Testing a New Product Feature

Acceptance & Pricing

Conjoint Analysis Survey Report

*This a demo, not intended for use

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Overview

- Research objectives
- Results in a nutshell
- Methodology
- Full results:
  - Attribute importances
  - Preference segments
  - Acceptance of ‘Cow-Free’ milk
  - Willingness to pay for new feature
  - Price vs share & revenue per 1,000 (RPK)

Client Wants to Know if a New Milk Feature Will Be Accepted?

"***'Cow-free' milk is now possible. Various technologies have either been developed or are being developed to make milk that is identical to cow milk, except no cows are involved in producing the milk.*** "

How will they react and what price to charge?

SOLUTION

"Conjoint Analysis Survey 180 UHT milk buyers"

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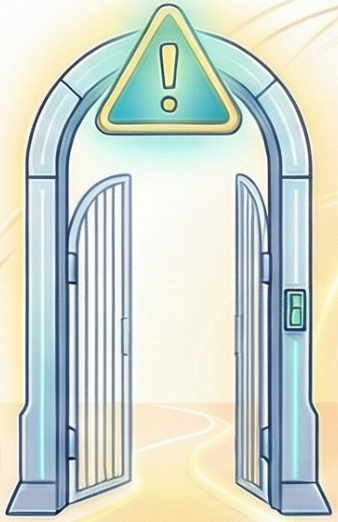
Results in a Nutshell

Replacing Real Milk Causes a Drop in Share & Revenue

Swapping cow's milk for synthetic milk did not lead to an increase in sales.

Price Cuts Don't Fix the Revenue Problem

Lowering the price helps recover market share but fails to recover lost revenue.



Proceed with Caution

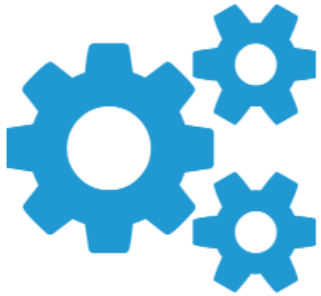
Only launch if production costs are low enough to ensure profit despite lower revenue.

NotebookLM

SUGGESTION

"Consider further analysis - a segmentation and a line extension scenario"

METHODOLOGY



How conjoint analysis works*

1 List attributes and levels that define the possible products (mutually exclusive levels)

Brand	Price	Type	Cap material	Pack
Kinder Green	9.99	Cow Milk	Plastic	Recyclable
Clover	13.99	Cow-Free Milk (from cells)	Bioplastic	Not recyclable
Dewfresh	17.99	Cow-Free Milk (from flora)		
First Choice	21.99			
Parmalat				

***Simplified.**

2

Attributes and levels could result in hundreds or thousands of combinations. So a type of experimental design is used to reduce this to a manageable # of product profiles.

Brand	Price	Type	Cap material	Pack
Clover	9.99	Cow Milk	Plastic	Recyclable
Kinder Green	9.99	Cow-Free Milk (from cells)	Plastic	Recyclable
Parmalat	17.99	Cow-Free Milk (from cells)	Plastic	Recyclable
First Choice	13.99	Cow-Free Milk (from flora)	Plastic	Recyclable
Kinder Green	21.99	Cow-Free Milk (from flora)	Plastic	Recyclable
Parmalat	13.99	Cow Milk	Bioplastic	Recyclable
Dewfresh	21.99	Cow Milk	Bioplastic	Recyclable
First Choice	21.99	Cow-Free Milk (from cells)	Bioplastic	Recyclable
Clover	17.99	Cow-Free Milk (from flora)	Bioplastic	Recyclable
First Choice	17.99	Cow Milk	Plastic	Not recyclable
Clover	21.99	Cow Milk	Plastic	Not recyclable
Dewfresh	13.99	Cow-Free Milk (from cells)	Plastic	Not recyclable
Parmalat	21.99	Cow-Free Milk (from flora)	Plastic	Not recyclable
Kinder Green	17.99	Cow Milk	Bioplastic	Not recyclable
First Choice	9.99	Cow-Free Milk (from cells)	Bioplastic	Not recyclable
Clover	13.99	Cow-Free Milk (from cells)	Bioplastic	Not recyclable
Dewfresh	9.99	Cow-Free Milk (from flora)	Bioplastic	Not recyclable

3

Each row is turned into a profile that a participant would rate in terms of purchase probability. For example...

Desktop

* 1. If all of the stores stocked the product, with the features and pricing shown below, how likely would you be to buy within the next 3 months?

Parmalat
16.55
Cow Milk
Plastic
Not recyclable

- (●) NO CHANCE, ALMOST NO CHANCE (1 IN 100)
- ( ) VERY SLIGHT POSSIBILITY (1 IN 10)
- ( ) SLIGHT POSSIBILITY (2 IN 10)
- ( ) SOME POSSIBILITY (3 IN 10)
- ( ) FAIR POSSIBILITY (4 IN 10)
- ( ) FAIRLY GOOD POSSIBILITY (5 IN 10)
- ( ) GOOD POSSIBILITY (6 IN 10)
- ( ) PROBABLE (7 IN 10)
- ( ) VERY PROBABLE (8 IN 10)
- ( ) ALMOST SURE (9 IN 10)
- ( ) CERTAIN, PRACTICALLY CERTAIN (99 IN 100)

Cell phone

UHT milk

* 1. If all of the stores stocked the product, with the features and pricing shown below, how likely would you be to buy within the next 3 months?

Parmalat
16.55
Cow Milk
Plastic
Not recyclable

- (●) NO CHANCE, ALMOST NO CHANCE (1 IN 100)
- ( ) VERY SLIGHT POSSIBILITY (1 IN 10)
- ( ) SLIGHT POSSIBILITY (2 IN 10)

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Show alternative product profiles during survey - like this example - then estimate a statistical model for a market simulator

* 1. If all of the stores stocked the product, with the features and pricing shown below, how likely would you be to buy within the next 3 months?

Parmalat

16.55

Cow Milk

Plastic

Not recyclable

- (●) NO CHANCE, ALMOST NO CHANCE (1 IN 100)
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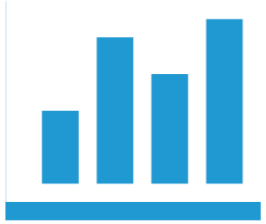
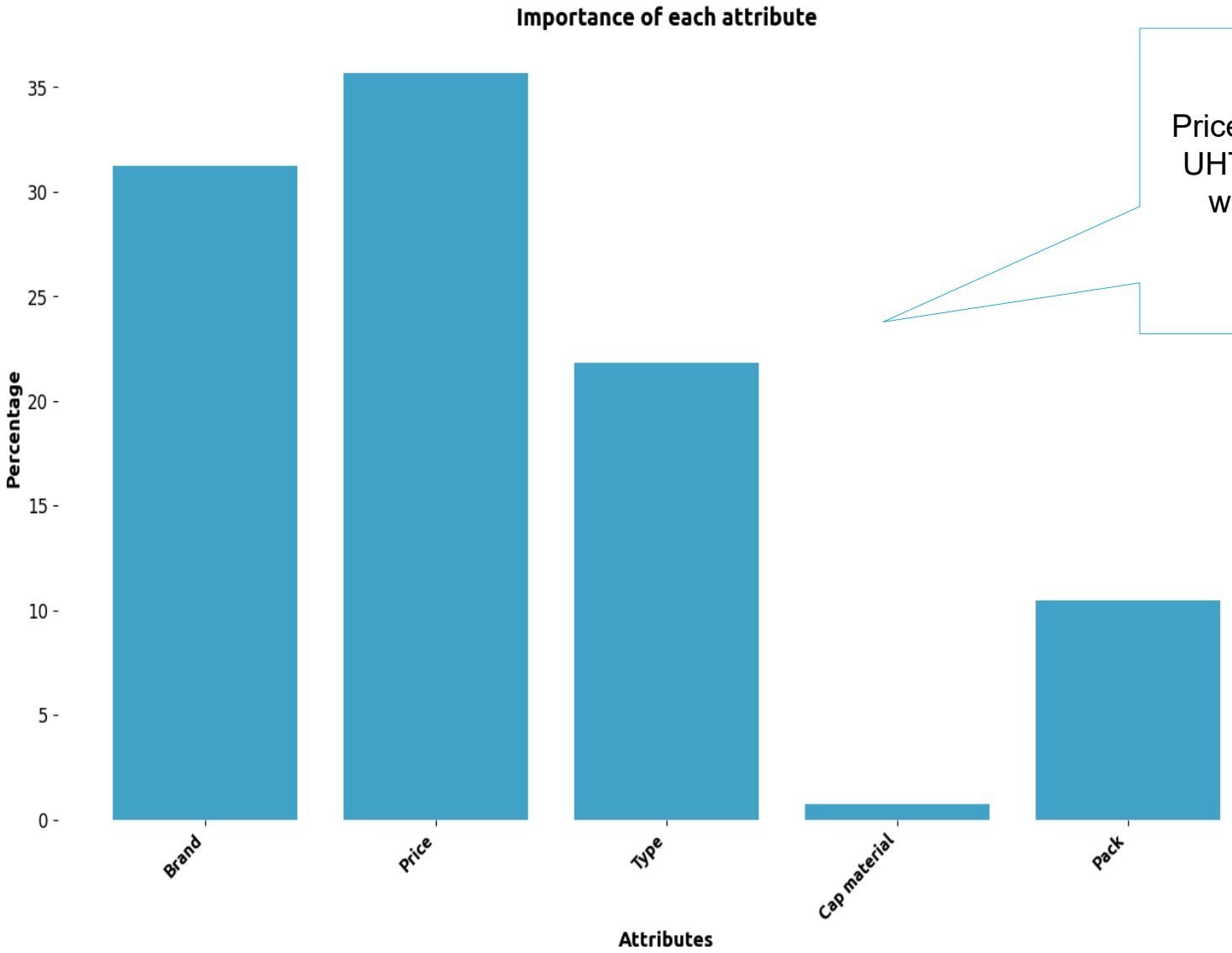
RESULTS





Price and brand most important in UHT milk. Importance is inferred without asking directly, using statistical models.

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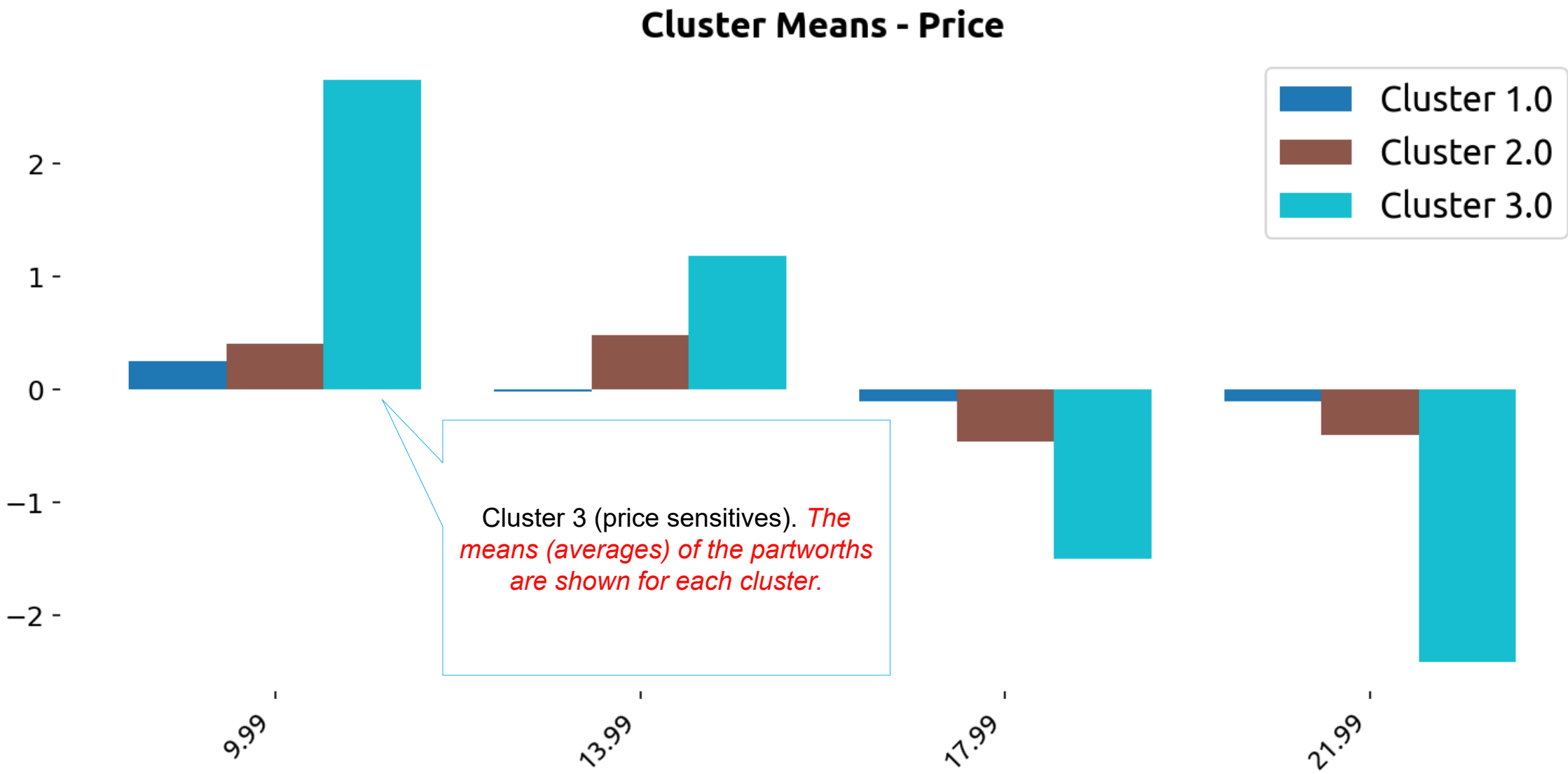
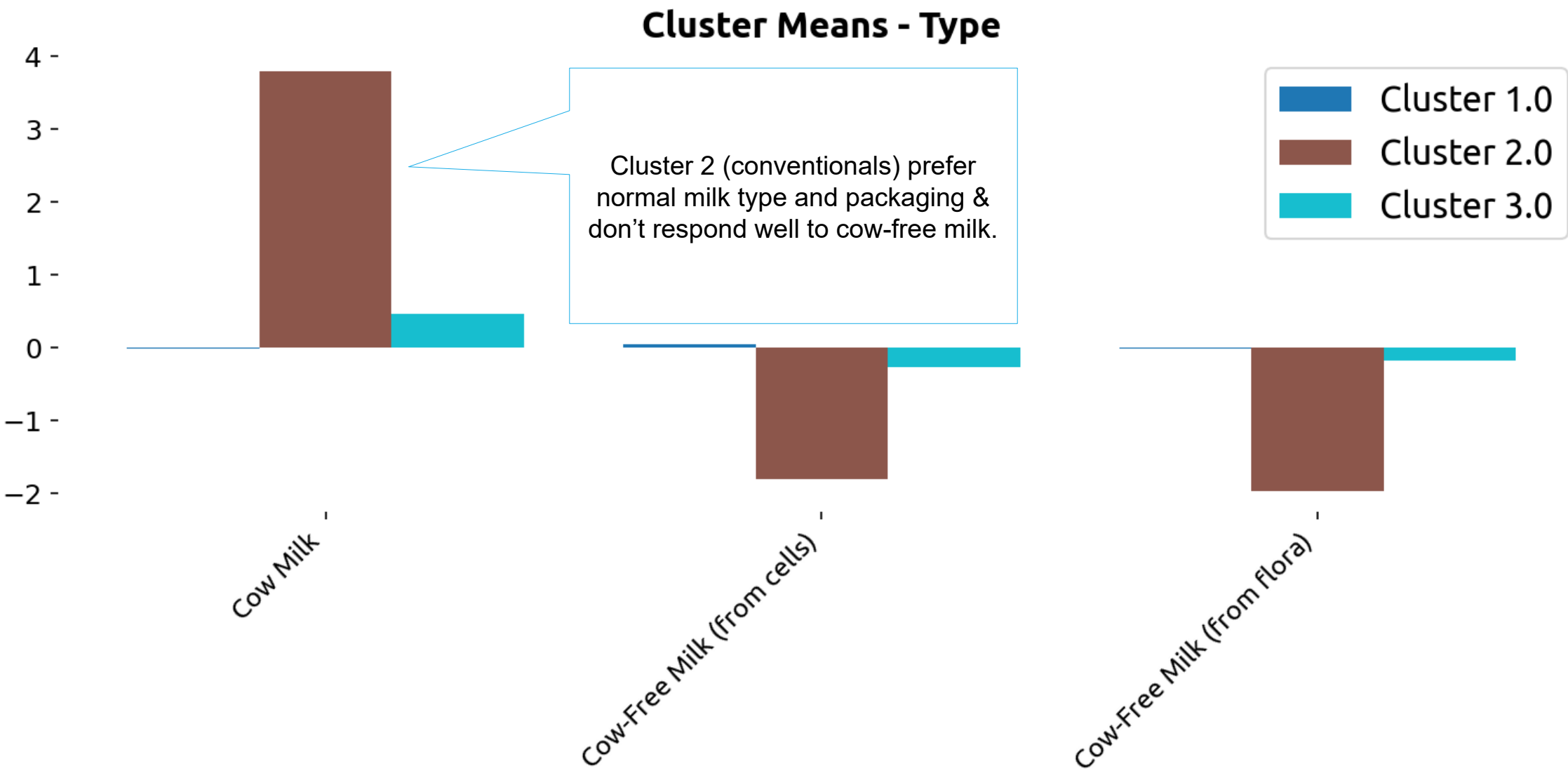
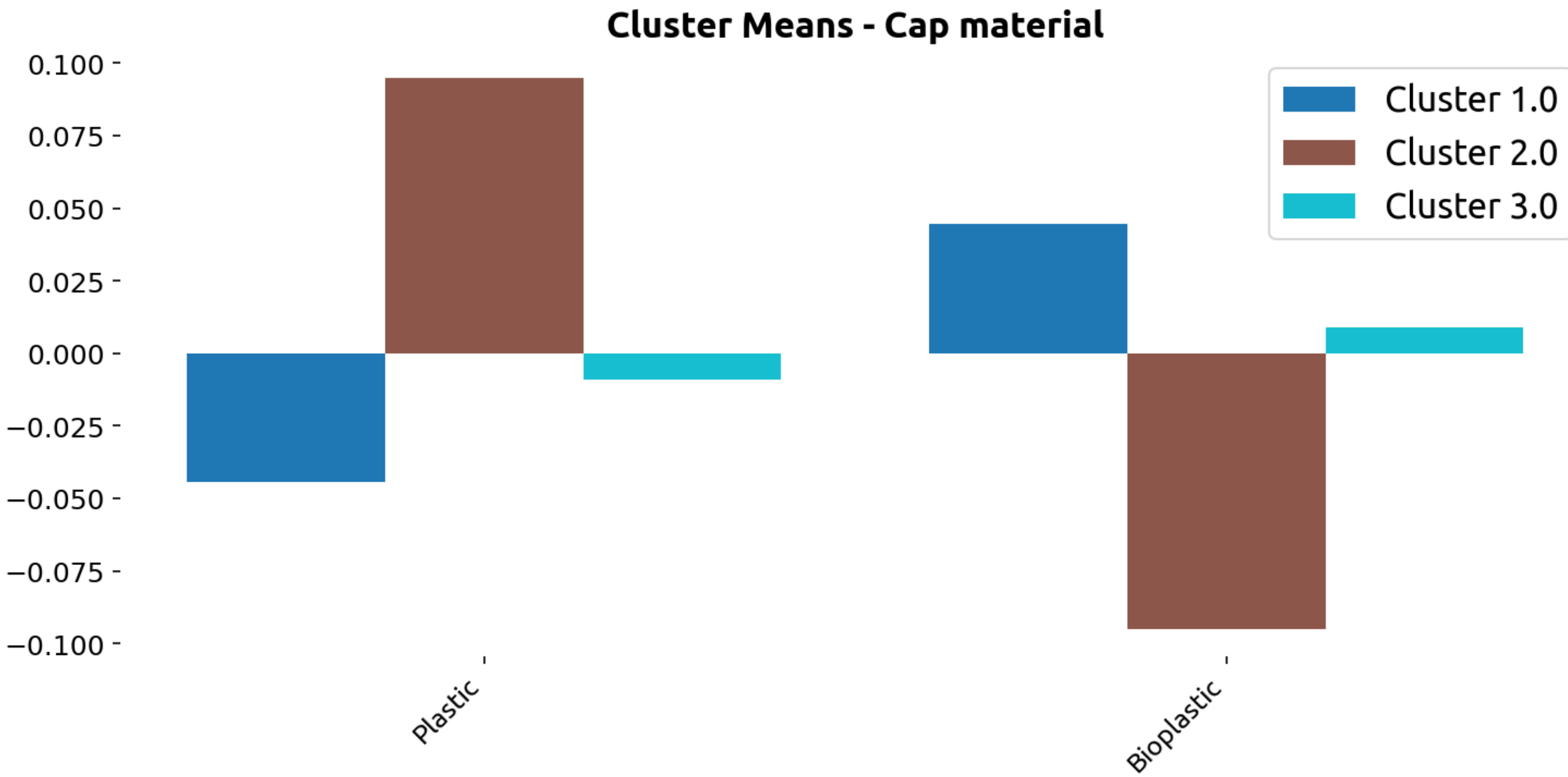
Cluster analysis revealed 3 segments:

Cluster	Percentage
Cluster 1.0 (Greens)	62.21
Cluster 3.0 (Price sensitives)	23.84
Cluster 2.0 (Conventional)	13.95

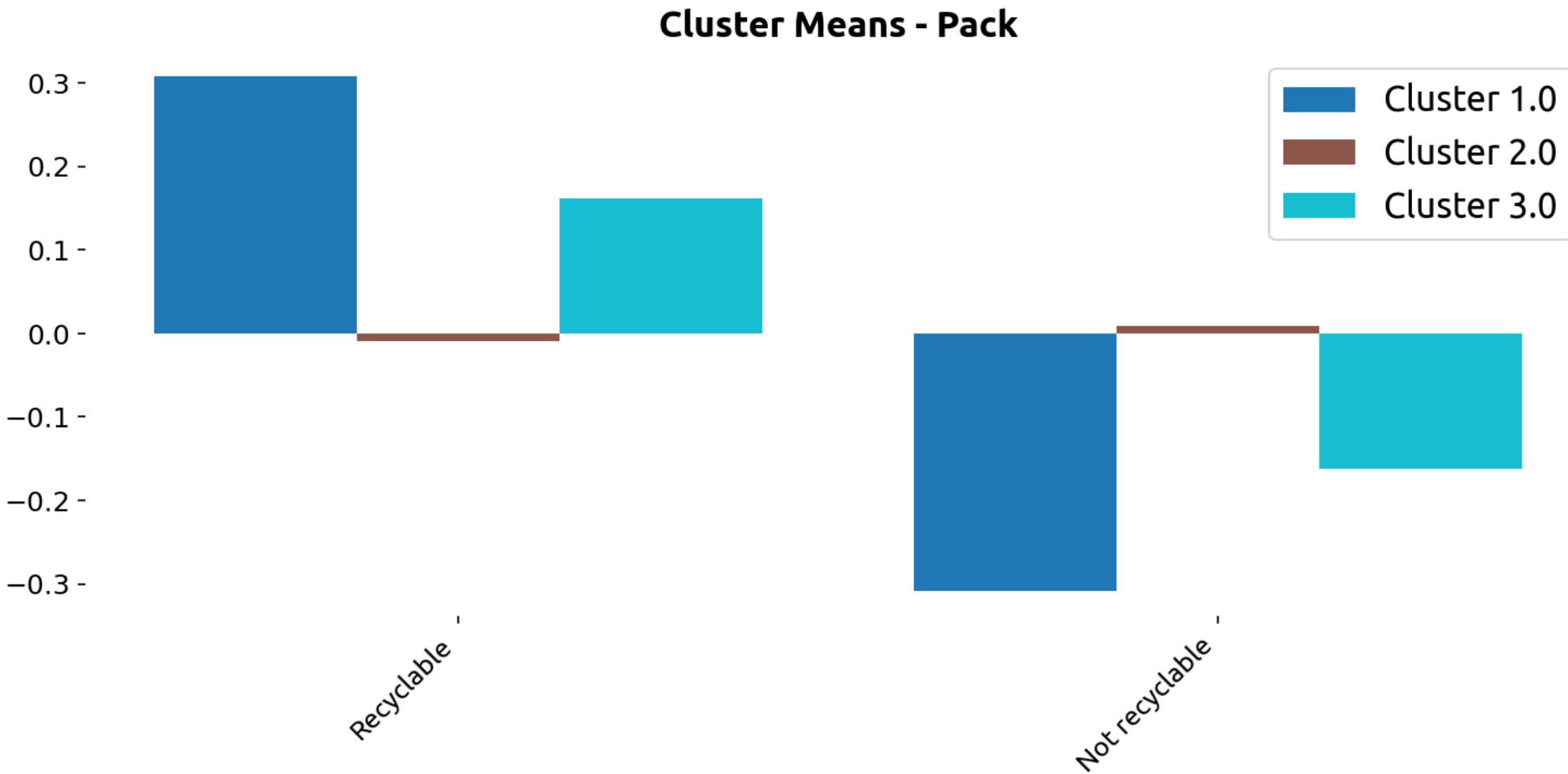
Cluster analysis is performed on the partworths. The percentages refer to the percentage of survey respondents falling in each cluster. Sometimes they are given creative names.


Cluster Means - Price
Cluster 1.0
Cluster 2.0
Cluster 3.0
2
1
0
−1
−2
9.99
13.99
17.99
21.99
Cluster 3 (price sensitives). The means (averages) of the partworths are shown for each cluster.


Cluster Means - Type
4
3
2
1
0
−1
−2
Cluster 1.0
Cluster 2.0
Cluster 3.0
Cluster 2 (conventionals) prefer normal milk type and packaging & don't respond well to cow-free milk.
Cow Milk
Cow-Free Milk (from cells)
Cow-Free Milk (from flora)


Cluster Means - Cap material
0.100
0.075
0.050
0.025
0.000
−0.025
−0.050
−0.075
−0.100
Cluster 1.0
Cluster 2.0
Cluster 3.0
Plastic
Bioplastic


Cluster Means - Type
4
3
2
1
0
−1
−2
Cluster 1.0
Cluster 2.0
Cluster 3.0
Cow Milk
Cow-Free Milk (from cells)
Cow-Free Milk (from flora)


Cluster Means - Pack
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
Cluster 1.0
Cluster 2.0
Cluster 3.0
Recyclable
Not recyclable

Scenario: Reformulation + compensation price?

- Will share drop if Clover* switches to cow-free milk (cells in bioreactor)?
- If so, would a lower price compensate, and how much to get back to a similar share?

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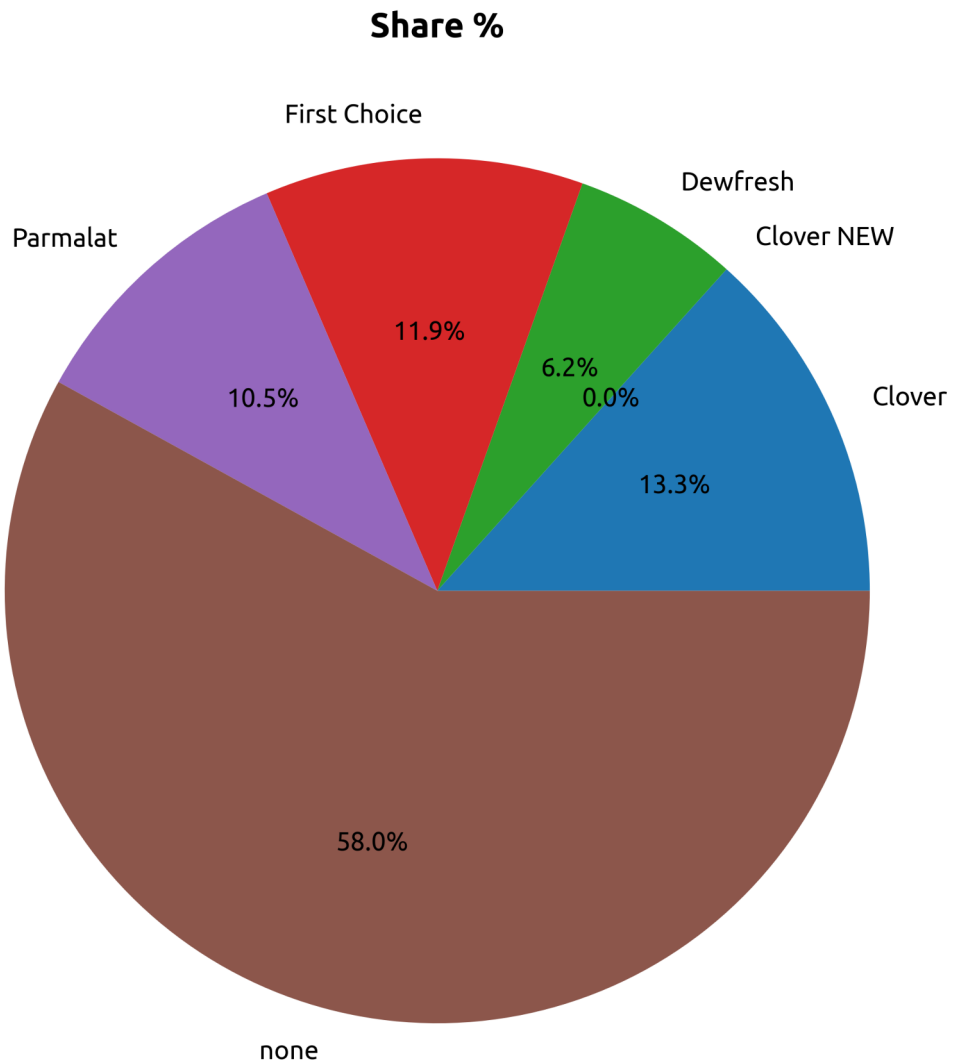
***Survey not sponsored by Clover.**

Scenario 1: baseline (the current market)

We start with the baseline (curent market) for reference.

Attributes	Clover	Dewfresh	First Choice	Parmalat
Inclusion	Yes	Yes	Yes	Yes
Brand of mil...	Clover	Dewfresh	First Choice	Parmalat
Price	17.01	14.74	16.64	16.55
Type	Cow Milk	Cow Milk	Cow Milk	Cow Milk
Cap material	Plastic	Plastic	Bioplastic	Plastic
Pack	Not recyclab...	Not recyclab...	Recyclable	Not recyclab...
Share %	13.34	6.21	11.9	10.53
RPK	2269	915	1980	1743

Total share % Total RPK
41.98 6907



Market share estimates in current market, within sample.

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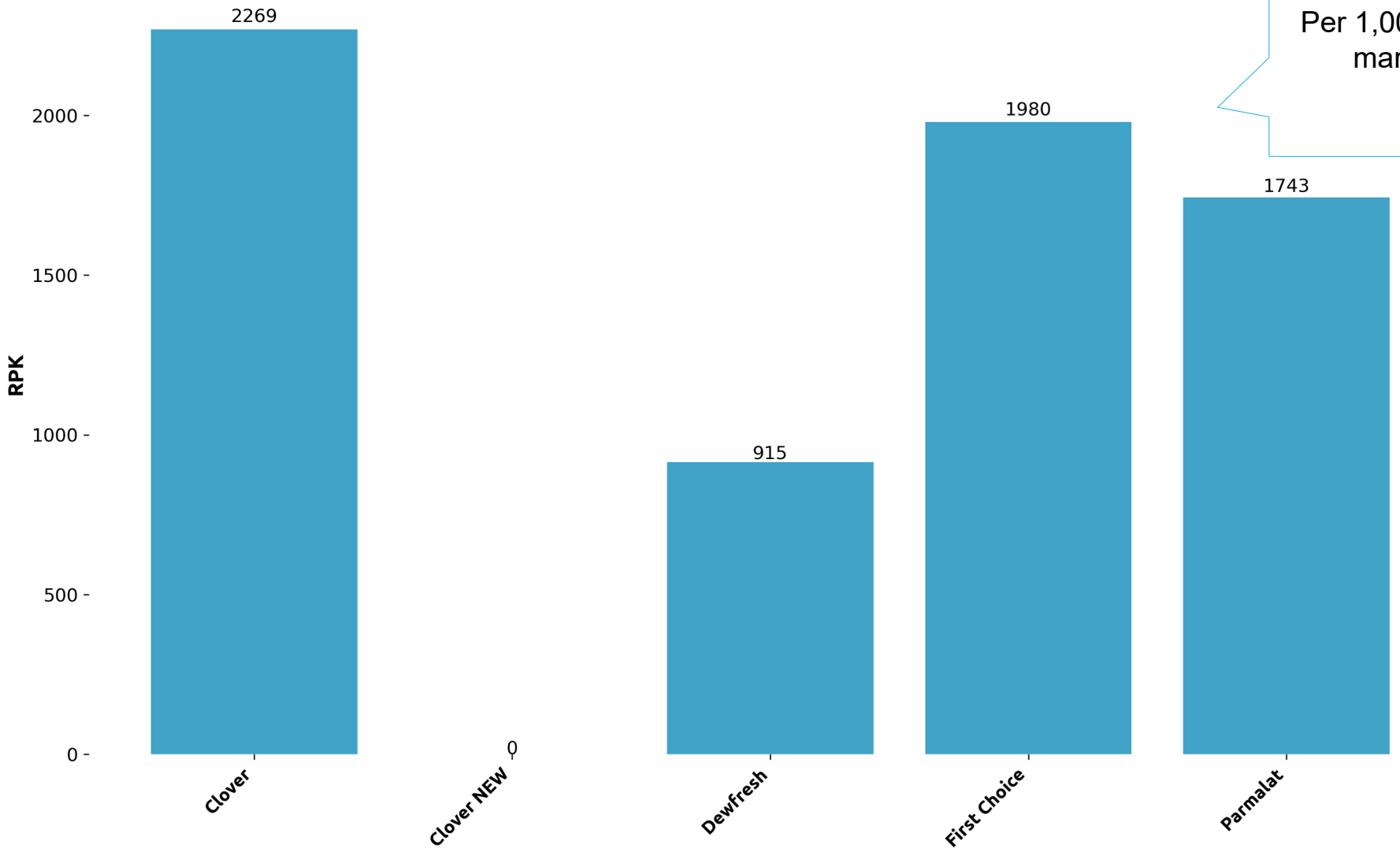
Estimated revenue per 1,000 customers



Per 1,000 customers in the market as a whole.

*Price x share/100 x 1000 = RPK. Translates to revenue if each customer purchased 1 unit on one purchase occasion. Therefore use as indicator not forecast.

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Scenario 2: Clover switches to cow-free milk

Same as baseline scenario except for the switch to thew new Cow-Free milk.

Attributes	Clover	Dewfresh	First Choice	Parmalat
Inclusion	Yes	Yes	Yes	Yes
Brand of mil...	Clover	Dewfresh	First Choice	Parmalat
Price	17.01	14.74	16.64	16.55
Type	Cow-Free Mil...	Cow Milk	Cow Milk	Cow Milk
Cap material	Plastic	Plastic	Bioplastic	Plastic
Pack	Not recyclab...	Not recyclab...	Recyclable	Not recyclab...
Share %	11.27	6.61	11.27	12.2
RPK	1917	974	1875	2019

Total share %	Total RPK
41.36	6785

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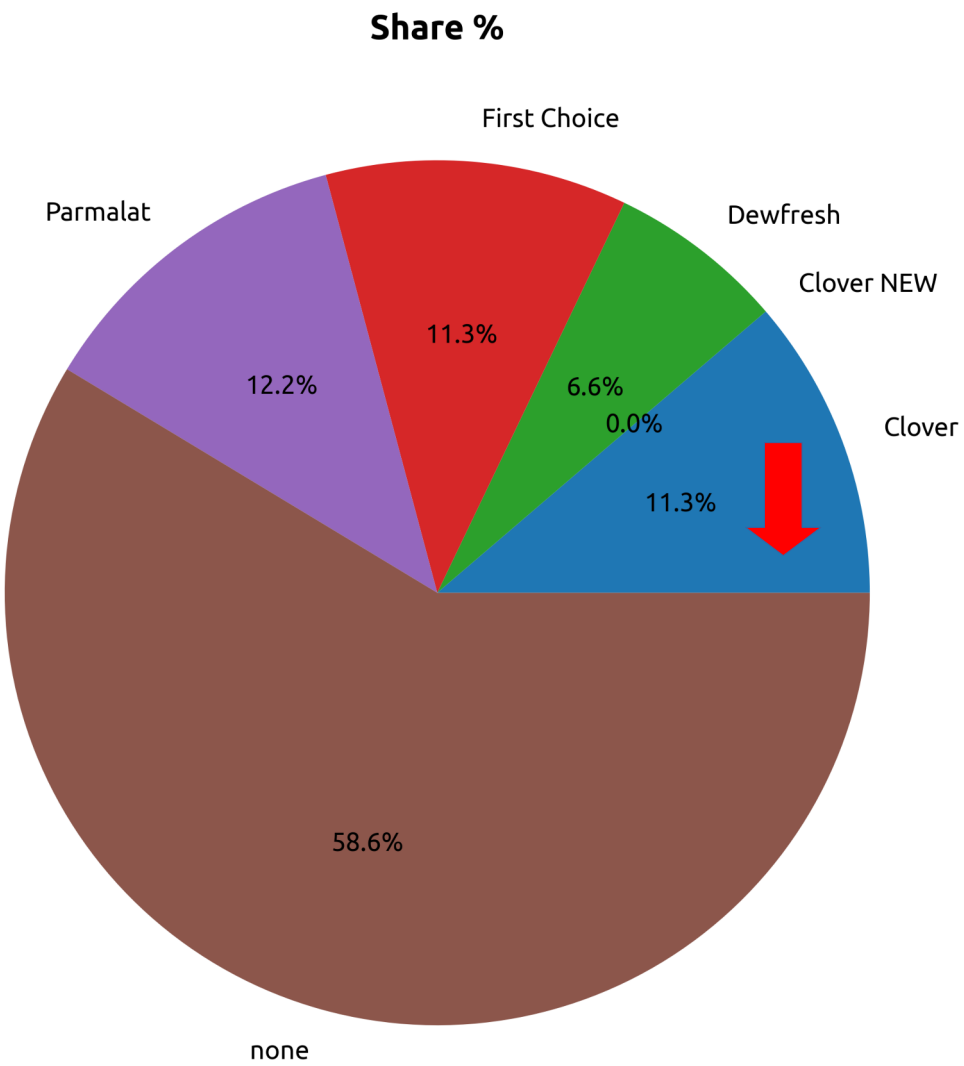

Share* drops around 2% in response to switch to ‘cow-free milk’.

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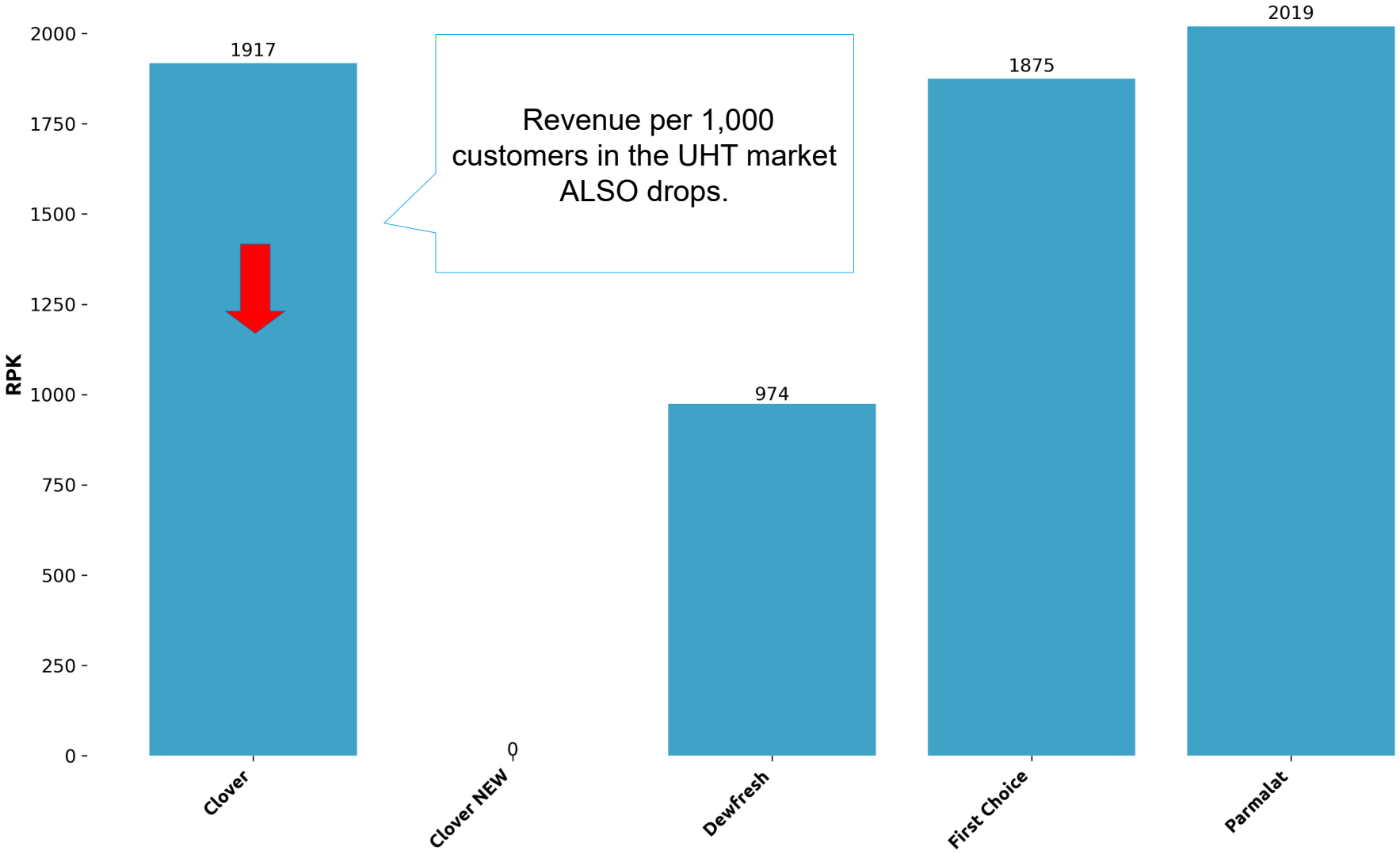
Estimated revenue per 1,000 customers



*Price x share/100 x 1000 = RPK. Translates to revenue if each customer purchased 1 unit on one purchase occasion. Therefore use as indicator not forecast.

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Scenario 3: Compensatory Clover price decrease to 15.3

This simulation answers the question ‘What are they willing to pay if the new feature is present (Cow-Free milk)’

Attributes	Clover	Dewfresh	First Choice	Parmalat
Inclusion	Yes	Yes	Yes	Yes
Brand of mil...	Clover	Dewfresh	First Choice	Parmalat
Price	15.3	14.74	16.64	16.55
Type	Cow-Free Mil...	Cow Milk	Cow Milk	Cow Milk
Cap material	Plastic	Plastic	Bioplastic	Plastic
Pack	Not recyclab...	Not recyclab...	Recyclable	Not recyclab...
Share %	13.45	6.01	12.31	12.12
RPK	2058	886	2048	2006

Total share %	Total RPK
43.88	6998

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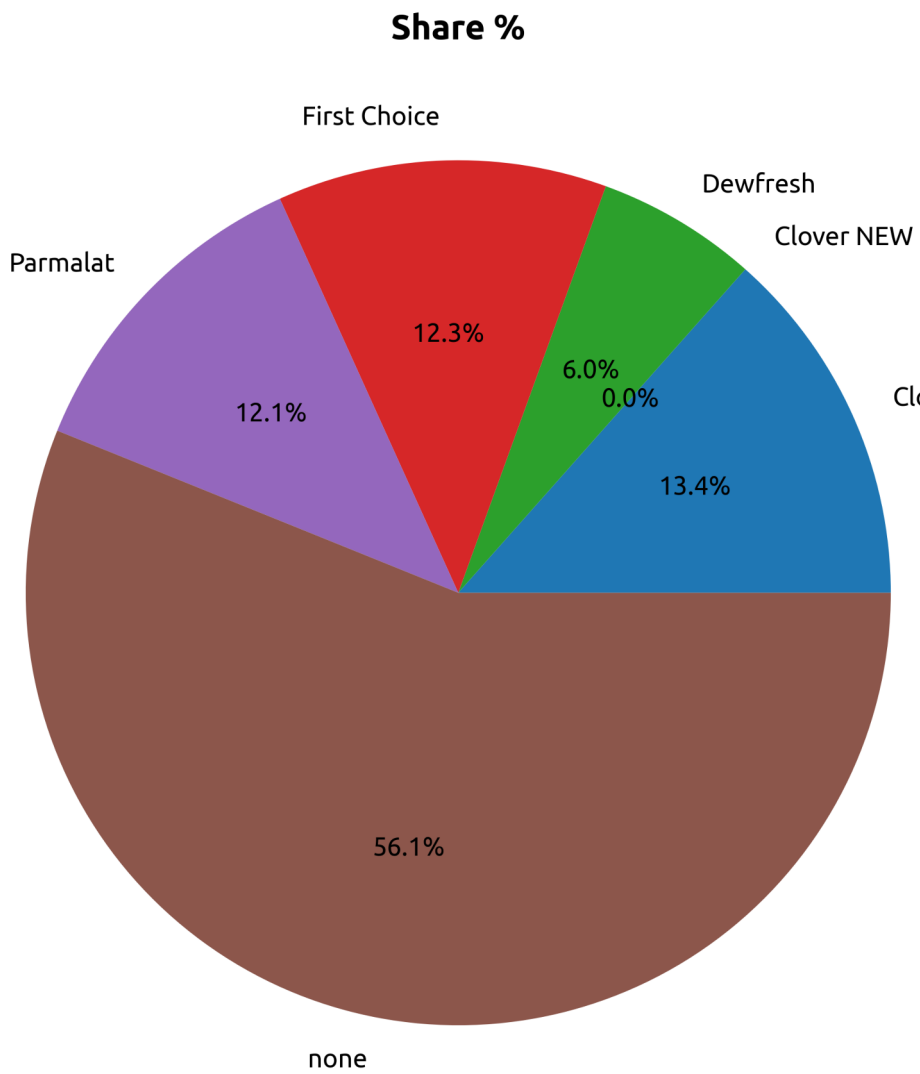

Share recovers after price reduction back to a similar share level.

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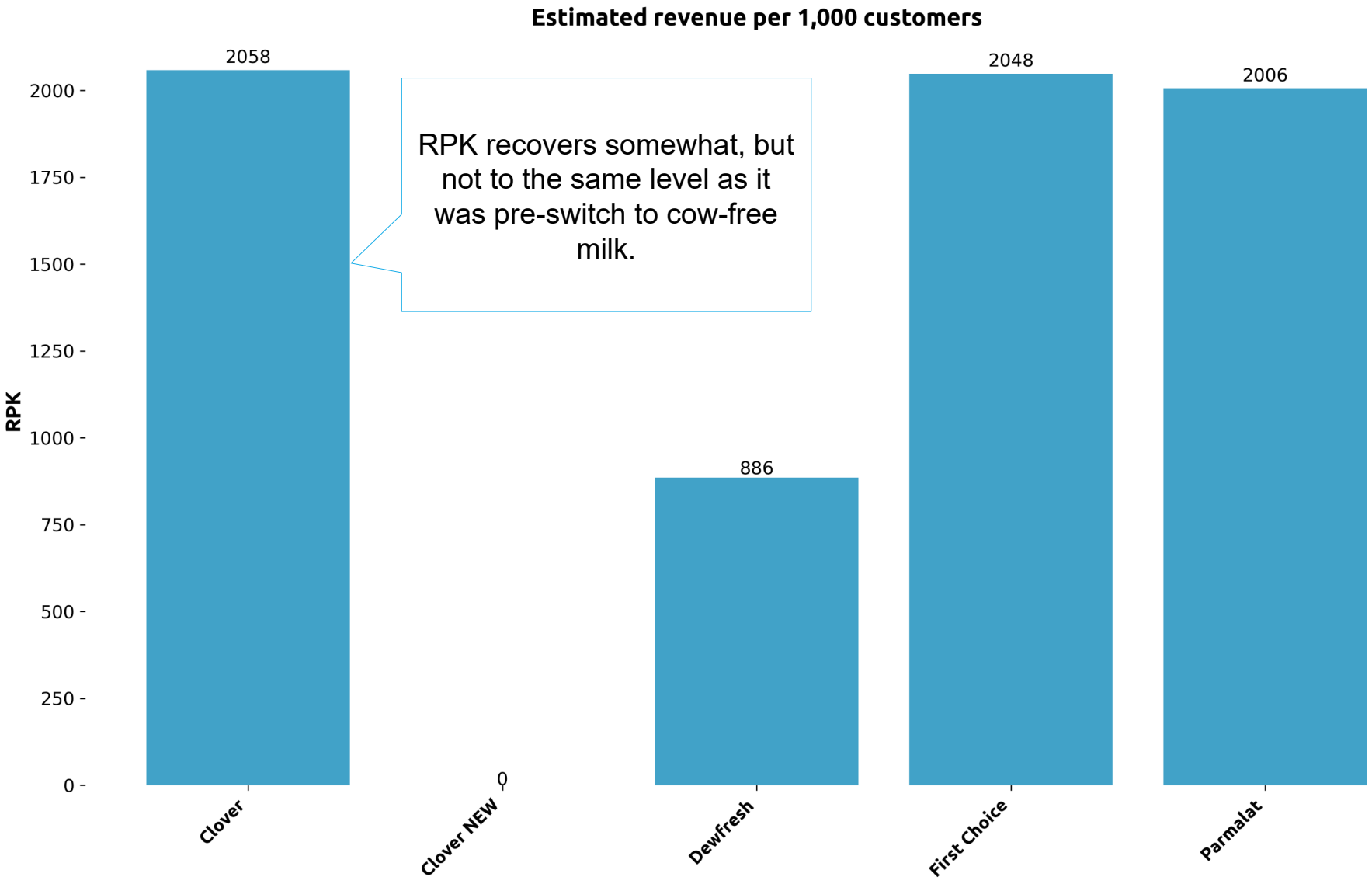
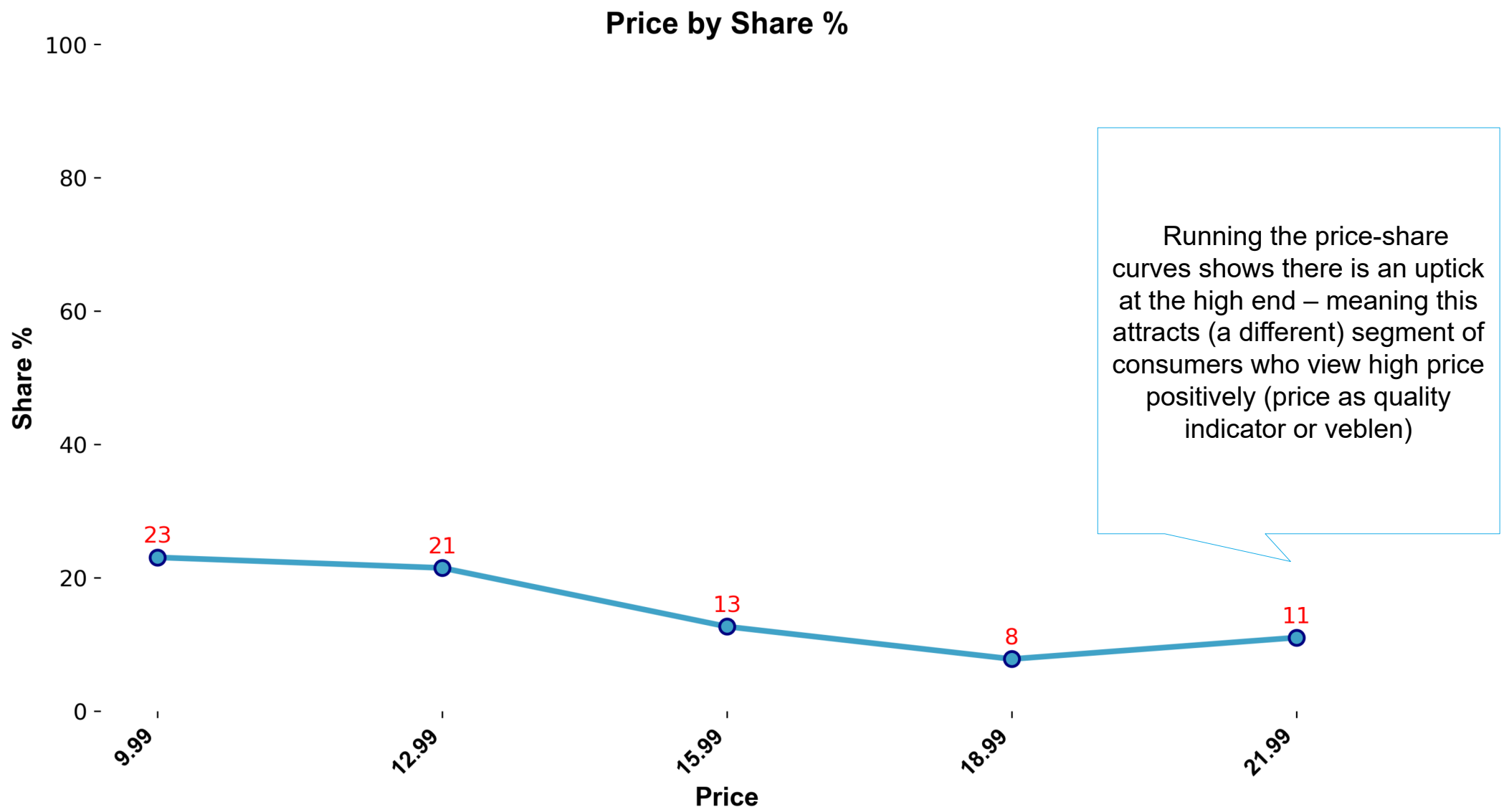
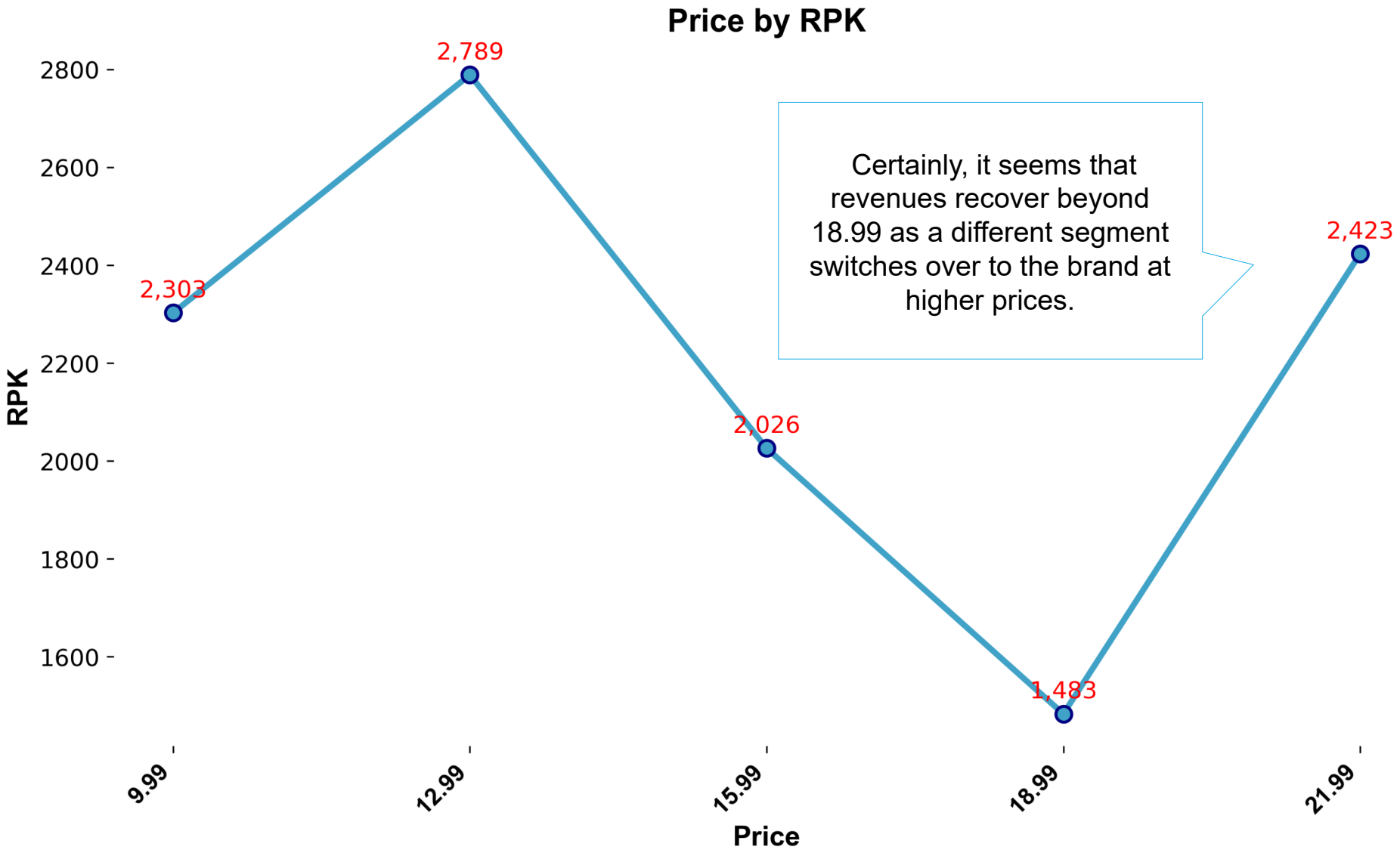



Price by Share %
100
80
60
40
20
0
Share %
23
21
13
8
11
9.99
12.99
15.99
18.99
21.99
Price
Running the price-share curves shows there is an uptick at the high end – meaning this attracts (a different) segment of consumers who view high price positively (price as quality indicator or veblen)



*RPK = Revenue per 1000 customers purchasing any brand of UHT milk (simplified to 1L per customer in period defined by question wording)

Prices	Shares %: Clover	RPK: Clover
9.99	23.05	2302.69
12.99	21.47	2788.95
15.99	12.67	2025.93
18.99	7.81	1483.12
21.99	11.02	2423.3

Conclusions

1) **Replacing real cow milk with synthetic causes a share and revenue drop, not an increase.**
2) **Lowering price recovers share, but not revenue. Perhaps a higher price might make sense.**
3) **Only proceed at the lower price if lower 'Cow-Free' production costs justify it OR alternatively explore a line extension scenario as the segmentation shows 'Cow-Free' appeals to a different segment and may result in higher total line revenues.**

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