Content

01

Background

Background

Consumer behavior data for medium-sized online beauty websites from October 2019 to January 2020.

Since it is difficult to calculate the purchase cycle with all the browsing data, it is necessary to take out the transaction records that have actually been purchased
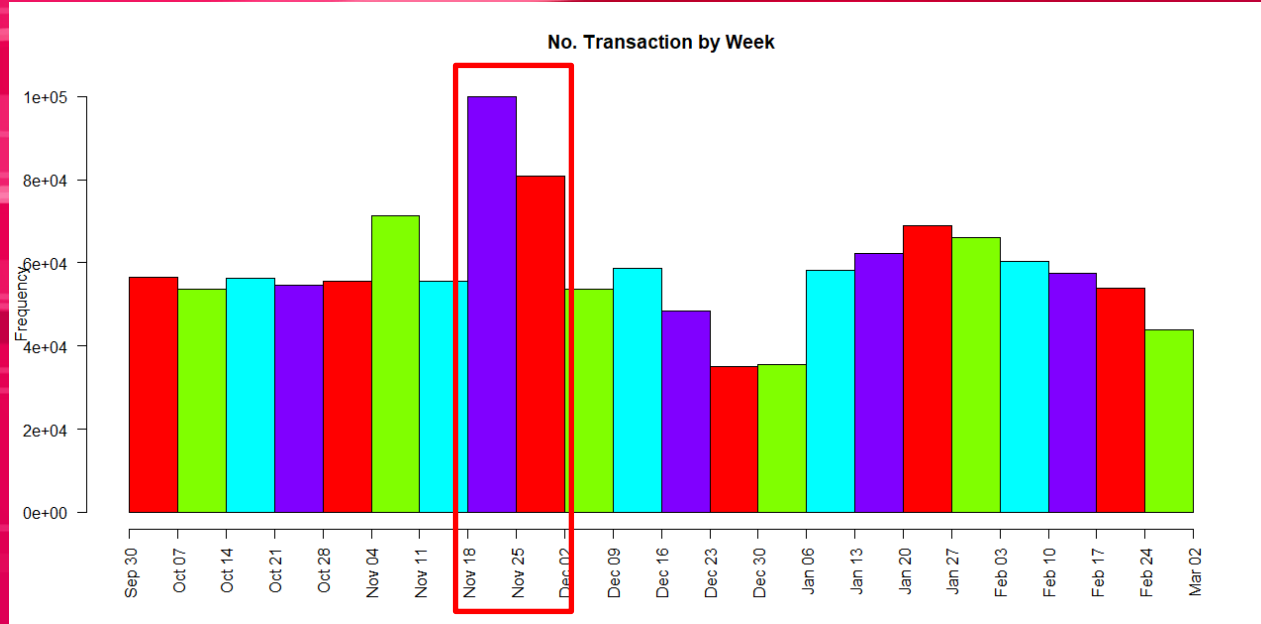
Data Processing

1. Leave membership numbers to identify the customer

2. **RSFM: Recency, Seniority, Frequency, Monetary**

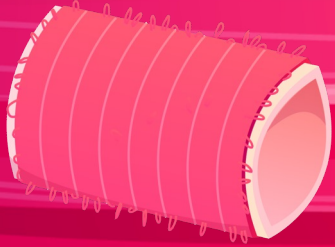3. NES model

Weekly Transactions

November is the month with the highest frequency of consumption

02

RFMS

RFMS

```
> summary(A)
      cid                 recent              freq
 Min.   :  9794320   Min.   :  1.00   Min.   :  1.00
 1st Qu.:495094295   1st Qu.: 32.00   1st Qu.:  3.00
 Median :559850017   Median : 71.00   Median :  6.00
 Mean   :528608019   Mean   : 70.72   Mean   : 11.65
 3rd Qu.:586252664   3rd Qu.:106.00   3rd Qu.: 13.00
 Max.   :622073202   Max.   :152.00   Max.   :715.00
     money               senior              since
 Min.   : -1.753    Min.   :  1.00   Min.   :2019-10-01
 1st Qu.:  3.254    1st Qu.: 43.00   1st Qu.:2019-11-03
 Median :  4.870    Median : 87.00   Median :2019-12-05
 Mean   :  8.094    Mean   : 81.92   Mean   :2019-12-10
 3rd Qu.:  7.940    3rd Qu.:119.00   3rd Qu.:2020-01-18
 Max.   :299.810    Max.   :152.00   Max.   :2020-02-29
>
```
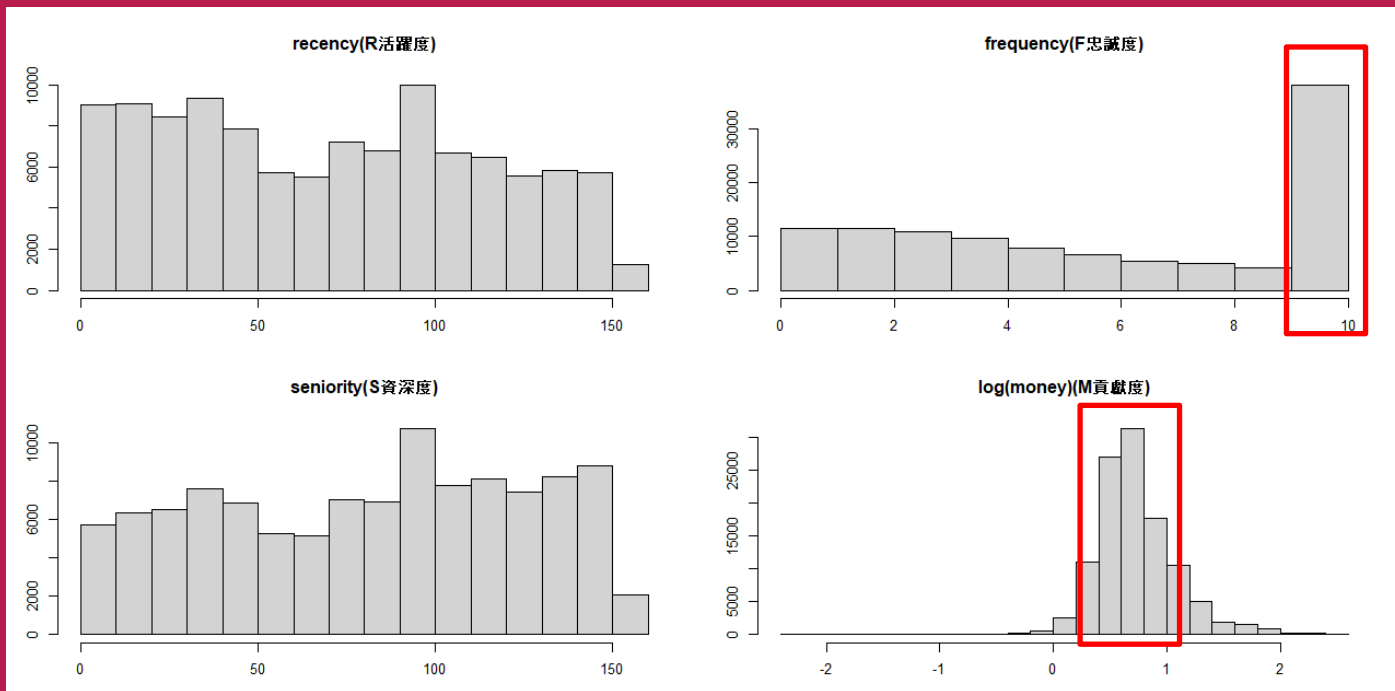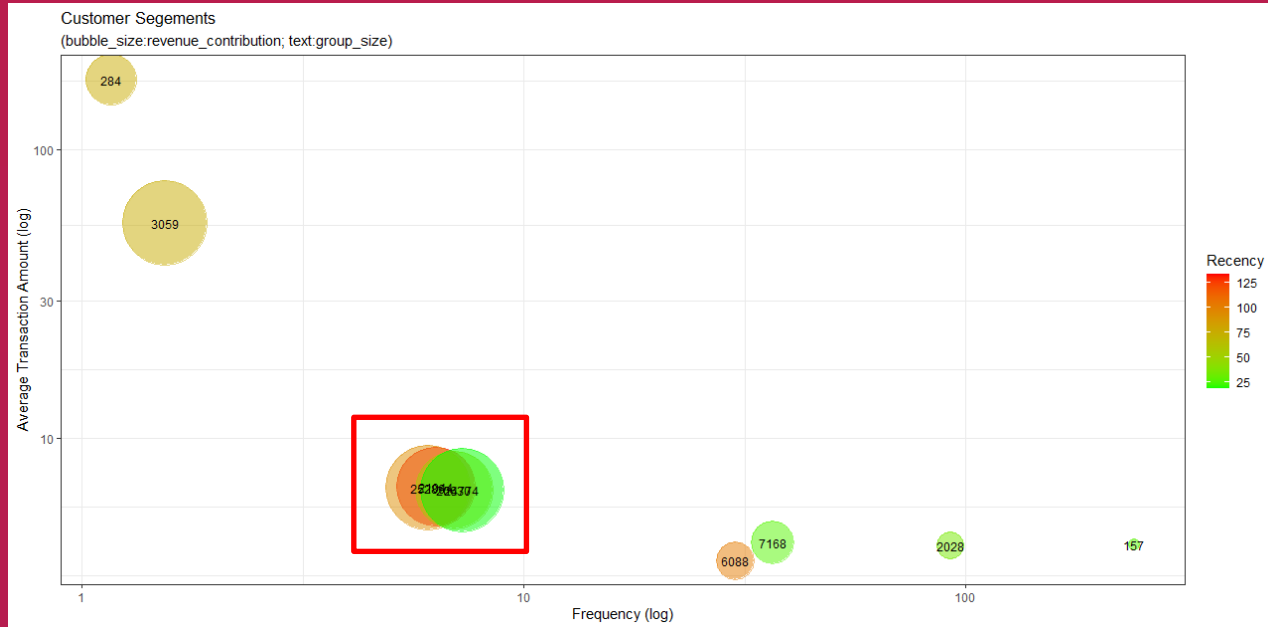
RFMS

Bubbleplot

The average customer purchase cycle is six days, which is about one week
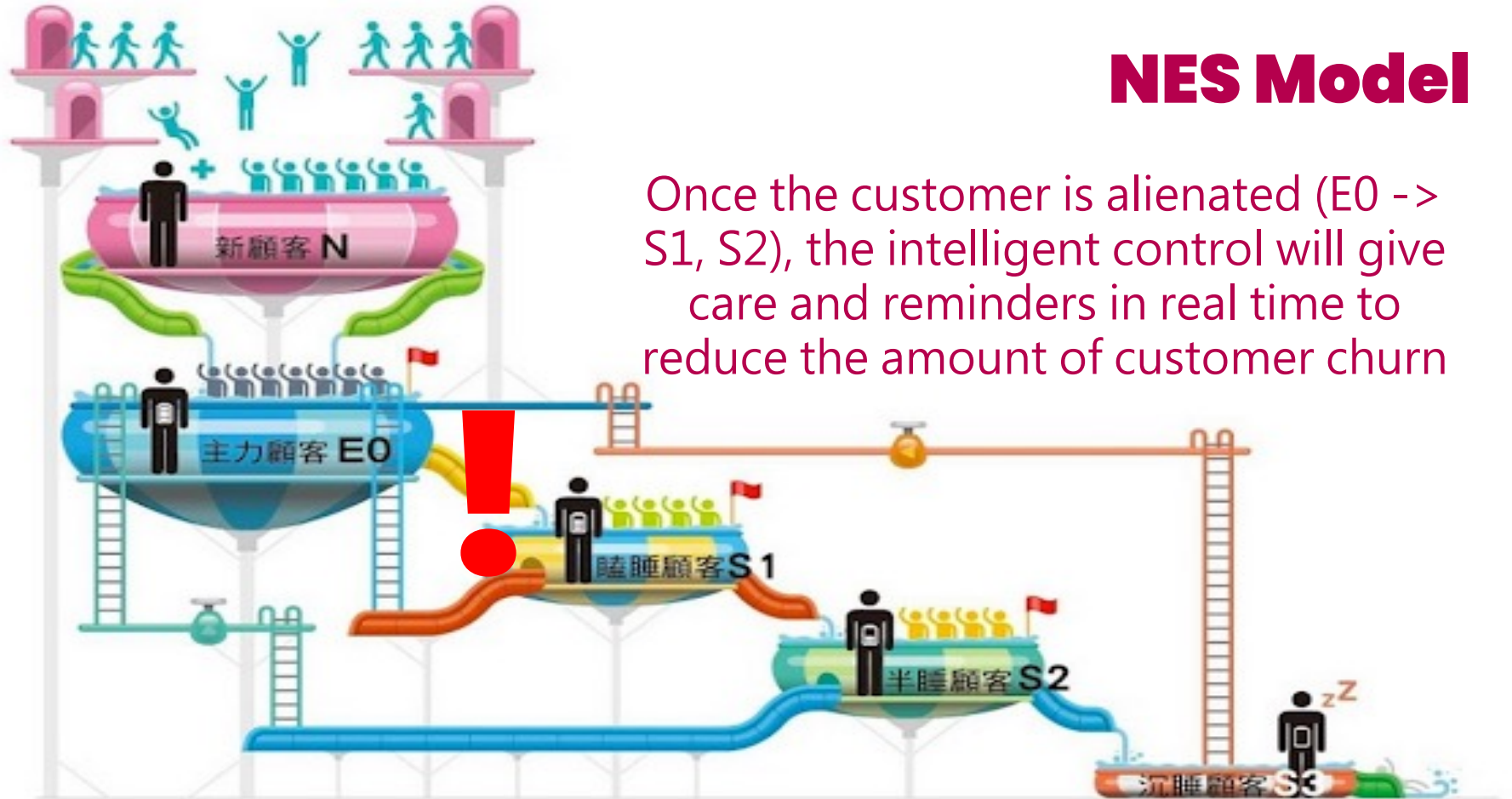
03

NES Model

NES Model

Once the customer is alienated (E0 -> S1, S2), the intelligent control will give care and reminders in real time to reduce the amount of customer churn
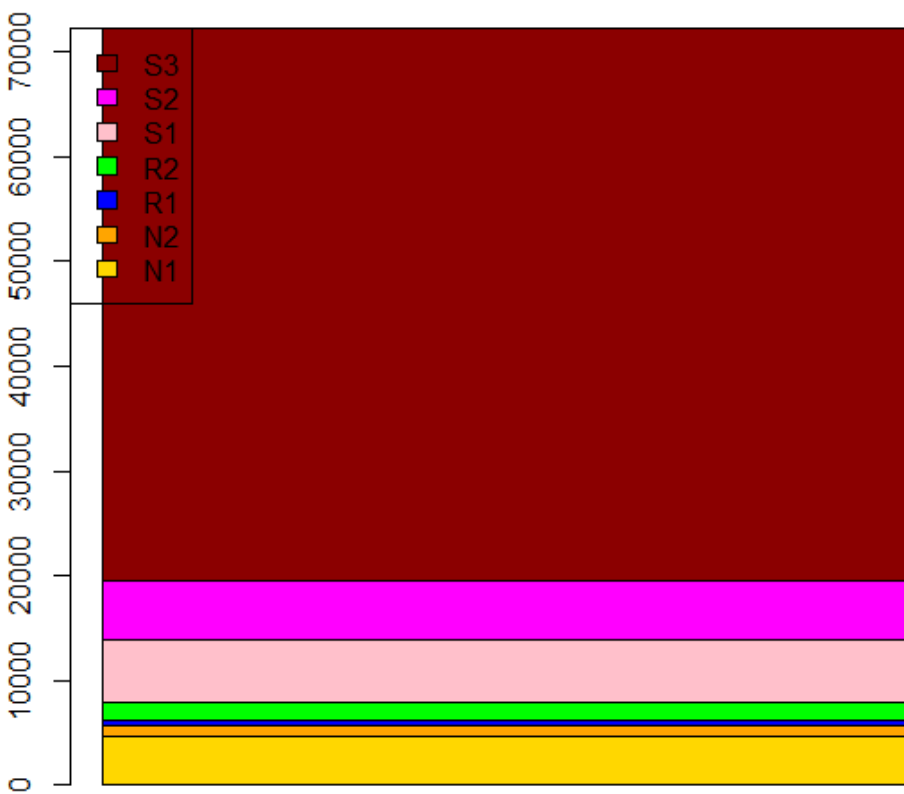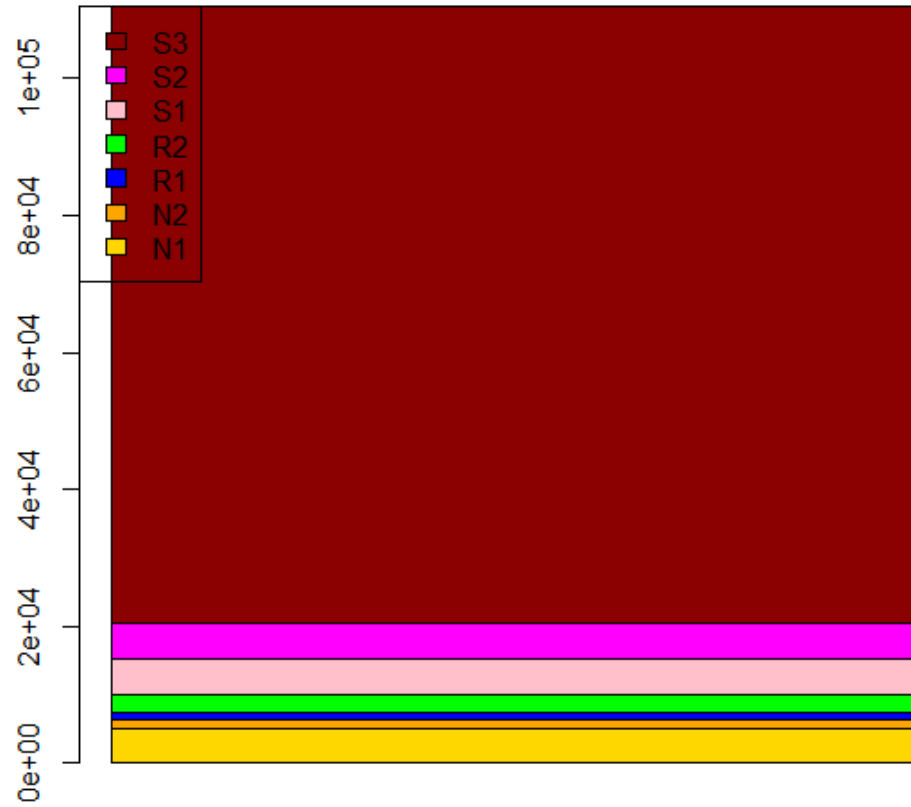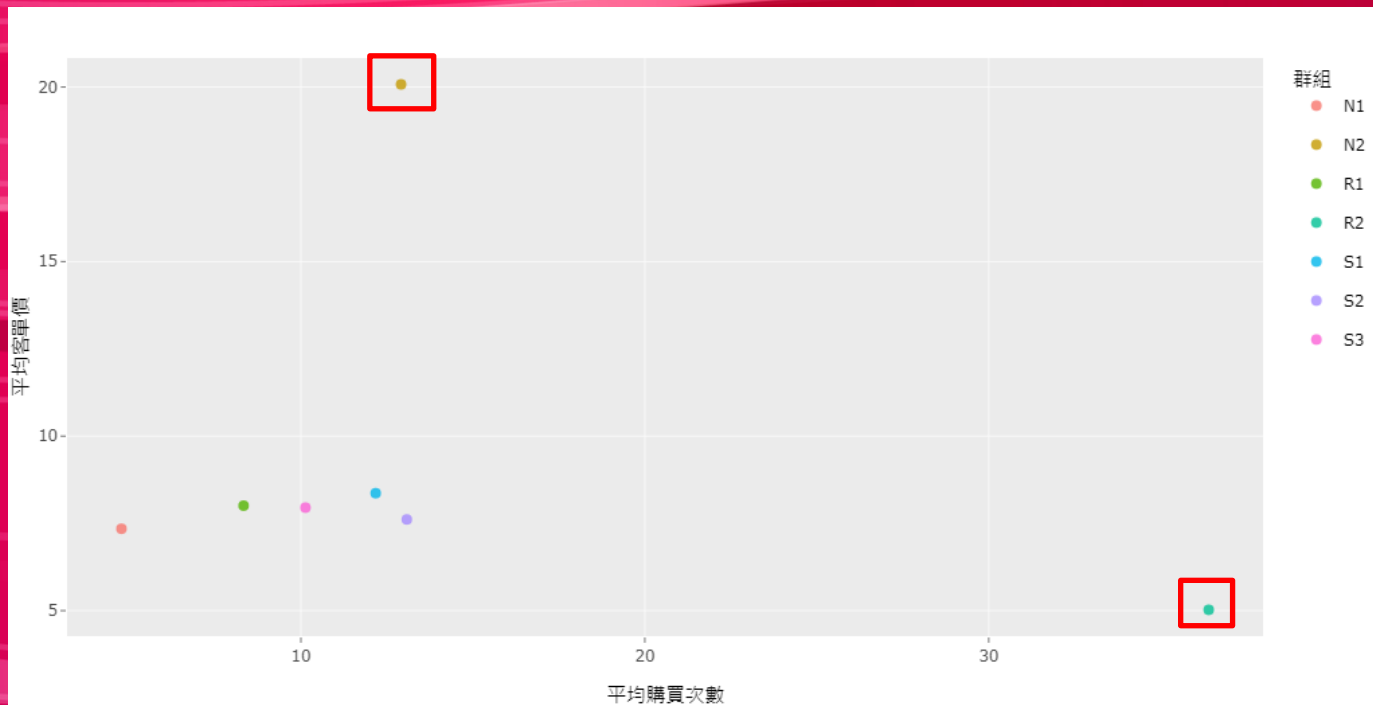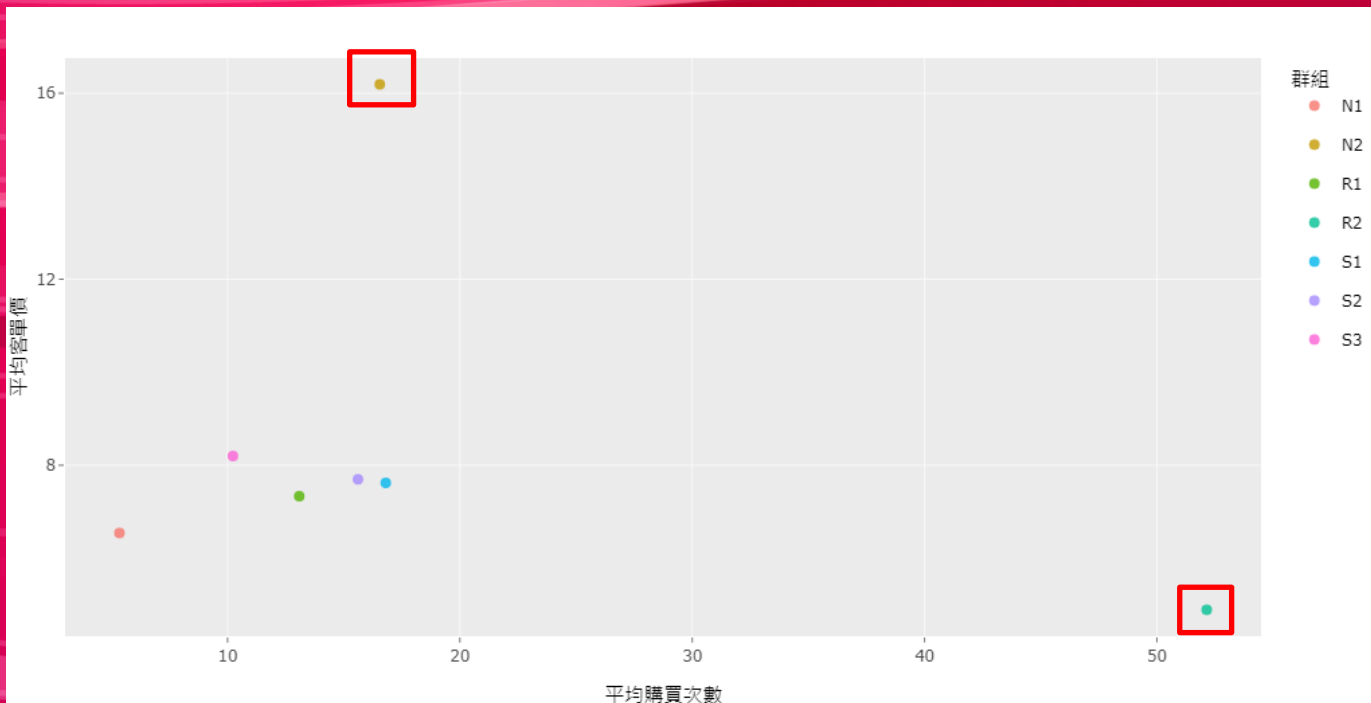
新顧客 N

主力顧客 E0

瞌睡顧客 S1

半睡顧客 S2

沉睡顧客 S3

2019 Customer Segments

N2 has the highest average order value, and R2 has the highest average number of purchases

2020 Customer Segments

N2 has the highest average order value, and R2 has
the highest average number of purchases

2019 Customer Segments

```
> head(CustSegments)
  status average_frequency average_amount total_revenue
1     N1          4.781944       7.344842            NA
2     N2         12.911684      20.077342            NA
3     R1          8.332731       8.007348            NA
4     R2         36.395909       5.023347            NA
5     S1         12.173862       8.365092            NA
6     S2         13.078773       7.612476            NA
  total_no_orders average_recency average_seniority group_size
1              NA        6.974359          7.011851       4641
2              NA        6.745170          6.961362       1087
3              NA        7.157324         63.453888        553
4              NA        6.876053         52.912154       1662
5              NA       14.545363         26.135582       5930
6              NA       20.664274         31.293020       5573
```

2020 Customer Segments

```
> head(CustSegments)
  status average_frequency average_amount total_revenue
1     N1          5.348126       6.542997            NA
2     N2         16.553103      16.189170            NA
3     R1         13.086802       7.334497            NA
4     R2         52.143765       4.892186            NA
5     S1         16.810033       7.621034            NA
6     S2         15.613000       7.697739            NA
  total_no_orders average_recency average_seniority group_size year
1              NA        5.847822          5.888754       4935 2020
2              NA        5.878621          6.120690       1450 2020
3              NA        5.920283        101.655447       1129 2020
4              NA        5.666005         84.121128       2518 2020
5              NA       14.372351         40.978223       5143 2020
6              NA       20.326883         42.960361       5323 2020
```

Summary	Situation	Tasks	
N	The average amount spent is significant, but the number of purchases is low.	Premium goods or services and ensure a high-quality customer experience to enhance loyalty.	✔
R	The frequency of purchases is very high, but the average purchase amount is low.	The contribution to total revenue is significant, marketing strategies should be focused on maintaining this relationship.	✔
S	There hasn't been a purchase for a long time, and they may have lost interest in the brand.	Innovative strategies, such as repositioning or offering new product lines, will keep them coming back.	✔

04

Strategy

1. Provide personalized beauty tutorials or interactive online consultation services to guide them through the purchase of the right products for their needs.

2. Subscribe to a monthly beauty box based on your skin type, preferences, and seasonal changes, and include samples for customers to try new products.

R1,R2

1. Encourage them to share their beauty experiences and product reviews, and each share can earn points for cash or gifts.

2. Host a "Make-up Challenge" : upload before and after reels of their transformations to social media such as TikTok.

S1, S2, S3

Channels

- Social media
- Multimedia
- Billboard
- Website
- Browsers

Customized email alerts

1. S1: New product promotion

2. S2: Product recommendations based on previous purchases

3. S3: Buy now, pay later

Thanks!