

client retention quantification

wendi yuan

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#coding in the back

##The average of clients' retention days

The average days of the clients retention days is 136.4988713, and the standard deviation of the clients' retention days is 227.9234917. We have total clients of 1413.

##Proportion of clients that are engaged > 30 days and >90 days

The proportion of clients that are engaged over 30 day is 48.1 % , We have 426 clients with retention days over 30 days, out of a total of 1413 clients.

The proportion of clients that are engaged over 90 day, the number of clients with retention days over 90 days is 34.4 % , We have 305 clients with retention days over 90 days, out of a total of 1413 clients.

##Using a **median split** (median retention = 96.5 days):

- **Low retention (median):**

587 clients
(66.3 %).

- **High retention (> median):**

299 clients
(33.7 %).

##Using **quartile cut-points** (Q1 = 0 days, Q3 = 157days):

- **Low retention (Q1):**

288 clients
(32.5 %).

- **Medium retention (Q1 < x Q3):**

378 clients
(42.7 %).

- **High retention (> Q3):**

220 clients
(24.8 %).

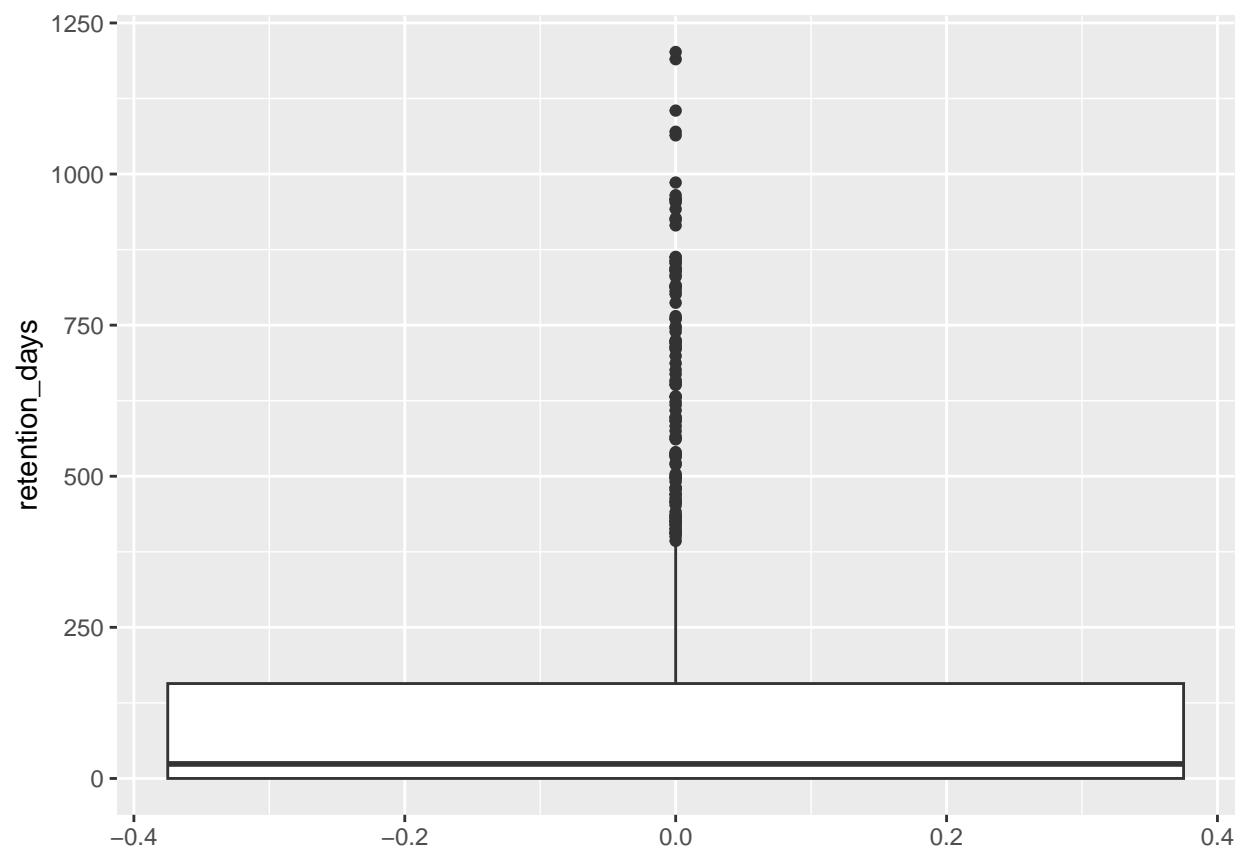


Figure 1: Boxplot of retention days across all clients

Boxplot of Retention Days

Below is a boxplot showing the distribution of retention days:

```
## Warning: Removed 527 rows containing non-finite outside the scale range
## (`stat_boxplot()`).
```

```
## NULL
```

histogram of Retention Days

Below is a histogram showing the distribution of retention days:

```
## Warning: Removed 527 rows containing non-finite outside the scale range
## (`stat_bin()`).
```

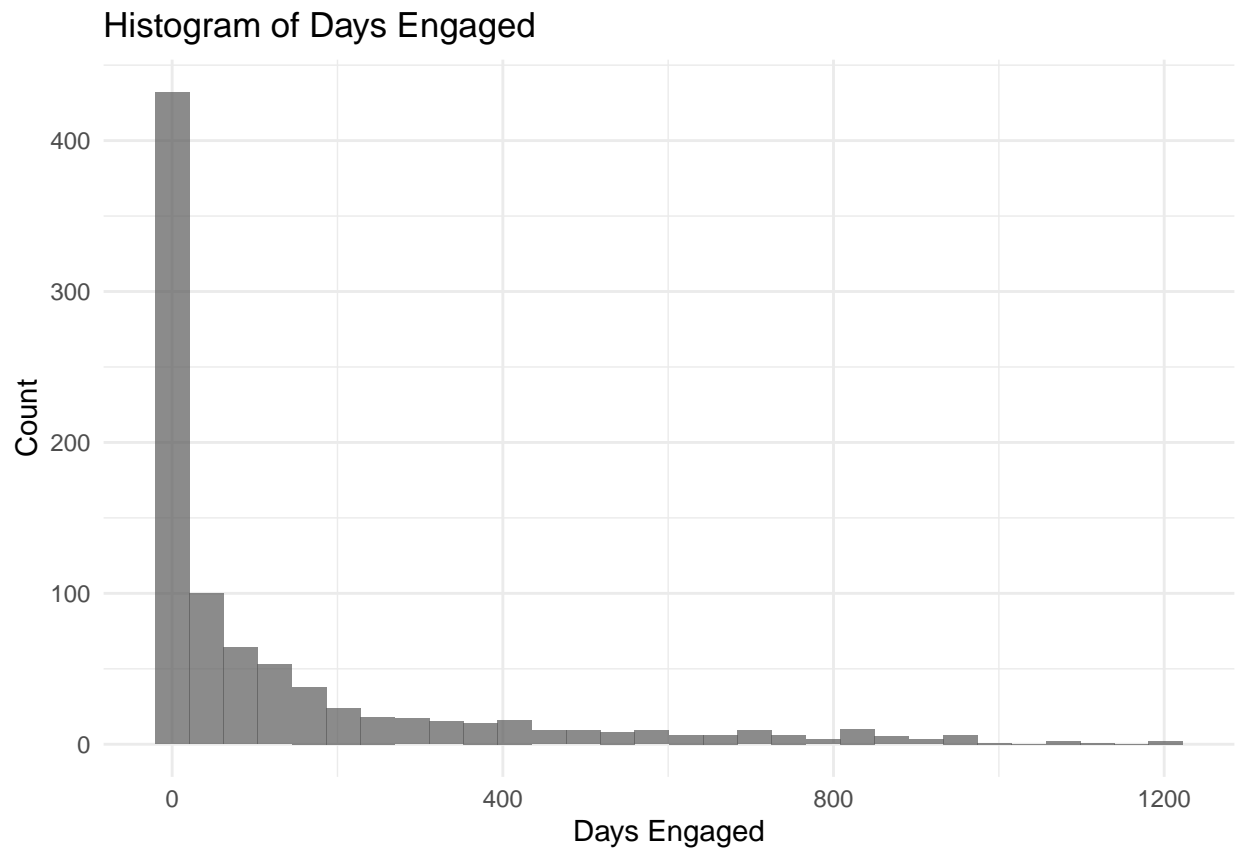


Figure 2: histogram of retention days across all clients