



Customer Retention and LTV analysis

Digital Parking Spot Reservation Service Company

Analyzed retention trends and the drivers of retention across customer segments to understand customer purchase behavior and, also assess the impact of incentives on customer retention.

Reporting infrastructure set-up on looker

Situation

- Client wanted to understand its customer behavior by analyzing purchase trends, lifetime value of customers and analyzing the retention of their power users
- Partnered with the client to study the customer purchase behavior, define the retention and lifetime periods for different customer segments to understand the drivers of customer retention and set up these analyses on a Looker BI dashboard that can be refreshed regularly

Accordion Value Add

- Evaluated retention and lifetime periods for each of the customer segments and categorized customers into active, resurrected and lapsed based on the retention period and purchase frequency
- Evaluated behavioral attributes (LTV, Incentive usage, Lifetime bookings, etc.) for above segments across years and customer segments
- Built a Looker dashboard to report the trends in customer acquisition and retention, LTV trends of customer cohorts and real-time tracking of customer status
- Built a super-user dashboard on Looker to report the trends in the number of power users (>5 bookings in a month) and their growth and retention over the months

Impact

- Statistical method of defining retention and lifetime periods enabled the client to better understand the customer behavior
- Identified that the impact of incentives on resurrections, revenues and purchase rates is minimal / ineffective. This helped the Executive team to get better insights into customer incentive programs.
- Our analysis identified key drivers of performance enabling management team to identify poor performers and proactively take action to prevent attrition
- Translating the analyses to a Looker dashboard that can be refreshed regularly provided management easy access to track various KPIs on a monthly basis

Methodology/ Approach

01

RETENTION & LIFETIME PERIOD EVALUATION

- **Defined retention period** as the time taken (in weeks) to complete ~90% of the cumulative bookings
- **Evaluated Lifetime period** as the time taken by the customers to generate ~90% of their total revenue
- The above metrics were **evaluated for each of the customer segments**.

02

SEGMENTATION OF CUSTOMERS

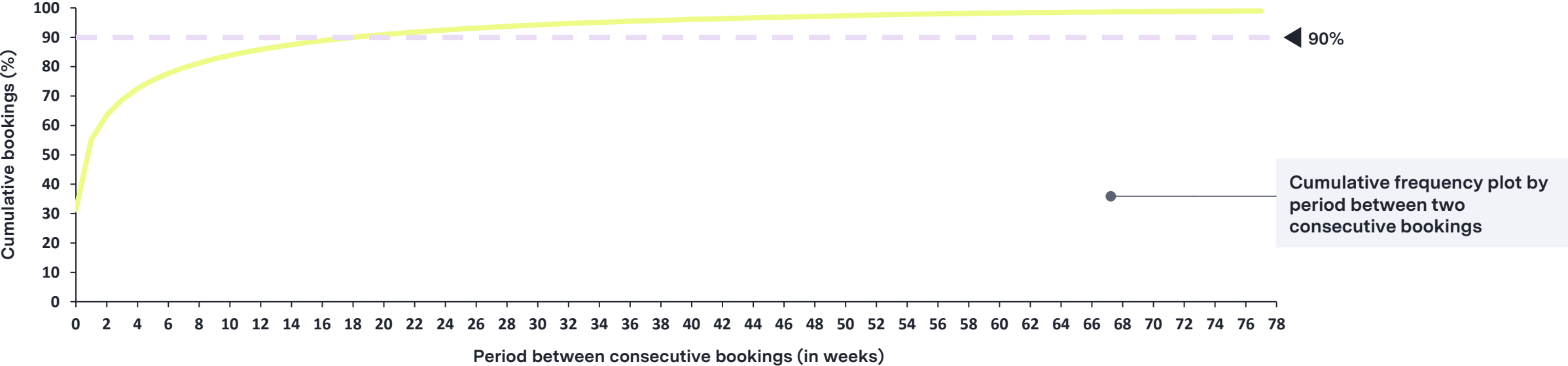
- **Segmented customers** into **new, retained and resurrected** by week **based on the retention and lifetime periods**
- **Segmented customers into active** (who never lapsed), **lapsed, resurrected based on their activity** in their lifetime to study the deterioration

03

IMPACT OF INCENTIVES ON USER BEHAVIOR

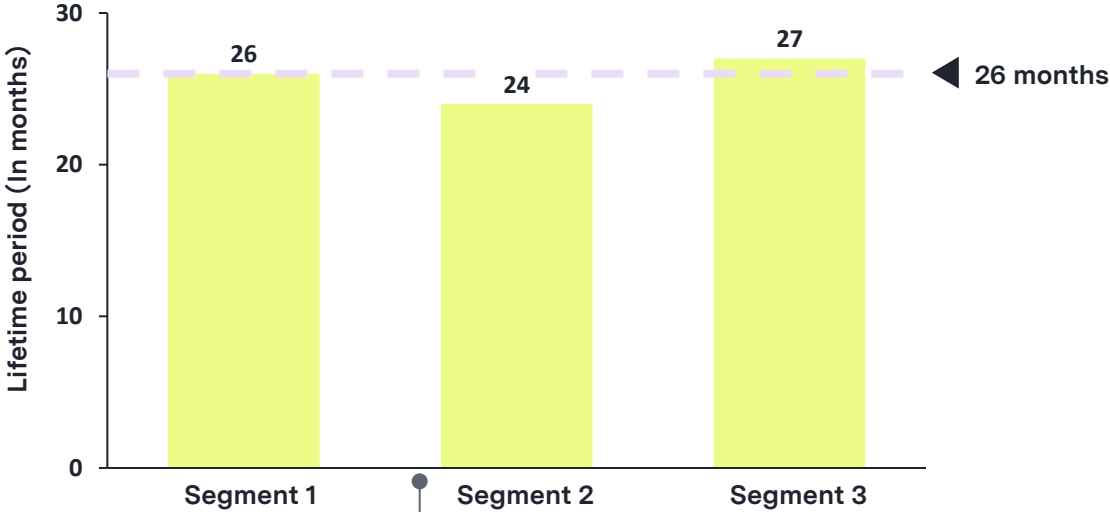
- Assessed the **share of different segments** of users utilizing incentives every week
- **Studied the repurchase rates** of users who made bookings with incentives vs. without incentives

Retention period and lifetime period evaluation



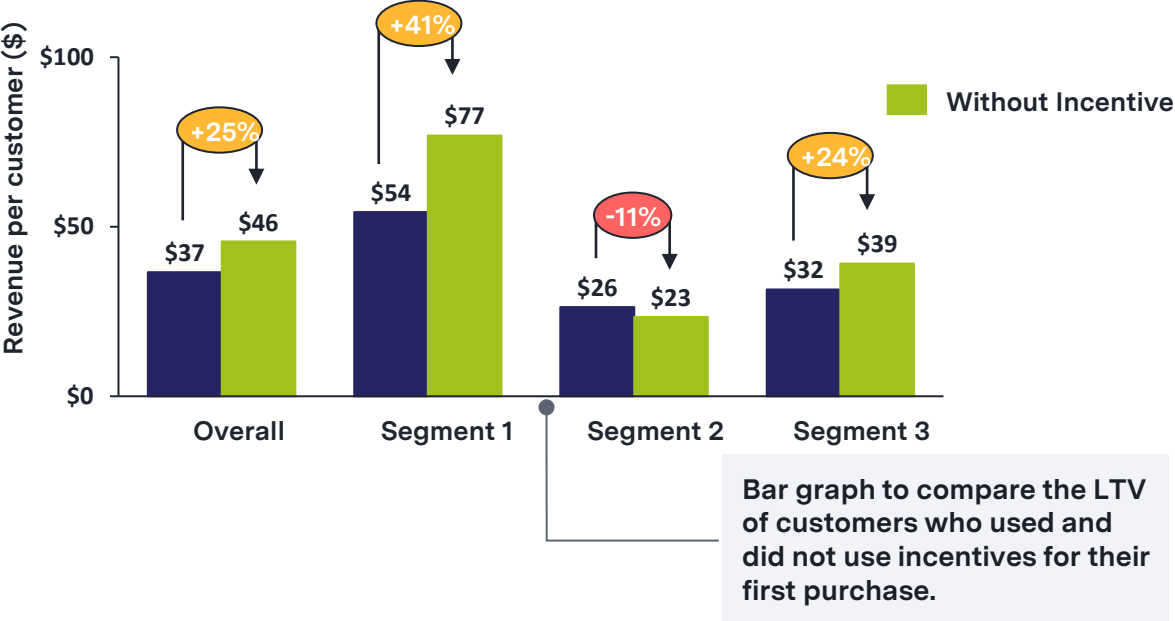
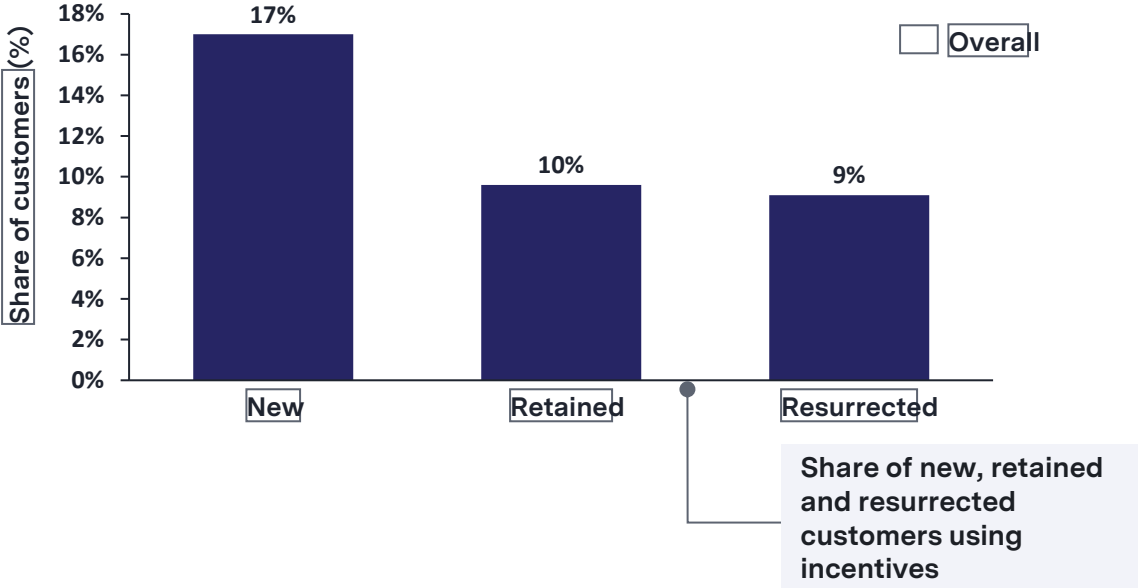
	Time period (in months) taken by users to generate corresponding revenue%					
Cumulative revenue (%)	50% of all users	60% of all users	70% of all users	80% of all users	90% of all users	100% of all users
50%	3	5	8	12	17	44
60%	4	7	10	13	20	45
70%	6	9	12	16	22	45
80%	7	10	13	18	24	46
90%	8	12	15	20	26	46
100%	9	12	16	21	28	47

Matrix to evaluate the time taken by the customers to reach their expected revenues

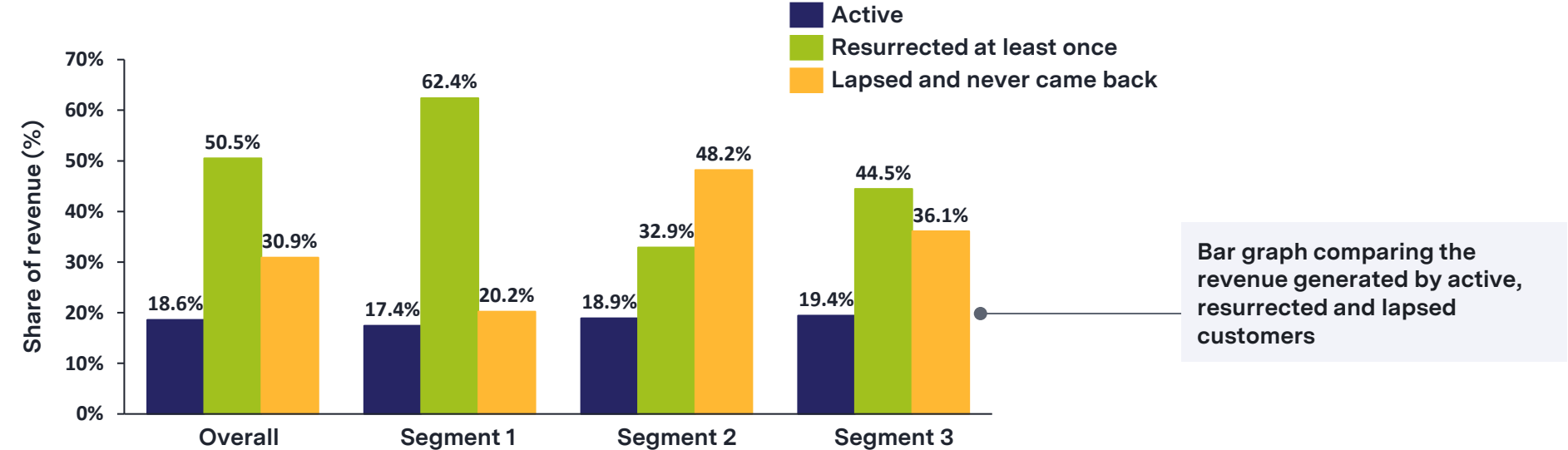
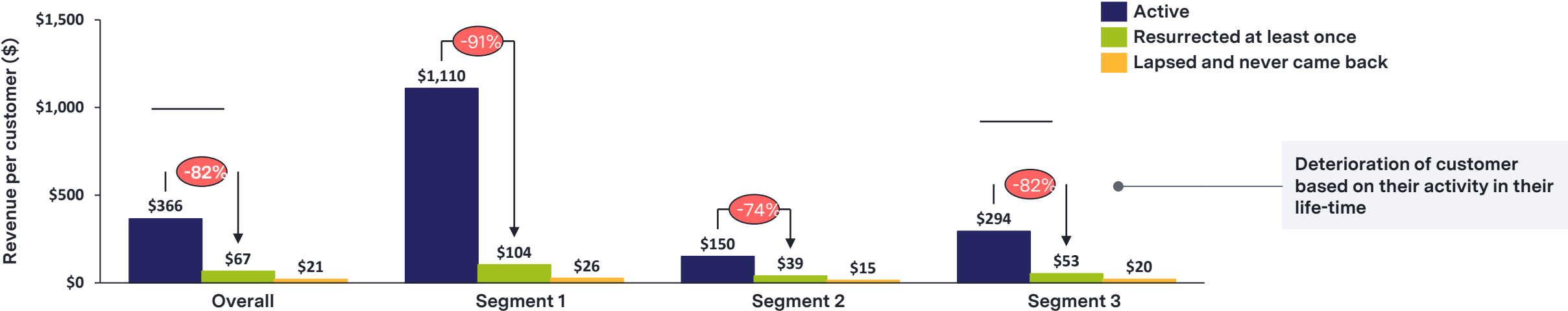


Graph showing the time taken by the customers to reach their expected revenues

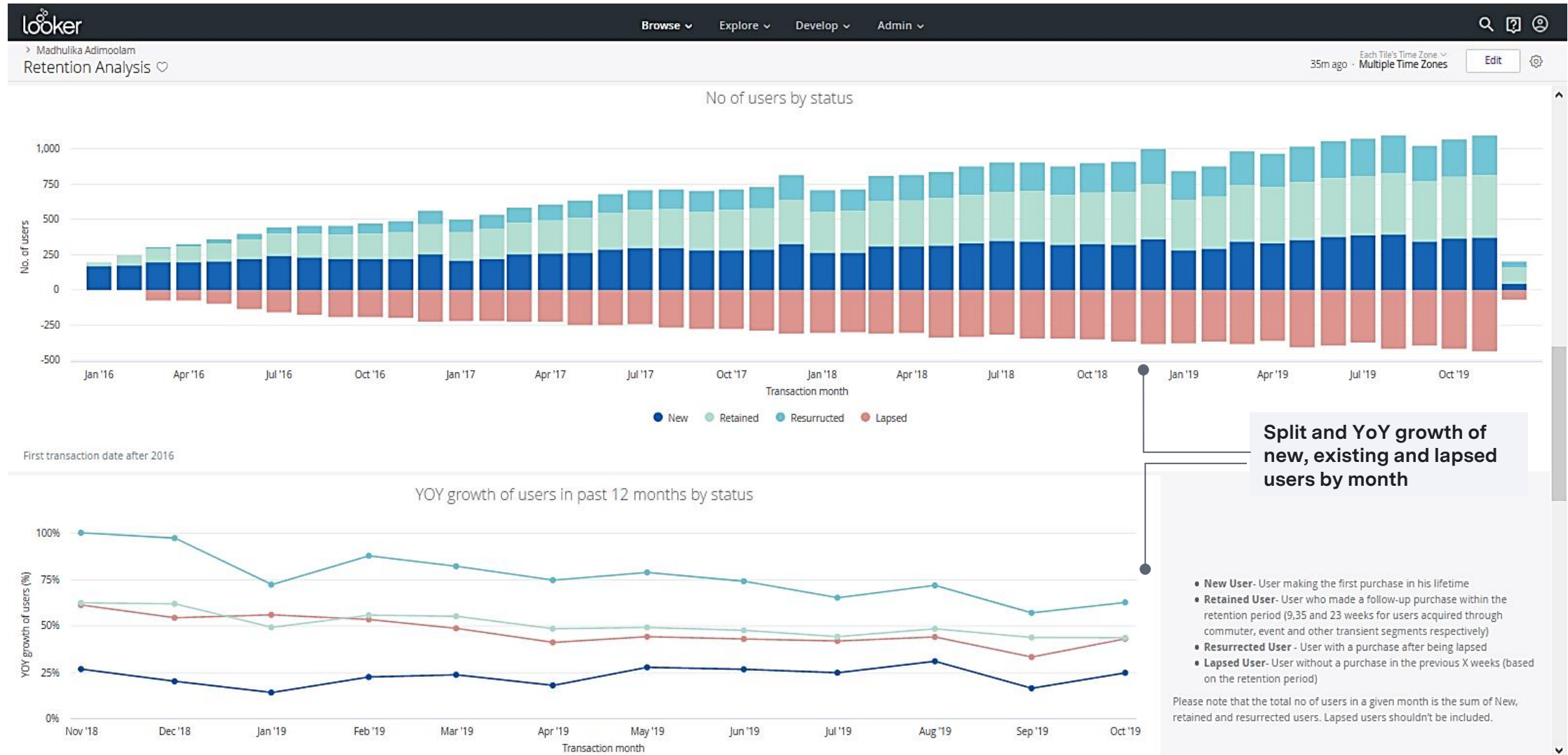
Impact of incentives



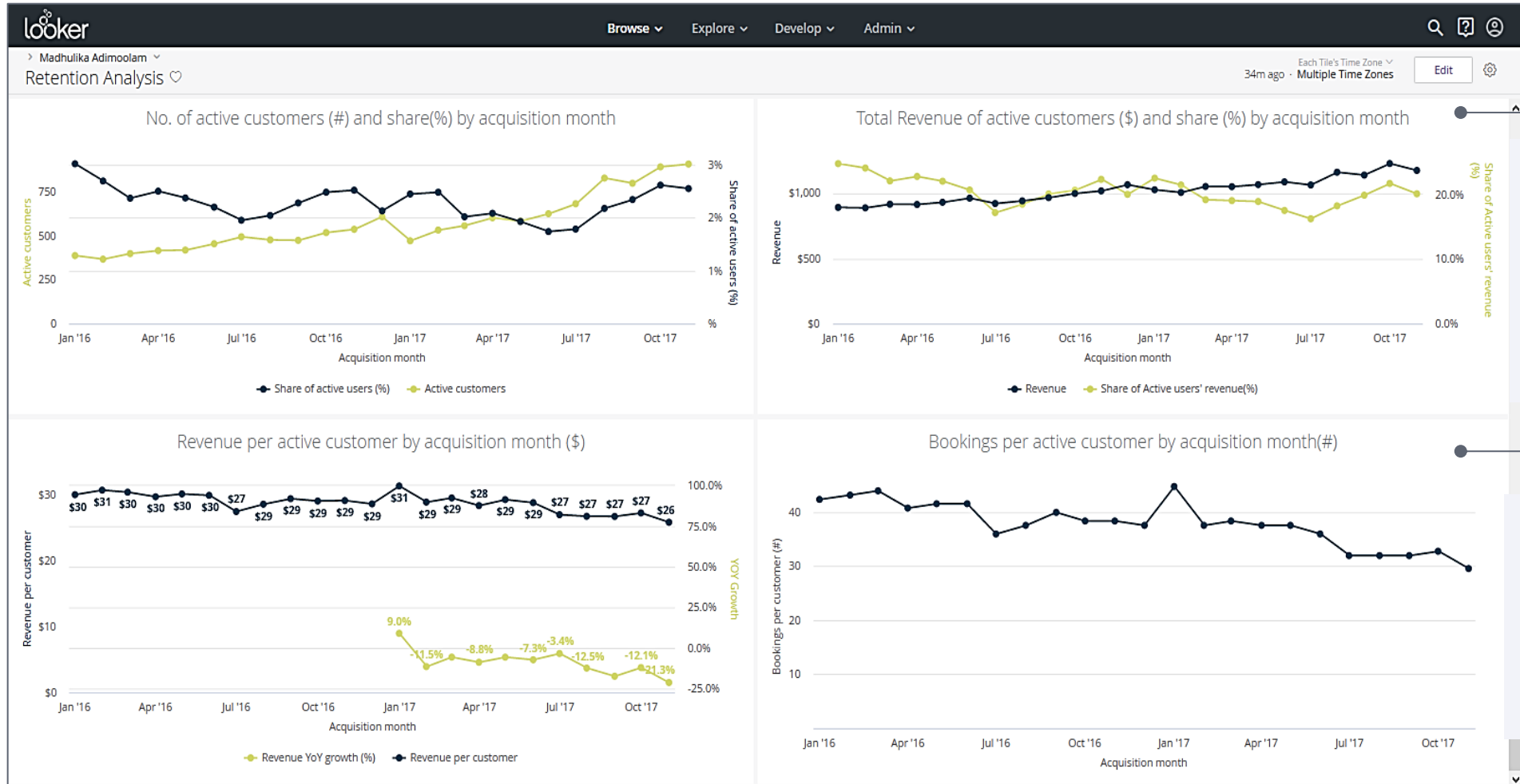
Customer purchase behavior



Looker dashboard - Retention analyses



Looker dashboard - Trends in customer purchase behavior of active users



Number of active customers by month and their share in total users acquired by month

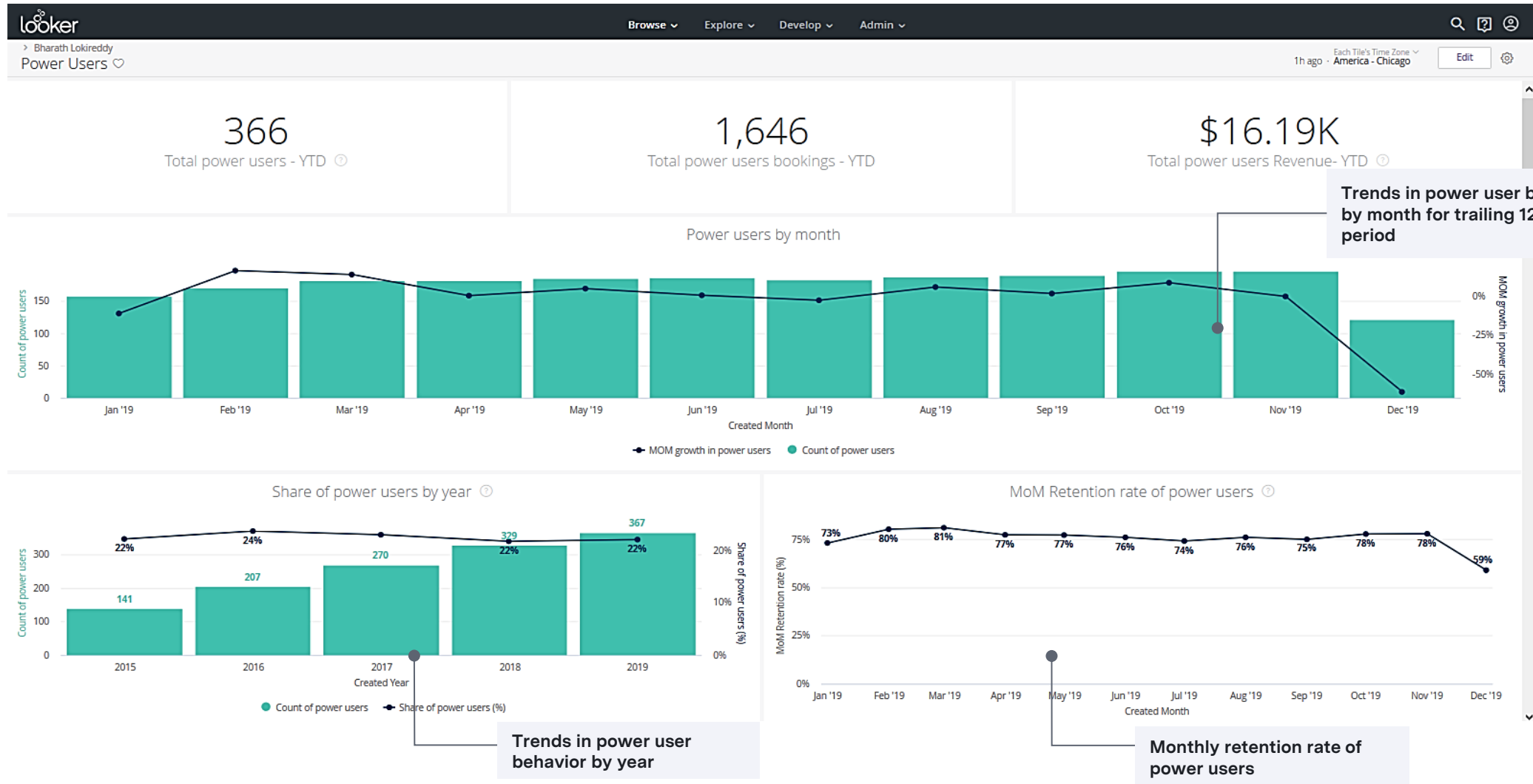
Total revenue (\$ & %) of active users by acquisition month

Trends in revenue per customer and YoY growth for active users from 2016-17 indicating deterioration

Trend in bookings per customer for active users from 2016-17 indicating deterioration

1. Customers acquired during the period Jan 2016 – Oct 2017 and active for 24 months period are considered
2. Shares (%) are calculated with respect to the customers acquired in a month
3. Revenue per active user = Revenue generated by active users in their lifetime / The total number of active users
4. Bookings per active user = Total bookings by active users in their lifetime / The total number of active users

Looker dashboard - Monthly & yearly trends for power users



1. Power users are the users with at least 05 bookings in any month of their lifetime