Customer Lifecycle Analysis

Yoga Fitness Chain

The analysis is a comprehensive study to understand various aspects related to customer behavior such as life-time value, tenure, loyalty, behavior based on the usage patterns etc. Additionally, we evaluated the impact of an ongoing marketing campaign on the business.

Customer Lifecycle Analysis

Situation

- Customer behavioral patterns were untapped and there was an opportunity to derive insights based on historical transactional data and demographic data to drive actions related to acquisition, conversion and retention
- Partnered with the client to build a comprehensive model to understand the behavior patterns of the customers that the Marketing, Finance and Operations teams could leverage

Accordion Value Add

- Built a statistical model based on historical data to calculate the lifetime value and average tenure of a customer by product
- Modeled repurchase behavior (including reacquisition after churn) of customers based on historical product usage frequency
- Analyzed the customer behavior during the free trial week period and their subsequent conversion to paid product
- Identified characteristics which define loyal customers and showcased their relative importance based on share of revenue contribution
- Calculated the true incremental value of Marketing campaign in terms of increase in # students and their revenue contribution

Impact

- Enabled client to quantify the future value of existing/new customers to make informed decisions in terms of the customer acquisition/customer retention spend. Client leveraged the analysis to set up targeted campaigns for upselling and retaining customers.
- Client was able to track the performance of the business entities across all markets based on monthly spends, conversion rates, churn rates etc.
- Client is now able to make informed decisions while designing marketing campaigns by understanding the effectiveness of the historical campaigns.

Approach & Methodology - LTV

Calculated the LTV and Tenure using multiple approaches such as:
- By extrapolating the 36-month revenue data and tenure data for future months using exponential smoothening techniques

LTV of Product1 Customer
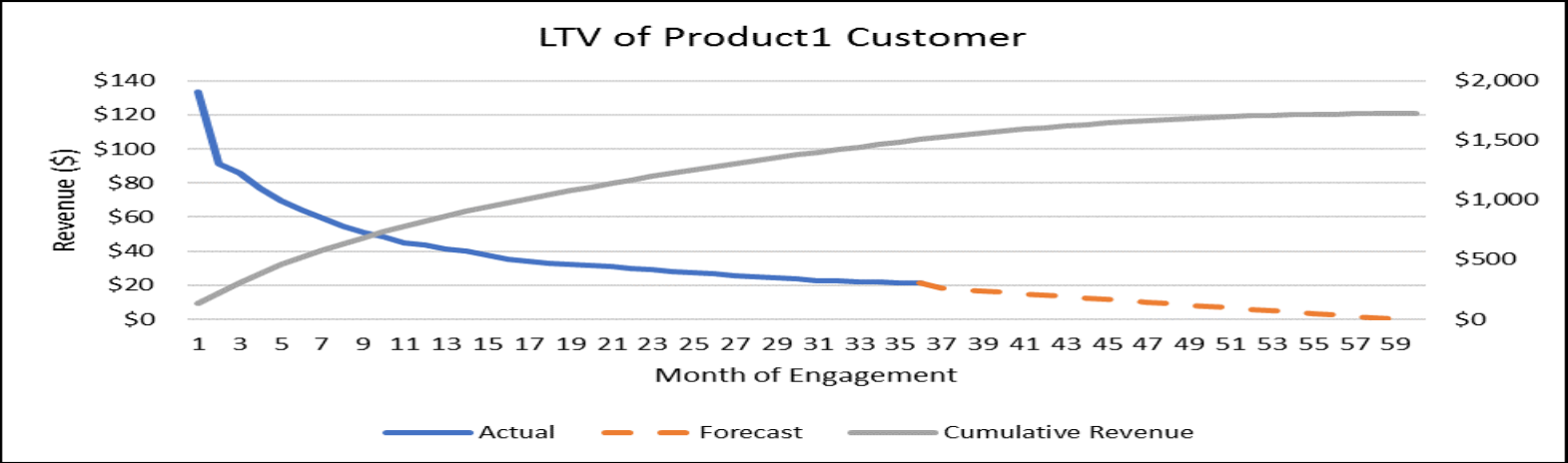
- By evaluating the spends of clients who churned in X years post onboarding.
- This way we have visibility into LTV of customers as per their tenure

Cumulative Revenue ($'000)												
	2016				2017				2018			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Year 1	$7,000	$4,000	$3,000	$1,000	$9,000	$6,000	$5,000	$2,000	$9,000	$6,000	$4,000	$2,000
Year 2	$12,000	$9,000	$9,000	$7,000	$15,000	$12,000	$12,000	$10,000	$15,000	$11,000	$12,000	$10,000
Year 3	$16,000	$12,000	$13,000	$11,000	$20,000	$16,000	$18,000	$15,000				
Year 4	$19,000	$15,000	$16,000	$15,000								

- By evaluating the customer retention rates for cohorts, based on their first purchase date, over several years.
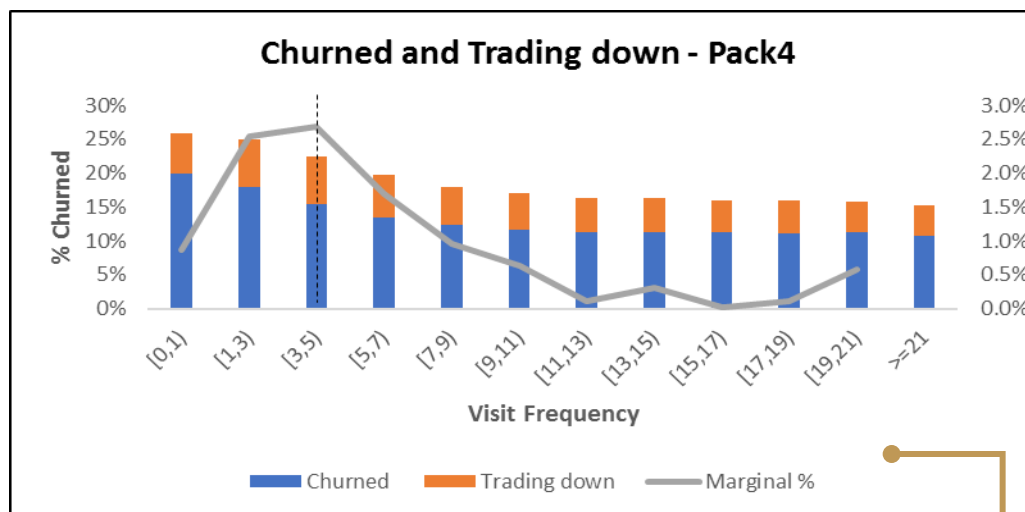
Student Retention by Cohort					
	2015	2016	2017	2018	2019
Year 1	100%	100%	100%	100%	100%
Year 2	26%	25%	23%	25%	–
Year 3	18%	17%	17%	–	–
Year 4	14%	14%	–	–	–
Year 5	13%	–	–	–	–

Approach & Methodology – Re-Purchase

- Segmented the customers based on visit frequencies.
- Evaluated purchase activities for each segment to estimate metrics like Trade-up, Trade-down, churn and retention.
- Using the marginal % change in churn we identified the segments of customers to be focused on for marketing purposes.
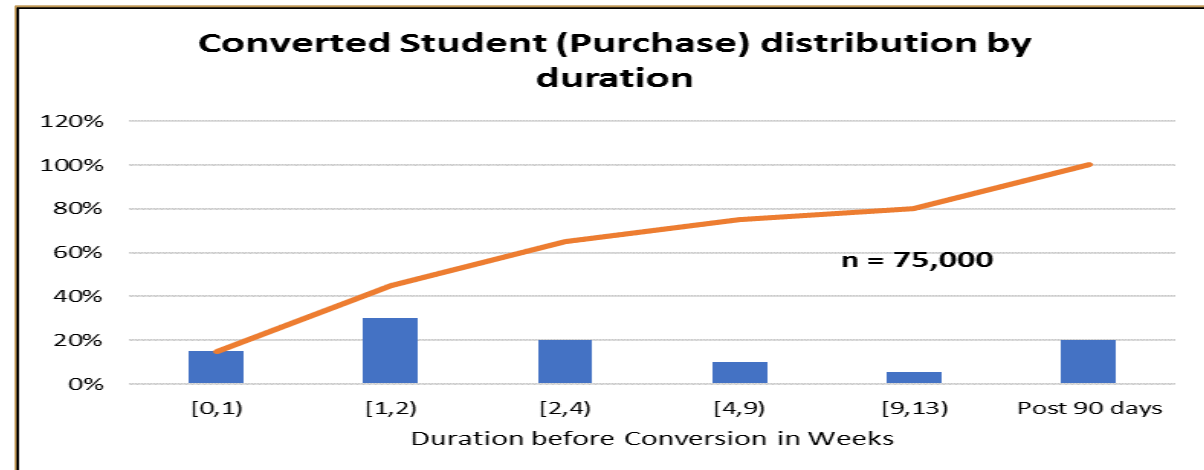
Low Value Product client trading up to other high value packs						
Visit Frequency (Preceding 3 Months)	# Instances	% Share trading up to High Value Pack 1	High Value Pack 2	High Value Pack 3	High Value Pack 4	Total % trading up
[0,1)	24,000	3%	4%	0%	4%	12%
[1,2)	50,000	3%	4%	0%	5%	11%
[2,3)	20,000	4%	6%	0%	7%	17%
[3,4)	8,000	5%	8%	1%	8%	22%
[4,5)	3,000	6%	9%	1%	10%	25%
[5,6)	1,000	6%	9%	1%	15%	31%
[6,7)	600	6%	11%	0%	18%	36%
[7,8)	200	5%	14%	1%	17%	36%
[8,9)	100	7%	8%	4%	24%	42%
[9,10)	50	5%	8%	4%	20%	36%
>=10	100	6%	12%	5%	26%	49%

Churned and Trading down - Pack4

Marginal % change is difference in churn % of consecutive visit based segments

Approach & Methodology – Customer Conversion

- Customer leads are segmented based on their # of free week visits.

- Identified a cutoff visits/ week to narrow down on leads which are likely to convert.

- Identified a cut off duration post free week to narrow down on leads which are likely to convert. The chart also highlights the period within which maximum conversions occurred.

Conversion of Free Week Customers by Visit Frequency

| n = 8,000 | 75,000 | 50,000 | 30,000 | 15,000 | 7,000 | 4,000 | 3,000 |

Free Week Visits(#/week)

Converted Student (Purchase) distribution by duration

n = 75,000

Duration before Conversion in Weeks

Approach & Methodology – Customer Loyalty

- Using the distribution of students by engagement, identified the loyal students and calculated their revenue contribution

Student Distribution By Engagement Period

Revenue Distribution By Engagement Period
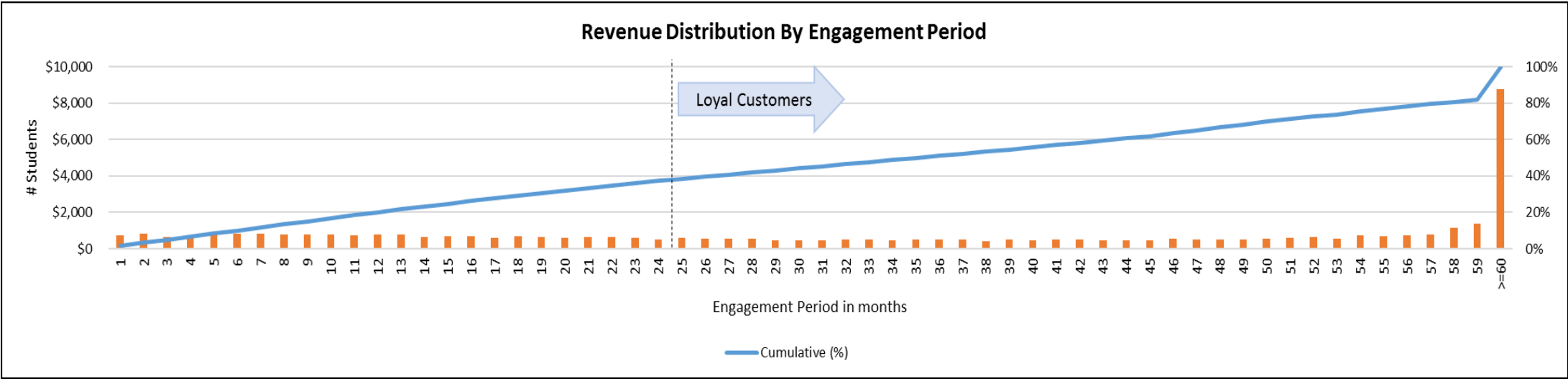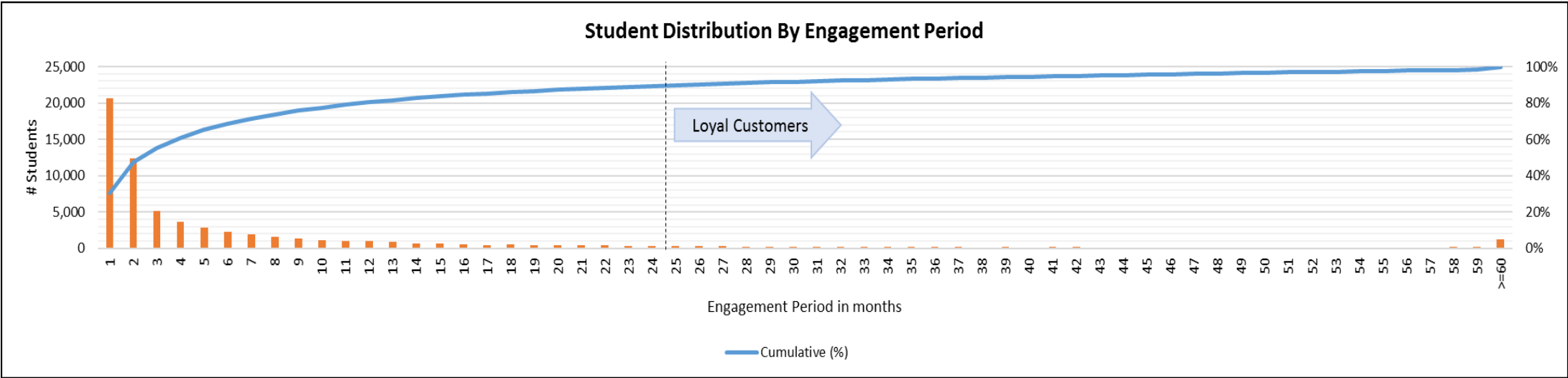
Approach & Methodology – Campaign Evaluation

- Behavior of campaign and non-campaign students are compared using the churn rates of the both sets over their initial 6-month period.

- Calculated the true incremental value of campaign based on incremental students & revenue based on projections using historical data.

New student Churn (after conversion): Campaign vs. non-campaign students

Legend: Churn of campaign students | Churn of non-campaign students | Cum. Churn of Campaign students | Cum. Churn of non-campaign students

New Customers/Store

Start of Marketing Campaign

Incremental Students from Campaign

Legend: Actual — Forecasted