

Customer Lifetime Value

What is Customer Lifetime Value (CLV)

- Present value of customer relationship
- Pay upfront vs after service
- Discounted cash flows (net)
- How much to spend to retain/acquire
- Valuation of company
- To segment customers

What are the components of CLV?

- Retention spending
- Retention Rate
- Margin
- Discount rate

A Simple Metric - Netflix

Expected Customer Lifetime in Months	20
Average Gross Margin per Month per Customer	\$50
Average Marketing Costs per Month per Customer	\$10
Average Net Margin per Month per Customer	\$40
Customer Lifetime Value	\$800

Lifetime Value of a Customer (CLV)

- Just like we use Net Present Value (NPV) to evaluate investments and companies, we use CLV to evaluate customer relationships
- CLV is the expected NPV of the cash flows from a customer relationship

CLV is defined as the discounted sum of all future customer revenue streams minus product and servicing costs and remarketing costs.

The Base CLV Model

$$\text{CLV} = [\$M - \$R] \times [(1 + d) / (1 + d - r)]$$

Short-Term Margin

Long-Term Multiplier

G.M

Ret
Cost

discount
rate

ret,
rate

Example 1 - Netflix

Netflix charges \$19.95 per month. Variable costs are about \$1.50 per account per month. With marketing spending of \$6 per year, their attrition is only 0.5% per month. At a monthly discount rate of 1%, what is the CLV of a customer?

If Netflix cuts retention spending from \$6 to \$3 per year, they expect attrition will go up to 1% per month

Should they do it?

Challenges / Tips?

- Same units of measure
- Retention vs Attrition rate
- Net worth of the customer
- Company's worth (based on customer valuation)
- Optimize / simulate – yield. Tweak variables to calculate churn
- How much to spend on acquiring a new customer?
- Or retain an existing customer

CLV-Initial Margin

- Customer pays before using the service
 - e.g., apartment rentals, Netflix, Hulu
- Customer pays after using the service
 - e.g., credit cards

$$\text{CLV} = [\text{\$M} - \text{\$R}] * [(1+d)/(1+d-r)]$$

$$\text{CLV} = [\text{\$M} - \text{\$R}] * [r/(1+d-r)]$$

- M-R ↗

$$CLV = [\$M - \$R] * [(1+d)/(1+d-r)]$$

$$\overline{M-R} \quad CLV = [\$M - \$R] * [r/(1+d-r)]$$

$$\frac{(M-R) \cdot (1+d)}{1+d-r} - M-R = \frac{(M-R) \cdot (1+d)}{1+d-r} - \frac{(M-R) \cdot (1+d-r)}{1+d-r}$$

$$\frac{\cancel{(M-R)} + d\cancel{(M-R)} - \cancel{(M-R)} - d\cancel{(M-R)} + r(M-R)}{1+d-r} = \frac{(M-R) \cdot r}{1+d-r}$$

Market Cap & CLV

- Differences?
 - Variance in Mcap
 - External (sentiment) vs CLV – Internal
 - Normalized adjustment
- Similarities?
 - Lag in trend
- What increases CLV the most?
 - Retention
 - COGS (Margin)

What Is CLV Used For?

- To determine how much to spend to acquire a customer.
- To determine how aggressively to spend to retain a particular customer or group of customers
- To value a company

Conclusion

- Customer Lifetime Value can provide a forward looking measure of the customer relationship.
- It can connect marketing strategies to financial consequences.
- Strategic marketing alternatives, (e.g., targeting, and promotion campaigns) can be evaluated based on whether they improve customer retention, and lifetime value