CALCULATING

Lifetime Value

A CASE STUDY »

One way to analyze acquisition strategy and estimate marketing costs is to calculate the Lifetime Value ("LTV") of a customer. Roughly defined, LTV is the projected revenue that a customer will generate during their lifetime. In this graphic we'll briefly cover how to calculate LTV and how to use LTV to help solidify your marketing budget. Special thanks to @avinash.

Case Study: Starbucks

» Despite the shaky economy, Starbucks is opening new stores around the world. In 2012, Starbucks expects to open 600 new locations internationally, about 25 percent of which will be in China. It's no secret that Starbucks' acquisition strategy is closely scrutinized and routinely copied. Using rough sales figures from 2004, we're able to estimate the LTV of an average Starbucks customer. The sales data from Starbucks may not reflect current marketing trends, and is only provided to illustrate the steps necessary to calculate LTV.

Step 1: Average Your Variables

CUSTOMER EXPENDITURES PER VISIT

AVG. ACROSS 5 CUSTOMERS (IN USD)

→ 5.90 → (s)

NUMBER OF VISITS PER WEEK (THE "PURCHASE CYCLE")

AVG. ACROSS 5 CUSTOMERS

→ 4.2 → (c)

AVG. CUSTOMER VALUE PER WEEK (EXPENDITURES × VISITS, IN USD)

AVG. ACROSS 5 CUSTOMERS (IN USD)

→ 24.30 → (a)

Step 2: Calculate Lifetime Value (LTV)

CONSTANTS

t — **The Average Customer Lifespan** (how long someone remains a customer). In the case of Starbucks, the average customer lifespan is **20 years**.

r — **Customer Retention Rate**. The percentage of customers, who, over a given period of time, repurchase, when compared to an equal and preceding period of time. Starbucks: **75%**.

p — **Profit Margin per Customer**. Starbucks: **21.3%**.

i — **The Rate of Discount**. The "rate of discount" is the interest rate used in discounted cash flow analysis to determine the present value of future cash flows. Usually this number falls between 8% and 15%. Starbucks: **10%**.

m — **Avg. Gross Margin per Customer Lifespan**. Starbucks has a profit margin of 21.3% (see constant "p"). If the average customer spends $25,272 (see the "Simple LTV Equation" results below) during their time as a customer ("t"), Starbucks has gross margin per customer lifespan of **$5382.94**.

DIFFERENT WAYS TO CALCULATE LTV

Companies like Starbucks will typically use **several different equations** to calculate the LTV. We've included 3 common LTV equations below. Companies will typically use these equations (separate or in combination) to help determine their marketing budgets, and, ultimately, the cost of acquisition.

SIMPLE LTV EQUATION	CUSTOM LTV EQUATION	TRADITIONAL LTV EQUATION
$52(a) \times t$	$t(52 \times s \times c \times p)$	$m\left(\frac{r}{1+i-r}\right)$
EQUATION FILLED	EQUATION FILLED	EQUATION FILLED
$52(24.30) \times 20$	$20(52 \times 5.90 \times 4.2 \times 0.213)$	$5382.94\left(\frac{0.75}{1+0.1-0.75}\right)$
CALCULATED LTV	CALCULATED LTV	CALCULATED LTV
$25,272	$5,489	$11,535

AVERAGE LTV

$14,099

By calculating the LTV of an average customer, Starbucks can now begin to estimate the maximum acquisition cost of a new customer. Using our estimate (an average of several LTV equation results), Starbucks must spend less than $14,099 to acquire new customers. If Starbucks spends more than $14,099 per acquisition over the course of an average customer lifespan (20 years), there's a chance that they could be losing money.

Breaking Down LTV Further

LTV WILL BE DIFFERENT FOR DIFFERENT KINDS OF CUSTOMERS

Step 2 in this graphic is intended to help you determine LTV as a total average (an average of all your customers). To do this, companies will typically average the data from randomly chosen customers (as shown in Step 1 above). Sometimes it's helpful to break down the average further and perform separate LTV calculations for different kinds of customers. Try and segment your customer base by total purchases over a long time period, and it will help you determine the LTV of a "good" customer versus an "average" one. This type of analysis will help you determine how much more you should pay in order to acquire a "good" customer. See chart below.

INVESTING IN "GOOD" CUSTOMERS

Companies should be worried about the lasting impact of "buying cheap customers." How likely are these customers to buy another product, or hang around for a few years? Sometimes it pays to invest in "good" customers. "Good" customers might cost more to acquire, but they'll likely be more profitable as well.

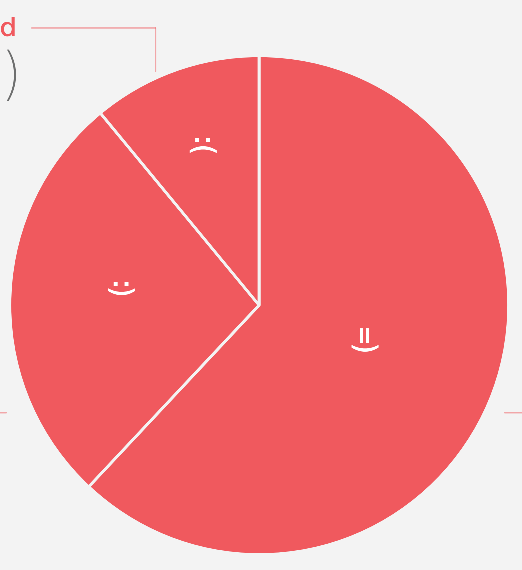
Let's say that the LTV of an "average" customer is $8,000, and the LTV of a "good" customer is $10,000. By subtracting the two LTVs, you can see that you might expect to pay $2,000 more to acquire "good" customers.

Customer Satisfaction Boosts LTV

One of the most effective ways to boost LTV is to increase customer satisfaction. Research has found that a 5% increase in customer retention can increase profits by 25% to 95%. The same study found that it costs six to seven times more to gain a new customer than to keep an existing one.

The success of Starbucks could be attributed to its high customer satisfaction rate (89%, 2002, see below). Survey software, such as KISSinsights, can help you determine (and improve) your customer satisfaction rate.

CUSTOMER SATISFACTION AT STARBUCKS*



This is just the beginning

Calculating LTV can help you see how profitable customers are—and how much should be spent on acquiring them. **KISSmetrics** is a powerful web analytics solution that has built-in support for lifetime value and can help you identify which marketing channels deliver the most valuable customers. Give us a try! Try KISSmetrics for free: kissmetrics.com/signup.

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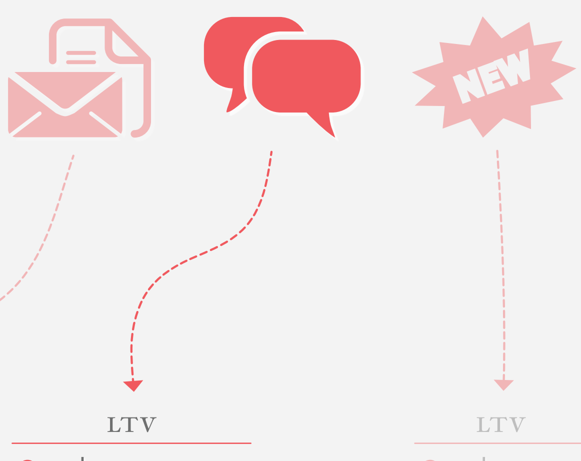

SOURCES

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