

# Proposal - Apply Customer Lifetime Value Analytics to Improve Ecommerce Business

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- **Abstract**

An exhaustive comprehension of individual customer value is urgent to any fruitful customer relationship administration system. It is additionally the way to building items for long haul value returns. Demonstrating customer lifetime value (CLTV) can be laden with specialized troubles, be that as it may, because of both the loud way of client level conduct and the conceivably substantial customer base. The present study attempts to establish a framework for computing customer lifetime values for a e-commerce company, where confronting the unique challenges of local commerce means quickly iterating on new products and the optimal inventory to appeal to a wide and diverse audience. Given current purchaser frequency we need a faster way to determine the health of individual customers, and given finite resources we need to know where to focus our energy. Preliminary data will be assembled from **Groupon**, a large global e-commerce company. The hypothesis of the survey is delivered as H1: Customer lifetime value is one of the essential metrics in your device belt in case you're an e-commerce retailer. We all realize that it's more exorbitant to acquire new prospects than to retain existing ones in this way extending your CLV is central to a healthy business model and customer retention strategy. In this manner, a get-together of basic information from various sources is done and as a general rule, it is out-dated. A t-test with the expectation of complimentary examples is used to address the hypothesis. The customer lifetime value defined in this study consists of the current and future values of a customer, which involve an estimation of lifetime length, future purchasing behavior and the profit associated with each behavior of the customer. We furthermore show various customer sorts, for instance, one-time buyers and power users, autonomously to think about particular component weights and to redesign the interpretability of our results.

- **Introduction**

For newly established E-commerce companies, seemingly the highest need is customer procurement. Earning your first dollar is a huge milestone. Next, is receiving your underlying 100 orders. Yet even after some stores have figured out how to get shoppers to add items to their truck and successfully check out, their businesses never genuinely get off the ground. That is because picking up customers is the underlying step to building a sustainable business. By then, the diligent work is recently beginning. To scale your Ecommerce store, you ought to continue to acquire new customers yet you ought to likewise allocate resources to manage customer unwaveringness and retention.

In ecommerce, CLV is the value a customer contributes to your business over their entire lifetime at your company. Because we don't know how long each relationship will be, we make a good estimate and state CLV as a periodic value — that is, we usually say “this customer's 12-month (or 24-month, etc) CLV is \$x”.

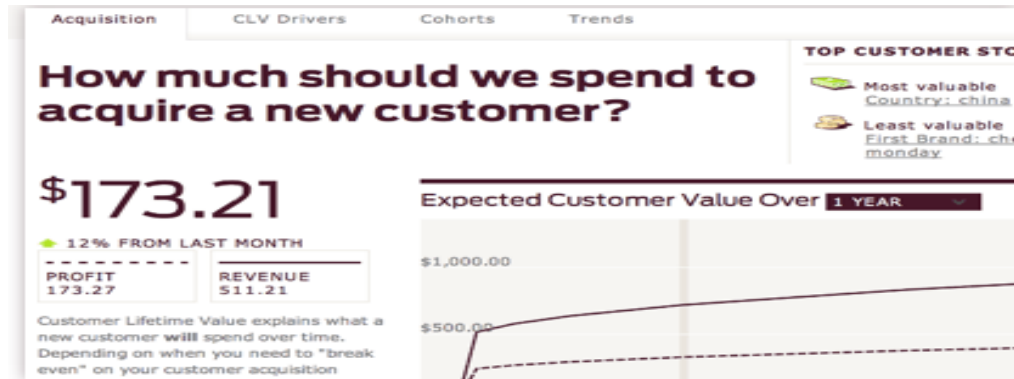
The main methods of calculating CLV are split between historic and predictive CLV:

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**Historic CLV (Good indication of CLV):** - Simply the sum of the gross profit from all historic purchases for an individual customer.

**Predictive CLV (Great indication of CLV):** - A predictive analysis of previous transaction history and various behavioral indicators which forecasts the lifetime value of an individual. As long as the equation is accurate, this value will become more accurate with every purchase and interaction.

## Why is Customer Lifetime Value important?



Customer lifetime value is one of the most basic metrics in your mechanical assembly belt in case you're an ecommerce retailer. We all realize that it's more exorbitant to acquire new prospects than to retain existing ones accordingly extending your CLV is central to a healthy business model and customer retention strategy.

Here are five reasons why employing CLV as a central metric is vital if you want to increase profitability, retention and overall ecommerce success.

### 1. Generate real ROI on customer acquisition

CLV helps you concentrate on the channels that give you the best, most profitable customers. You ought to be streamlining your marketing channels in terms of the lifetime value a customer contributes to your image, rather than the gross benefit on the underlying purchase.

You are therefore attempting to maximize your customer lifetime value in relation to your cost of customer acquisition.

### 2. Enhance your retention marketing strategy

The value of a marketing campaign (for example, one aimed at turning your one-time purchasers into repeat customers) should not just be valued on the instant revenue they drive. It should be valued in terms of what impact it had on the average CLV of the segment of customers you are targeting.

How did it alter the trajectory of CLV over time for an average customer? To calculate this, you'll need accurate predictive analytics so that you can see how predicted CLV is influenced by different marketing actions.

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## 3. Create more effective messaging, targeting & nurturing

Segment your customer base by CLV so that you can improve the relevance of your marketing with more personalized messaging.

A useful variable to use here would be the types of products you market to your customers from different segments.

## 4. Improve your behavioral triggers

By organizing data into natural groupings (or clusters) you can discover the behavioral triggers that incentivized your best customers to make their first purchase.

Once you've taken a look at your beautiful results, you should be trying to replicate this behavior with your prospective customers in order to turn them into first-time purchasers.

## 5. Improve output from customer support

Focus your time on giving special attention to your most valuable customers. Never forget Pareto's handy little principle: 20% of your customers generate 80% of your revenue.

Using CLV to identify your most valuable customers will help you decide where to direct your customer service resources. Paying attention to your most valuable (and profitable) customers will help you push up margins, at the same time as fostering strong relationships through better service with your most important segment.

## How to calculate customer life time value?

### Historic CLV

This is simply the sum of the gross profit from all historic purchases for an individual customer. Sum all gross profit values up to transaction N where transaction N is the last transaction a customer made with your store. If you have access to all your customer transactional data you can calculate this in Excel.

Calculating CLV based on net profit ultimately gives you the actual profit a customer is contributing to your store. This takes into account customer service costs, the cost of returns, acquisition costs, the cost of marketing tools etc. The issue with this is that it can be highly complex to calculate this on an individual basis, especially if you want the figures to constantly be up to date. Gross margin CLV will still give you great insight into the true profitability of your customers to date.

### Predictive CLV

Predictive CLV algorithms try to obtain a more accurate value of CLV through predicting the total value a customer will eventually give to your store over their entire lifetime.

Ecommerce expert, Vladimir Dimitroff, explains:

**"CLV is always the NPV (net present value) of the sum of all future revenues from a customer, minus all costs associated with that customer."**

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In practice this can be hard to achieve due to the requirement for up to date discount rates. There are numerous ways to calculate a predictive CLV that vary wildly in complexity and accuracy.

To quote Vladimir again:

**"Predictive techniques...are always limited to the horizon of our models' predictive accuracy and confidence."**

Having said this the more tailored your CLV equation is to your specific industry the more accurate it will likely be. The best models are highly accurate. It is essential to do these calculations to get a real understanding of how valuable your customers actually are, the more accurate you become the more powerful your marketing can be.

- **Results**

Success isn't about discovering customers—it's about finding the correct customers. Since you can calculate the lifetime value of your current customer base, you'll be able to begin creating efforts that target and win over those customers that really make the difference for your essential concern