

Churned

# THE DATA SCIENCE BEHIND CUSTOMER LIFETIME VALUE



# DECOMPOSE THE CLV COMPONENTS

## Find Valuable Customers

CLV is a very valuable topic for companies because it remains the pivot point when it comes to customer retention and ultimately contribute to the overall business growth for companies in the future. With the right tool and management, CLV can be predicted and optimized.

## CLV CALCULATION

AVERAGE SALE  
X  
ANNUAL  
PURCHASES  
X  
YEARS

## The Power of CLV

In recent times, a growing number of companies have come to recognize the value of predicting Customer Lifetime Value (CLV). Modern AI-driven CLV analytics can offer invaluable insights into the customer base of any company. Predicting accurately the value that each customer may potentially bring is crucial for the deployment of effective CSM strategies, targeting marketing campaigns, and offering dynamic pricing solutions and discounts to the right customers. Which customers are the most valuable to my company? Which customers should I target with a retention campaign? These are questions for which CLV analysis gives crucial answers.



## 1.

### ***Effective data enrichment.***

Data enrichment is a key component in achieving good levels of accuracy for CLV prediction. This is true for customers with a rich historical record, but even more relevant for new customers for which the amount of data available may be very limited. Modern CLV prediction engines are also capable of delivering the goods for customers with no purchase or engagement history. Overall, delivering accurate predictions for both existing customers and new customers is a challenge that only the best modern AI machinery can achieve. Effective data enrichment plays a big role in making this a successful effort.

## 2.

### ***Decomposing CLV into key components.***

Achieving a good degree of accuracy in CLV prediction is immensely challenging and requires the use of state-of-the-art machinery in data science. Typically, the future value of any given customer can be decomposed into three key components: (i) the chance that the customer will remain active – that's churn prediction! – (ii) the purchase frequency of an active client, (iii) the value of each purchase. Depending on the business model and the nature of the product (subscription or one-time purchase), some of these components may be simpler or harder to predict. In any case, achieving high prediction accuracy on any of the components requires an intelligent use of all available data, ranging from customer characteristics, to customer engagement levels, economic indicators, and industry/market performance, among others.



## 3.

### *Prediction of long-run customer behaviour*

Another important aspect of CLV prediction is that it relies on the robust and accurate modelling of long-run behaviour of customers. Interestingly, machine learning models designed to predict if a customer will churn in the short-run are usually not well suited to analyze long-run customer behaviour. Here's another tip for those wanting to improve on their CLV prediction: it is all about structure and robustness. Since CLV looks into the distant future, seemingly small changes in customer behaviour can have large impact on CLV predictions. The key to accurate and reliable CLV prediction is thus to focus on predictive robustness and to complement your AI/machine learning models with a structural CLV modelling approach. When in doubt, just talk to the experts at Churned.nl.

## 4.

### *Beyond prediction... Optimizing CLV and maximizing ROI.*

A final key point to consider in CLV modelling is that even the most accurate CLV prediction is not enough to optimize customer value and ROI of marketing campaigns, pricing and discounts. Achieving actionable results and optimizing CLV requires the deployment of structural causal data science models and the use sensitivity analysis. At the end of the day, campaigns should be targeted at customers which are sensitive to your marketing, communication and discounts. This is the only true avenue towards optimizing CLV and maximizing ROI. Should you target a customer that is in high risk of churn with a discount? Well, this depends on whether that customer is sensitive to the discount or not. Offering a discount to a customer that will churn anyway is a sure way to lose money and fall down the trap of a negative ROI. Modern marketing and pricing strategies recognize this basic business principle and make use of causal AI models to identify the customers and actions which deliver the "biggest bang for your buck".

If you want to learn more, feel free to drop us an email at [info@churned.nl](mailto:info@churned.nl).





# Key Takeaways

In an age of growing customer demands and heavy competition, retaining customers is critical to every business. Even just a small increase in customer retention can have a huge impact on the company's overall profit. A right tool can help companies reach the goal of CLV optimization. However, building a customer success management platform can be extremely time-consuming and technical. Therefore, it is not surprising that many companies decided to turn to existing software in the market instead of building their own one.

At Churned, we combine our extensive business experiences with our proprietary AI-driven analytics to deliver unrivalled predictive insights for your business.

We developed an industry proven best practice approach to help your business achieve customer success in four steps:

1. Build a retention model
2. Identify and distinguish customer groups
3. Test the retention strategy
4. Follow up and optimize

## ABOUT CHURNED

The Churned team consists of highly skilled data scientists, data engineers, software developers and managers. Together we have built Churned AI, a data-driven customer management and retention platform that helps SaaS, B2C & E-Commerce companies take full control over the customer base. Churned AI provides a set of tools for customer success managers, sales and marketing specialists to work seamlessly to operate systematic work on client retention, CLV and upsell accelerations.

Reduce Churn and maximize customer retention with Churned.

Get in touch today to see how we can help you.

Visit  
**[www.churned.nl](http://www.churned.nl)**

Contact us at  
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