

# Customer Lifetime Value (CLV)

Maximising Profits and Shaping  
Customer Relationships

December 2023



# Agenda



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**Customers:  
company's most  
profitable  
assets**



# Customers: your most profitable assets

Every customer is like a piece in the big puzzle of successful business.

They're the ones who bring in profits, but not every customer fits the picture perfectly. Some might bring more value to a company than others.

**What if there was a way to find the best pieces—the ones that complete the picture perfectly?**

**That's where Customer Lifetime Value (CLV) analysis steps in.**



# Discover your most valuable customers and elevate your business success today



**Customer Lifetime Value** is a special tool in a company's toolbox that helps businesses to pick out the most valuable customers.

It's a way to understand who contributes the most to a company's success and how to cater to those customers better.

# 2

**CLV as one of  
the most  
important  
business  
metrics**



“

Customer Lifetime Value is one of the most important metrics a business can have.

Customer Lifetime Value – The Only Metric That Matters

Forbes



# The strategic power of CLV analysis

**Customer lifetime value** is a metric that reflects the historical and future profitability of the customer.

In other words, it indicates **the total revenue a business can reasonably expect from a single customer** account throughout the business relationship.

By using CLV, a company is able to measure the **worth of a customer to the firm**. This can be the basis for formulating and implementing customer-specific strategies for **maximising each customer's lifetime profits and increasing each customer's lifetime duration**.



CLV is a total financial contribution (revenues minus costs) of a customer over his/her lifetime with the company.



# Predicting profits from lifelong customers



**PwC specialises in developing CLV models tailored to various time horizons, catering to both short-term and long-term company strategies. We can help you select the most suitable method that aligns with your company's needs and its long-term strategies.**

## Current Customer Value (CLV 1.0)

- Value\* of customer's existing products
- Taking into account probability weighted premiums, claims, lapses, surrenders, expenses and commissions, etc.

## Short-term Future Customer Value (CLV 2.0)

- Value\* of customer's future products (not yet closed) over the short-time horizon (~1 year)
- Driven by a customer's short-term behavior (propensity to upsell / xsell)

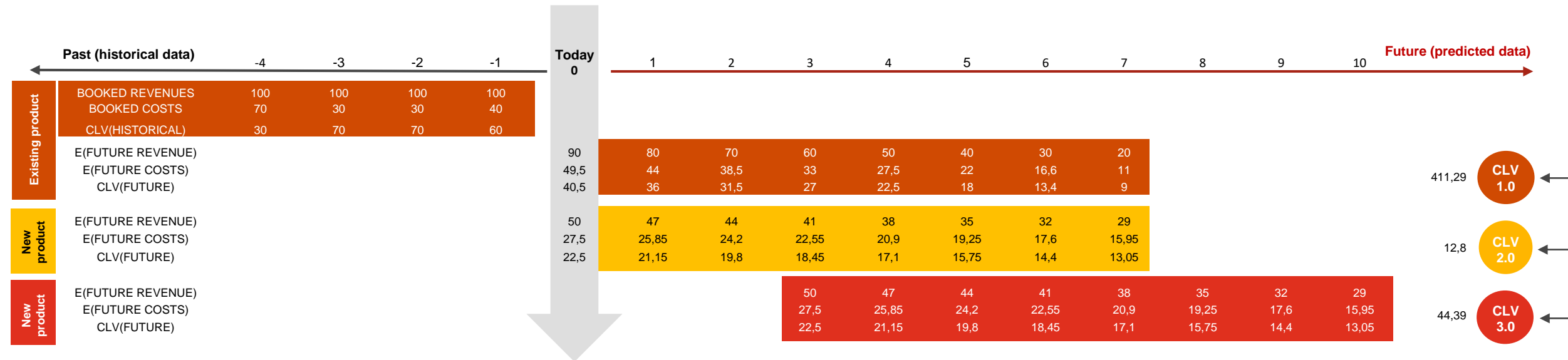
## Long-term Future Customer value (CLV 3.0)

- Value\* of customer's future products (not yet closed) over the long-time horizon (up to 10 years)
- Driven by a customer's long-term expected behavior and expected life situations

**Advanced approach**

\*Historical cash flows plus future cash flows discounted to present

# CLV 1.0, CLV 2.0, CLV 3.0 | Example



## Meet John

John is 25 years old, single, no children, 4 years ago, he signed an accident insurance policy with a 12-year insurance period

CLV 1.0

**How much is John worth for the company today based on his existing products?**

Can be presented as either expected future value of existing contracts or the sum of both historical (up to the current date) and expected future value of the current products

CLV 2.0

**The company wonders whether it is worth to offer John car insurance policy within this year?**

CLV 2.0 is calculated as the sum of expected profits that the product will generate in the future multiplied by the probability that the client will buy the product (herein  $p=10\%$ )

CLV 3.0

**The company wonders whether it is worth it to offer John a car insurance policy 3 years from now?**

CLV 3.0 is calculated as the sum of expected profits that the product will generate in the future multiplied by the probability that the client will buy the product (herein  $p=36\%$ ). The probability calculation is based on expected long-term behaviour and expected life situations. It is a very complex / data demanding approach.

# 3

## How to use CLV to achieve maximum return



# How to use CLV to achieve maximum return

CLV isn't just a number. It's a way to understand **which customers contribute the most to a company's success and how to utilise that knowledge to nurture these valuable customer relationships for long-term profitability and sustainable growth.** There are several strategic, CLV-based approaches, which companies can adopt:



# CLV Strategies | Profit-driven targeting

CLV  
1.0

## Description

The primary objective of this strategy is to **identify and acquire customer segments** that promise the highest potential for long-term profitability.

CLV is a tool that helps companies to identify those high-value segments, allowing them to craft marketing campaigns and strategies tailored to attract these valuable customers.

By directing efforts specifically towards these high-value segments, businesses aim to initiate relationships that have the potential for long-term profitability, setting the foundation for **sustained growth** and **maximising return on investment** right from the outset.

## Approach

We prepare a detailed segmentation of existing clients based on the calculated CLV and supplementary variables provided. This should allow us to identify the population segments that should be targeted due to the expected high(er) CLV.

## Data

- Client-product interaction matrix (clients x products expr. by, e.g., CLV)
- Variables enabling detailed client segmentation:
  - Sociodemographic variables (age, occupation, education level, average income, etc.)
  - Product variables (number of products, sum of total premiums, type of product, etc.)
  - Customer interaction variables (number of interactions with the company, communication channel, etc.)

## Methods

- Various supervised learning methods which enable to find the key features in terms of clients segmentation (such as regression models, neural networks, random forest, gradient boosting, etc.)

## Benefits

- **Revenue growth** – by focusing on high-value potential customers, companies increase the probability of acquiring those who will bring long-term profits
- **Efficient Marketing Spend** – allocating resources to acquire high-value customers optimises marketing budget
- **Higher Conversion Rates** – tailoring acquisition strategies to attract customers aligned with the business's offerings enhances the likelihood of converting leads into paying customers
- **Competitive advantage** – businesses that effectively acquire and convert high-value customers outperform competitors who employ broader, less precise acquisition strategies, strengthening their market position



# CLV Strategies | Increasing loyalty

CLV  
1.0

## Description

CLV-based segmentation enables companies to categorise customers based on their **long-term value and profitability**.

Identifying the most lucrative clientele allows for tailored incentives such as **personalised offers, VIP access, and exclusive benefits**.

These initiatives not only nurture ongoing engagement but also contribute significantly to the customers' attachment to the brand, ultimately bolstering the company's profitability.

## Approach

We prepare a detailed segmentation of existing clients based on the calculated CLV and supplementary variables provided.

Following this detailed segmentation, the client's individual communication and servicing strategies might be designed together with supporting teams (sales, marketing, claims handling, etc.).

## Data

- CLV per client and per product
- Variables enabling detailed client segmentation:
  - Sociodemographic variables (age, occupation, education level, average income, etc.)
  - Customer interaction variables (number of interactions with the company, communication channel, etc.)

## Methods

- Various supervised learning methods which enable to find the key features in terms of clients segmentation (such as regression models, neural networks, random forest, gradient boosting, etc.)

## Benefits

- **Revenue growth** – loyalty programs not only reinforce loyalty but also drive increased spending, contributing to the company's profitability
- **Enhanced Customer Loyalty** – tailored incentives foster a stronger sense of loyalty, encouraging continued engagement and repeat purchases
- **Improved Retention** – exclusive benefits and personalised offers incentivize customers to stay committed to the brand, reducing churn and attrition rates
- **Competitive advantage** – creating exclusive benefits and personalised experiences for high-value customers can set a brand apart, attracting new customers while retaining existing ones, thus providing a competitive edge



# CLV Strategies | Cross and up selling



## Description

In today's dynamic marketplace, the ability to pitch the **right product to the right customer at the right time** has become an essential art of modern business.

This strategic approach is not only about offering a product; it's about **delivering a tailored solution precisely when it's needed, meeting customer demands**, and ultimately enhancing overall satisfaction.

By mastering this art, businesses can unlock new levels of customer engagement and profitability.

## Approach

Our approach is based on the **matrix factorisation algorithm** (one of **recommendation systems**):

1. We create a **client-product interaction matrix** that represents historical customer purchases measured, e.g., by CLV. It is typically sparse.
2. The **probability that a customer will purchase an additional product** is calculated by factorising the client-product interaction matrix into two lower-rank matrices: (i) the **client latent factor matrix** and (ii) the **product latent factor matrix**. The client latent factor matrix would represent the preferences and behavior of each customer. The product latent factor matrix would represent the characteristics of each product.
3. The scalar product of a customer's vector with a product's vector provides the **probability of a customer to purchase that product**.
4. To improve the accuracy of the values that this model would provide, additional customer characteristics such as demographic information might be used for presegmenting the client portfolio. Similarly, product influencing factors can be added, such as type of coverage, whether they are premium products or the type of insurance.

## Data

- Client-product interaction matrix (clients x products expr. by, e.g., CLV)
- Variables enabling detailed client segmentation:
  - Sociodemographic variables (age, occupation, education level, average income, etc.)
  - Product variables (number of products, sum of total premiums, type of product, etc.)
  - Customer interaction variables (number of interactions with the company, communication channel, etc.)

## Methods

- Recommendation algorithms (Alternating Least Squares algorithm)

## Benefits

- **Increased Sales and Revenue**
  - by suggesting the most relevant offers to customers, businesses witness higher sales and revenues, as the targeted offers are more likely to result in purchases
- **Improved Conversion Rates**
  - presenting offers that align closely with customers interests increases the likelihood of conversion
- **Enhanced Customer Experience** – by tailoring offers based on individual preferences and behaviors, customers receive personalised recommendations that resonate with their needs, leading to a more satisfying experience
- **Optimised Marketing Spend**
  - targeted offers directed at specific customer segments optimise marketing budgets, as resources are allocated towards campaigns reducing wasted efforts and expenses



# CLV Strategies | Mitigating churn



## Description

Keeping customers happy and loyal is a big deal for any business. When customers leave, it's called churn, **and preventing that is key.**

CLV can be utilised effectively by identifying high-value customers and understanding their behaviors, preferences, and needs.

By recognising these patterns, a company can **tailor retention strategies, offer personalised incentives or services,** and allocate resources more effectively to retain these valuable customers

## Approach

Alongside calculating CLV per client and per product, we estimate the **churn rate** as the probability that a customer with defined characteristics will unsubscribe from a specific product.

The calculation will be approached by means of statistical / machine learning models in order to detect the main churn predictors.

## Data

- Client-product interaction matrix (clients x products expr. by, e.g., CLV)
- Variables enabling detailed client segmentation:
  - Sociodemographic variables (age, occupation, education level, average income, etc.)
  - Product variables (number of products, sum of total premiums, type of product, etc.)
  - Customer interaction variables (number of interactions with the company, communication channel, etc.)

## Methods

- Various supervised learning methods which enable to find the key features in terms of churn probability (such as logistic regression model, survival regression model, neural networks, random forest, gradient boosting, etc.)

## Benefits

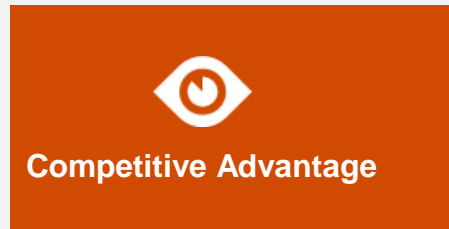
- **Improved Retention Rates** – by utilising CLV to identify customers at risk of leaving, the company can proactively address issues and improve customer satisfaction, thereby reducing churn rates
- **Enhanced Customer Relationships** – by understanding and addressing the needs of customers likely to leave, the company can improve their experiences, fostering stronger relationships and loyalty
- **Optimised Resource Allocation** – rather than spending resources on acquiring new customers, the company focuses efforts on retaining existing customers, causing better cost-efficiency and improved ROI
- **Revenue growth** – by retaining customers, who tend to spend more over their lifetime, the company ensures long-term profitability.





# Maximising profitability: CLV advantage

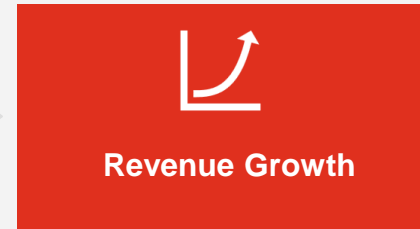
CLV possess amazing power. It revolutionises how businesses engage with customers, offering following key benefits:



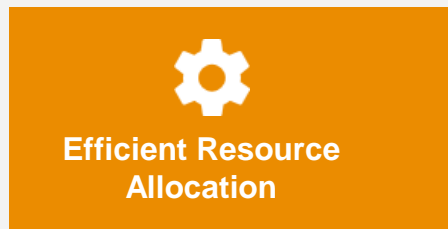
Attracting and retaining customers sets the brand apart from competitors through personalised experiences and targeted initiatives.



Retaining valuable customers and optimising revenue streams contribute to the overall stability and sustainability of the business, providing a foundation for continued growth and success.



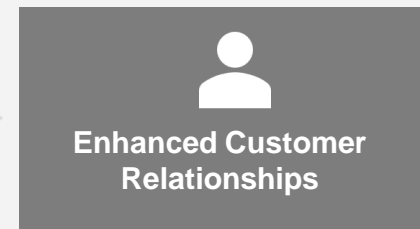
By focusing on high-CLV customers, businesses optimise profitability and long-term revenue streams



Efficient allocation of resources helps companies focus on activities and customer segments that drive the most profitability, optimising marketing spend and efforts and reducing wasted efforts



By ensuring that marketing and retention efforts are directed towards segments with the highest potential for returns, the company can reduce unnecessary expenses and wasted efforts



By tailoring strategies and offers, businesses foster stronger relationships and create a sense of exclusivity and appreciation among customers, thereby reducing churn and increasing retention rates.



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# PwC's support to succeed



# Partner with Us

We can offer our services for both **new and well-established businesses**.

## For Companies New to CLV we can offer:

- 1 CLV Assessment** – We can help you develop CLV strategies aligned with your specific goals and objectives
- 2 CLV Implementation** – We can help you to fully implement CLV principles in your company's business model

## For Companies Already Using CLV:

- 3 CLV Audit** – We can help you evaluate and fine-tune your current CLV strategies, and identify areas for improvement to maximise returns
- 4 Advanced CLV Strategies** – We can design advanced strategies for increased effectiveness



At PwC, we specialise in harnessing the power of CLV to propel your business towards sustainable growth and increased profitability

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## Meet the PwC experts



# Interested? Contact us.



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# Thank you

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