SaaS Metrics Handbook

swisscom

Swisscom Ventures
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SaaS Metrics

The Rule of 40

The Rule of 40 provides a quick and simple way to assess the health of a SaaS company and is considered a benchmark for SaaS startups.

At the core it measures a startups growth rate and its ability to operate profitable. Any score above 40% indicates that the company is growing at a healthy pace, while a lower score suggests that the company may need to reevaluate its business strategy.

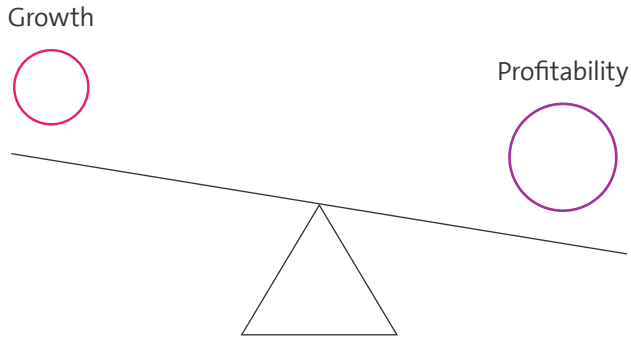
Rule of 40	Revenue growth rate % + Profit margin %

The drivers of the Rule of 40 are the annual growth rate and the profit margin. The annual growth rate reflects the increase in revenue over a given period, while the gross profit margin reflects the company›s ability to generate profit from its revenue.

To improve the Rule of 40, SaaS companies can focus on driving growth in revenue and improving profit margins. This can be achieved through a combination of strategies, such as optimizing pricing, reducing customer churn, improving customer engagement, and increasing customer lifetime value. Efficiency is also an important driver of the Rule of 40. A company that can grow and generate profits efficiently is considered to be more successful than a company that is burning through cash to fuel its growth. Efficiency can be measured by metrics such as customer acquisition cost (CAC) and lifetime value (LTV) of a customer.

To visualize the impact of the Rule of 40, consider the following scenario:

Imagine a SaaS company with an annual growth rate of 30% and a profit margin of 10%. The company›s score under the Rule of 40 would be 40%. This indicates that the company is growing at a healthy pace and generating profit from its revenue. However, if the company›s annual growth rate were to decrease to 20% while the profit margin remained at 10%, the company›s score under the Rule of 40 would decrease to 30%.



Rule of 40 Trade Off

In conclusion, the Rule of 40 emphasizes the importance of finding a balance between growth and profitability. A company that is growing too quickly may be sacrificing profitability, while a company that is too focused on profitability may be missing out on growth opportunities. The key is to find the optimal balance between the two factors that maximizes the company's overall value.

Type of Revenues

Bookings

The finalized contract with a customer. Bookings refers to the total value of all booked subscription agreements that provide revenue.

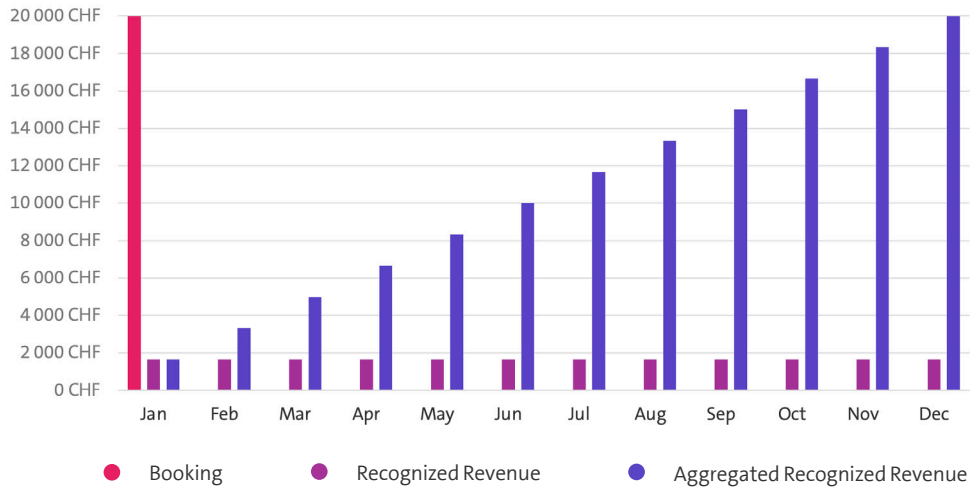
Recognized Revenue

Line item in the income statement. This is the revenue that is earned and recognized because all services were delivered. There are five conditions for recognizing revenue.

For SaaS, the two most relevant are:

- **Collectibility**: Collection of payment is reasonably assured; i.e., the customer is likely to pay what they owe for the billing period.
- **Earned:** You must provide the agreed-upon service for the billing period.

CHF 20'000 Revenue Recognized Over 12 Months



Recognition Schedule

The schedule at which your revenue is recognized over the course of a subscription service period. This involves booking terms and customer payment plans. Typically, revenue is recognized month by month. Revenue beyond the basic subscription cost - like setup fees, expansion business and professional services - may recognize on a different schedule.

Monthly Recurring Revenue (MRR) & Annual Recurring Revenue (ARR)

For SaaS companies ARR and MRR are important metrics that measure the recurring revenue generated from customers on a monthly or annual basis.

Monthly Recurring Revenue **MRR**

Contracted/or realized monthly recurring revenues from current clients.

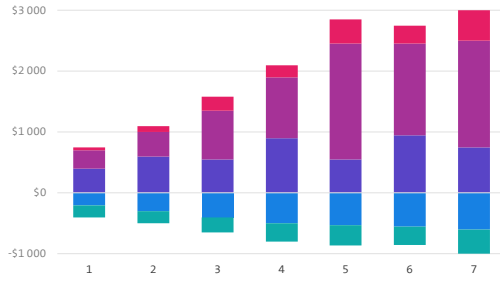
Annual Recurring Revenue **ARR**

MRR x 12

Example: You generate CHF 100k in MRR. This would equal to CHF 1.2m in ARR.

The growth of ARR is driven by a combination of factors, including new customer acquisition, existing customer expansion, and customer retention. Founders can track their ARR growth by regularly monitoring changes in the number of customers, average revenue per customer, and the rate at which customers are churning. This data can then be used to inform decisions around product development, marketing, and sales strategies.

Breaking MRR into its component parts gives a useful insight into both the inbound and outbound flow of revenue involved in your business. When viewed as a monthly trend it's easy to evaluate high level performance compared to previous months.



Reactivation
Previously active customers moving back onto a paid plan.

Expansion
Increase from existing customers, usually from upgrades.

New Business
Leads converting to new customers.

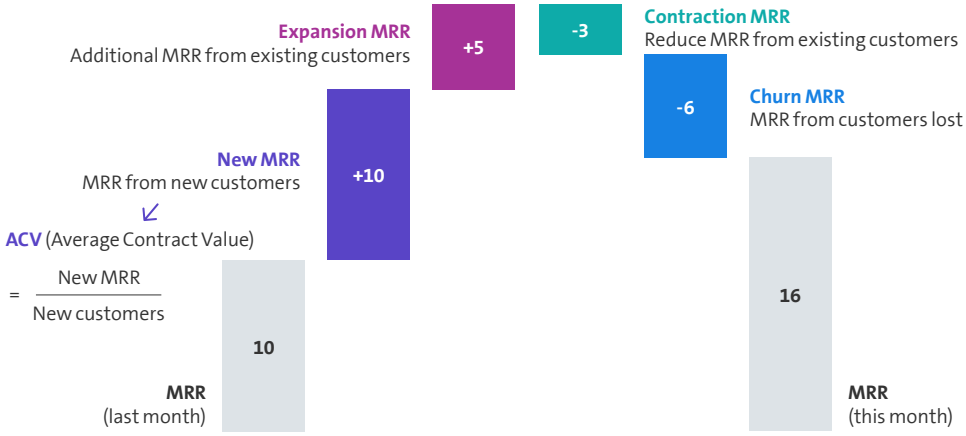
Churn
Customers canceling active subscriptions.

Contraction
Decrease in MRR from existing customers. E.g. from downgrades.

Another standard chart for a «Year-To-Date» view or for budget planning purporses is the MRR-Bridge/ARR-Bridge.

Assuming no other/professional services in a growing start-up, ARR will be higher than your recognized revenues as it dynamically fluctuates with your client wins, upsells, downsells and customer churn throughout the year. The faset you can recognize your revenues, the closer your ARR and revenue will track along and the higher will be your cash reserves.

For VCs, ARR is particularly useful because it gives them a sense of the stability, predictability of the company›s revenue streams, and helps them assess the risk involved and the potential for future growth. A company with a high ARR and a growing customer base is typically seen as a more attractive investment opportunity than a company with a low ARR and a stagnant customer base. In particular, the growth (MoM or YoY) and driver behind the growth (internal or new ARR) is important.



At Swisscom Ventures we specifically investigate in Expansion MRR or ARR as it measures the increase in monthly recurring revenue generated by existing customers, rather than new customers. It represents the additional revenue generated by existing customers through upsells, cross-sells, or renewals of their existing subscriptions. In the SaaS business model, existing customers are a key driver of revenue growth, and a high expansion MRR indicates that the company is effectively monetizing its existing customer base. This is important because it is often easier and more cost-effective to sell to existing customers than it is to acquire new customers.

Expansion MRR is also a key indicator of customer satisfaction and loyalty. If a company›s customers are willing to pay more for additional services or to renew their subscriptions, it is a sign that they are happy with the company's products and services and are likely to remain loyal in the future.

Net Retention Rate (NRR) & Gross Retention Rate (GRR)

Net Retention Rate is a metric that represents the amount of revenue retained from the existing customer base after considering churn, upgrades, and downgrades. It is a crucial factor in determining customer satisfaction and loyalty and serves as a predictor of future revenue growth.

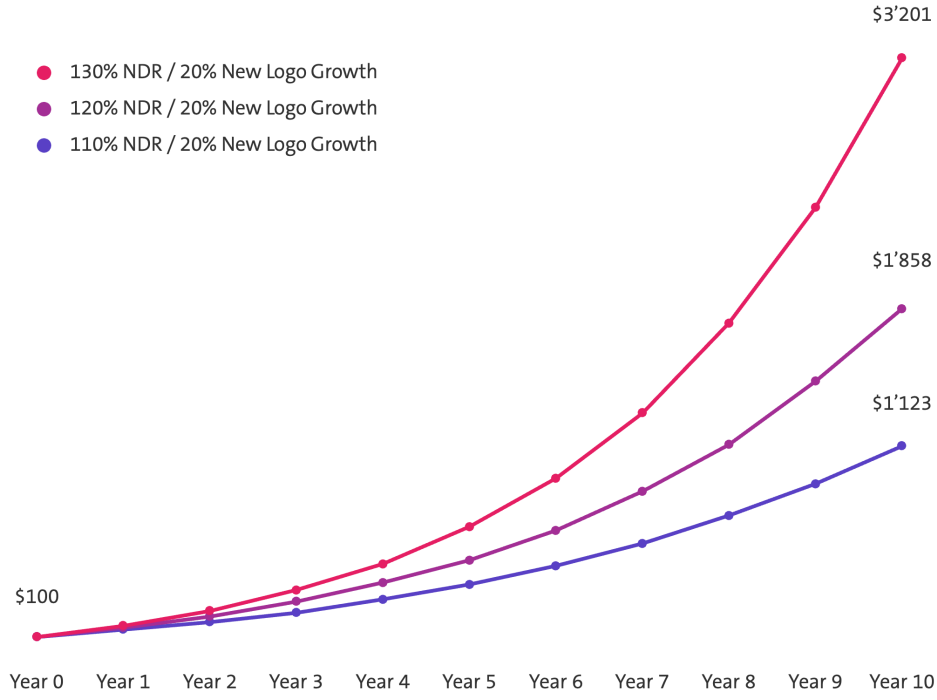
Example: If you have started the year with CHF 100k in ARR, expanded CHF 40k on an existing customer, but contracted CHF 10k on the other existing customer and lossed 10k by a churned customer, your NRR rate would be 120%. NRR is a strong metric to measure your internal growth. In other words, if you wouldn't acquire/win any additional clients your company would grow at an internal rate of 20% per year. The higher your NRR, at an equal growth rate of new logos, the bigger the positive impact on your revenue curve.

Net Dollar Retention (NRR)

$$\frac{\text{Starting ARR} + \text{Upsell} - \text{Downsell} - \text{Churn}}{\text{Starting ARR}}$$

Gross Dollar Retention (GRR)

$$\frac{\text{Starting ARR} - \text{Downsell} - \text{Churn}}{\text{Starting ARR}}$$



Gross Retention Rate, in contrast, measures the proportion of revenue retained from the existing customer base without considering upgrades or downgrades. This metric provides a more comprehensive view of the overall health of the business and helps identify areas for improvement. Everything equal to the NRR example, your GRR is 80%. GRR is a measure of the percentage of existing revenue your company retains in each period.

Tipp: Use GRR as the more conservative version of NRR. Instead of balancing lost revenue with gains from upgrades and expansion, gross revenue retention more closely aligns the performance of your customer success team in retaining customers. Please note that GRR can never go above 100%.

As a SaaS-Founder, tracking both Net Retention Rate and Gross Retention Rate is of utmost importance as it allows for the analysis of trends, such as customer churn or changes in revenue, and the formulation of data-driven decisions to drive growth. Whether it›s through the optimization of the product, enhancement of customer satisfaction, or modification of sales and marketing strategies, a thorough understanding of these metrics is crucial for success.

For VCs such as Swisscom Ventures, a startup with high retention rates is often seen as more attractive because it suggests that the company has a strong product-market fit and a happy customer base. This can increase the likelihood of the startup›s future success, upcoming funding rounds, acquisitions, or IPOs.

Other Growth Metrics

ARR Growth in % **YoY**

$$\frac{\text{ARR current year} - \text{ARR previous year}}{\text{ARR previous year}}$$

Revenue Growth in % **YoY**

$$\frac{\text{Next 12 month (NTM) revenue} - \text{current revenue}}{\text{Current revenue}}$$

Annualized OPEX/FTE

$$\frac{\text{Total OPEX}}{\text{Total number of employees}}$$

Implied ARR/FTE

$$\frac{\text{MRR x12}}{\text{Total number of employees}}$$

Expansion Rate

$$\frac{\text{Expansion MRR at end of month - Expansion MRR at beginning of month}}{\text{Expansion MRR at beginning of month}} \times 100$$

The expansion rate is the rate of new recurring revenue added from existing customers, usually through add-ons and upgrades.

Quick Ratio

$$\frac{\text{New MRR + Expansion MRR}}{\text{Churned MRR + Contraction MRR}}$$

A measure of a company's ability to grow recurring revenue in spite of churn. Sometimes referred to as growth efficiency. An estimate of the average cost to acquire a new customer (CAC).

MRR Rentention Rate

$$\frac{\text{MRR of renewed subscriptions}}{\text{MRR of subscriptions up for renewal}}$$

The rate at which MRR is renewed.

Customer Retention Rate

$$\frac{\text{Number of renewed customers}}{\text{Number of contracts up for renewal}}$$

The rate at which customers renew their subscriptions.

Net Burn

Cash flow from operations
- Bank transfers
- Financing transactions
- Intercompany activity

Also called cash burn rate, this metric tracks the rate at which you use up cash reserves. Simply expressed, it is the amount that you burn after you deduct your monthly operational expenses from your recognized revenues in the same period. Burn rate is a critical component of your company's story. But this metric doesn't help explain the «why» behind financial performance. Get more out of investor meetings by adding context with insight into cash inflows and outflows.

Burn Multiple

$$\frac{\text{Net burn}}{\text{Net new ARR}}$$

A capital efficiency metric that shows how much cash you're spending per incremental unit of revenue generated in a given period. Burn multiple benchmarks vary heavily on business maturity. Earlier-stage startups expect to have higher burn multiples as they spend to grow where-as more mature VC-backed organizations should be working toward zero.

Runway

$$\frac{\text{Total cash on hand}}{\text{Net burn (3 month average)}}$$

The amount of time, in months, before your company runs out of cash. Cash on hand refers to cash and cash equivalents in your bank account. When trying to extend runway, break down expenses into three categories - forecasted spend, discretionary spend, and variable spend. Sift through and find opportunities with large savings and low impact on operations.

Gross Margin

Gross Revenue -
Cost of Goods Sold (COGS)

This metric shows you how much of a dollar is left after you have provided a certain service and the direct costs occurred through that service to your client. For SaaS companies the gross margin shall be higher than 73%.

Lifetime value (LTV) & Customer Acquisition Cost (CAC)

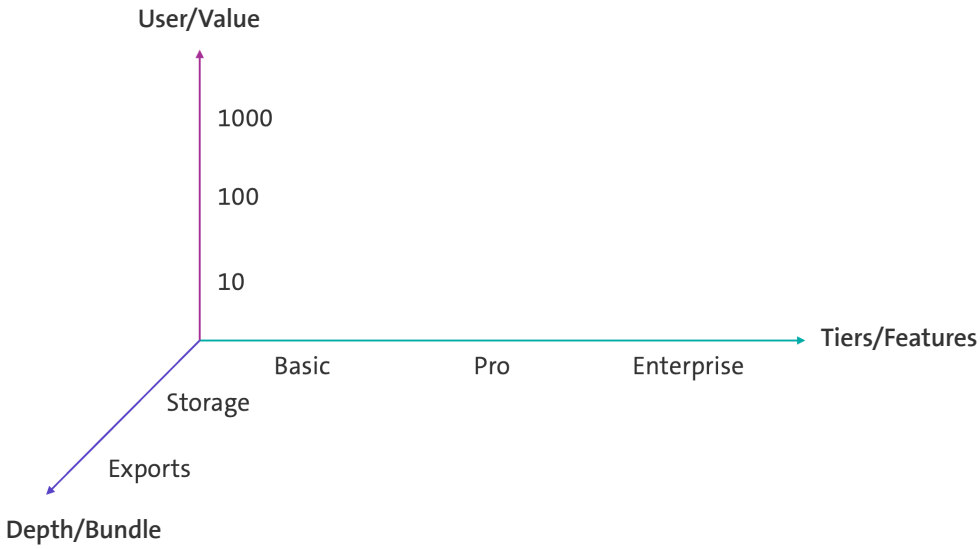
Lifetime value (LTV) is a metric used to measure the total revenue generated by a customer throughout their relationship with the company. This metric is important for SaaS companies as it helps to identify the most valuable customers and determine the amount of resources that should be allocated to customer acquisition and retention efforts. Calculating LTV provides a better understanding of the return on investment (ROI) of customer acquisition costs and can guide decision-making in terms of pricing, marketing, and sales strategies. A high LTV indicates that a customer is generating significant revenue over time, making it more cost-effective to invest in customer acquisition efforts. On the other hand, a low LTV may suggest that a company needs to reassess its pricing, product, or marketing strategy.

Lifetime value (LTV)

$$\frac{\text{Average Contract Value (ACV) (in CHF) x Gross Margin (in \%)}}{\text{Churn (in \%)}}$$

Average Contract Value (ACV)

ACV measures the average revenue generated per customer over the lifetime of their contract. Increasing the ACV can have a significant impact on a SaaS company›s revenue and profitability. Here are some strategies that SaaS companies can use to increase their ACV:



1. **Upsell and cross-sell:** One of the most effective ways to increase ACV is to upsell and cross-sell to existing customers. This involves offering additional products or services to customers who have already purchased from the company. By providing customers with additional value, companies can increase the amount of revenue generated per customer.
2. **Tiered pricing:** Another strategy to increase ACV is to implement tiered pricing. This involves offering multiple pricing tiers with different levels of features and functionality. By offering higher-priced tiers with more advanced features, companies can encourage customers to upgrade to a higher tier, increasing their ACV.
3. **Long-term contracts:** Offering customers longer-term contracts can also increase ACV. By committing to a longer-term contract, customers are more likely to spend more money upfront, which can increase the ACV.

4. **Bundle pricing:** Bundle pricing involves offering multiple products or services as a package at a discounted rate. This strategy can encourage customers to purchase more products or services from the company, increasing the ACV.
5. **Value-based pricing:** Value-based pricing involves setting prices based on the value that the product or service provides to the customer. By focusing on the value that the customer receives, rather than the features or functionality of the product, companies can increase the perceived value of their offerings, and thus the ACV.
6. **Personalization:** Offering personalized pricing or services to customers can also increase the ACV. By tailoring pricing and services to individual customer needs, companies can increase the perceived value of their offerings and encourage customers to spend more money

Customer Acquisition Cost (CAC)

Customer Acquisition Cost (CAC) measures the cost associated with acquiring a new customer. CAC is essential in determining the efficiency and sustainability of a SaaS business, as it directly impacts the company›s profitability and growth potential. In the SaaS industry, acquiring new customers is a significant expense that can consume a substantial portion of a company's budget. Understanding the CAC is critical because it helps startups to determine their customer acquisition strategy and make informed decisions about their marketing spend. A high CAC can indicate that a company›s sales and marketing efforts are not optimized, and customer acquisition costs are too high to sustainably scale the business.

To reduce CAC, startups can implement the following strategies:

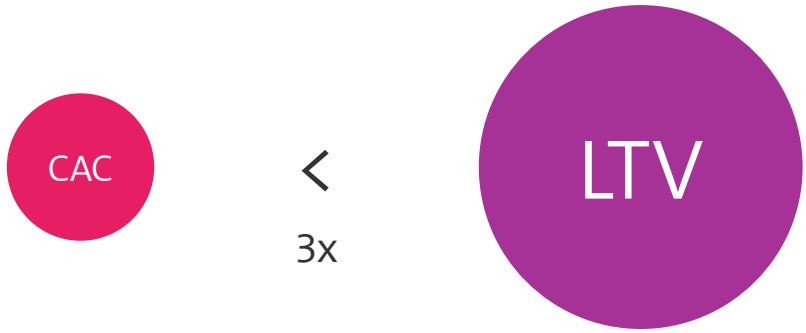
1. **Optimize Customer Acquisition Funnel:** SaaS companies should map out their customer acquisition funnel and identify the stages where customers are lost. By optimizing each stage of the funnel, the company can increase conversion rates and reduce the cost of acquiring new customers.
2. **Leverage Referral Marketing:** Referral marketing can be a cost-effective way for SaaS companies to acquire new customers. Encouraging satisfied customers to refer their friends and colleagues can be an effective way to increase customer acquisition without significant marketing costs.
3. **Focus on Customer Retention:** Retaining existing customers can be more cost-effective than acquiring new ones. SaaS companies should focus on providing excellent customer service and creating a product that meets the needs of their customers to increase retention rates.
4. **Utilize Inbound Marketing:** Inbound marketing strategies such as content marketing, search engine optimization (SEO), and social media marketing can be an effective way to attract potential customers and reduce CAC.
5. **Test and Iterate:** SaaS companies should continually test and iterate their customer acquisition strategies to identify what works best for their business. This will enable them to optimize their strategies and reduce customer acquisition costs over time.

The right ratio between LTV (Customer Lifetime Value) and CAC (Customer Acquisition Cost) depends on the specific SaaS company's goals, industry, and business model. However, a general rule of thumb is that the LTV/CAC ratio should be greater than 3:1.

For example, if a company spends CHF 1,000 to acquire a customer and that customer generates CHF 5,000 in revenue over their lifetime with the company, the LTV/CAC ratio would be 5:1. This means that for every dollar the company spends on acquiring a customer, they generate five dollars in lifetime revenue.

Customer Acquisition Cost (CAC)	The average amount of money you spend to acquire a single new customer.
$\frac{\text{Current period total acquisition cost}}{\text{Current period new customers acquired}}$	Make sure you align CAC calculations with your sales cycle. If you're calculating CAC on a one-month time period but your sales cycle is 50-60 days, you're not fully burdening your CAC.

LTV/CAC ratio of 3:1 or higher is considered good because it shows that the company is generating enough revenue from each customer to cover the cost of acquiring that customer and still have enough profit left over to invest in further growth.



Magic Number

The «magic number» is a metric used to measure the efficiency of a SaaS company's sales and marketing efforts in acquiring and retaining customers.

The magic number is defined as the ratio of the company's revenue growth in a given period to the amount spent on sales and marketing during that same period. Specifically, it is calculated by dividing the revenue growth in each quarter by the sales and marketing expense from the previous quarter.

The formula for calculating the magic number is:

Magic Number

$$\frac{\text{Revenue Growth in Quarter}_{T}}{\text{Sales and Marketing Expense in Quarter}_{T-1}} \times 4$$

A magic number of greater than 1 indicates that the company is achieving economies of scale in its sales and marketing efforts, meaning that the revenue growth is outpacing the amount spent on sales and marketing. This suggests that the company is efficiently acquiring and retaining customers, and is on a path to sustainable growth.

There are several reasons why the magic number is an important metric for SaaS companies:

1. **It helps to measure the efficiency of sales and marketing efforts:** The magic number helps to quantify how much revenue growth is being generated from each dollar spent on sales and marketing. This can help companies identify areas where they can optimize their sales and marketing strategies to maximize growth.
2. **It provides a measure of customer lifetime value:** Since the magic number is calculated based on revenue growth over time, it can provide insight into how much value a customer is likely to generate over their lifetime. This can help companies better understand the long-term impact of their sales and marketing efforts.
3. **It can be used to forecast future growth:** By tracking the magic number over time, SaaS companies can make predictions about future revenue growth based on their sales and marketing investments.

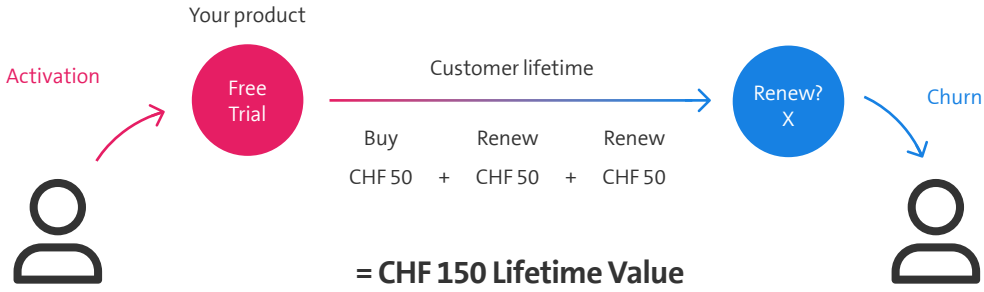
It is important to know the Magic number benchmarks to understand how your Sales and Marketing team is performing:

1.	**<0.5**	Not ready to invest in S&M. Inefficient process. Review!
2.	**0.5-0.75**	Evaluate the process. There is room for improvement.
3.	**>0.75**	Continue to invest in S&M! Your process works well.

How can LTV be useful?

Balancing acquisition spend: If I know my LTV is «X», I can confidently spend «Y» to acquire the customer without much risk. Determining payback period: How long does it take for a customer to «pay back» their acquisition cost? The longer this is, the more risk there is tied up in the business.

Limitations of the basic formula:



Assumes linear churn over time. This is never usually the case with most SaaS businesses, who typically see most churn early on in the subscription. Doesn't account for expansion. If your customers usually upgrade plans over time, this has a big impact on LTV. Produces an over-optimistic estimate of LTV. Aspects like future risk, etc. are not accounted for.

CAC Payback Period

$$\frac{\text{Customer acquisition cost}}{\text{ARR - Average cost of service}}$$

The average amount of time it takes to recover acquisition costs per customer.

Don't be rigid with your CAC payback calculations. They may change as your company matures. Early on 100% of sales and marketing may go to new customer acquisition. But as you mature, you can split CAC into different segments and calculate payback for different customer segments.

CAC Ratio

$$\frac{\text{Total acquisition cost}}{\text{New \& Upsell ARR}}$$

An efficiency ratio for the cost to acquire annual recurring revenue.

Blended CAC ratio is the most common form of this metric because it combines sales and marketing expenses. If you have a good chart of accounts, you can get more granular and calculate new business or expansion CAC ratio.

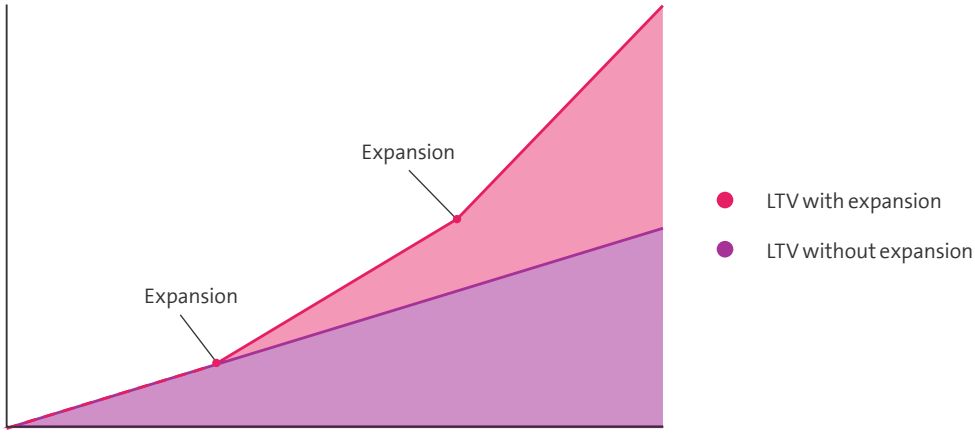
LTV/CAC Ratio

$$\frac{\text{Average ARR per customer} \;/\; \text{Churn \%}}{\text{Total acquisition spend} \;/\; \text{Current period new customers acquired}}$$

An acquisition efficiency ratio that compares the average life-time value of your customer base to the average cost to acquire those customers.

LTV:CAC miscalculations are common because of all the variables and volatile factors involved. Lack of fully burdened CAC calculations, churn fluctuations, and misunderstandings of LTV can cause misleading LTV:CAC numbers. Always put this metric in context with other acquisition metrics. A ratio of 1:3 is generally accepted as a good target for SaaS.

How account expansion affects LTV



Customer X is on a CHF 100 monthly plan. We expect them to churn after 1 year. LTV = CHF 1200

Customer Y is also on CHF 100 monthly plan, also expected to churn after 1 year. But Customer Y upgrades plans to a CHF 150 monthly plan in month 4, and then again to a CHF 180 plan in month 8. LTV = CHF 1,800 (Pretty significant difference!)

(Customer) Churn

As a SaaS founder, it is essential to understand the impact of customer churn on your business. Churn refers to the loss of customers over a given period, and it can significantly impact the growth and stability of your company. Churn Rate is a measure of this customer loss, expressed as a percentage of the total customer base.

Churn Rate

$$\frac{\text{Churned customers (revenue) in period}}{\text{Total customers (revenue) at start of period}}$$

The rate at which your customers are cancelling their subscriptions. A negative churn rate is a state achieved when revenue expansion outweighs churn and downgrade revenue. In this case, the net MRR has a negative value.

Net MRR Churn Rate

$$\frac{\text{Sum of churn \& contraction MRR} - \text{Sum of expansion \& reactivation MRR}}{\text{MRR at start of period}}$$

The rate at which MRR is lost through downgrades and cancellations, offset by account expansions.

A high Churn Rate indicates that the business is losing customers at a rapid pace, while a low Churn Rate indicates that the business is retaining customers effectively. Negative Churn, on the other hand, refers to the situation where the revenue from existing customers increases at a faster rate than the revenue lost due to churn.

Negative Churn

Expansion revenue from existing customers > Revenue lost from Churn

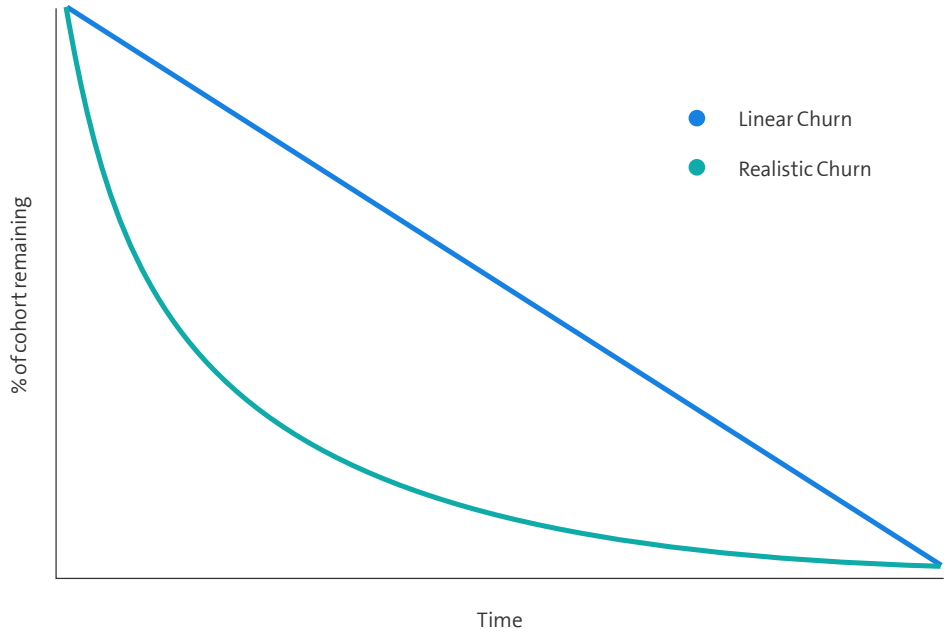
Customer Churn can result from a variety of reasons, including poor customer service, lack of product/market fit, competition, and pricing issues. To reduce customer churn and improve customer retention, it is crucial to understand the root causes of customer churn and address them proactively.

To visualize the impact of churn, consider the following scenario:

Imagine a SaaS company with 100 customers and a monthly Churn Rate of 5%. At the end of the first month, the company will have 95 customers. At the end of the second month, it will have 90.25 customers (95 x (1-5%)). And so on.

As can be seen from this example, reducing the Churn Rate by just a few percentage points can result in a significant increase in the customer base.

Note: Linear churn is a simple, straightforward way to measure churn that assumes a constant rate of customer attrition over time. Linear churn is easy to calculate and understand, and it can provide a useful benchmark for tracking changes in customer retention over time. However, linear churn can be a somewhat unrealistic way to model actual customer behavior. In practice, customer attrition may not be constant over time, and different customers may have different probabilities of churning depending on their usage patterns, satisfaction levels, and other factors. Realistic churn takes these factors into account and models customer attrition in a more sophisticated way.



Realistic churn may use different models to estimate the probability of churn for different customer segments, or it may incorporate data on customer behavior and feedback to make more accurate predictions. For example, a company might use data on how frequently customers use its service, how long they have been customers, and how satisfied they are with the service to develop a more nuanced model of churn. Realistic churn can provide a more accurate picture of customer behavior, which can help companies identify areas where they can improve retention and reduce churn.

Cohort Analysis

Cohort analyses are a powerful tool to help you understand your subscriptions and identify important trends in churn or retention. It involves dividing a larger population into smaller subgroups, or cohorts, based on a shared characteristic or behavior, and then tracking how these cohorts perform over time.

To read and interpret a cohort analysis, there are a few key steps that you should follow:

1. **Define your cohorts:** Start by identifying the shared characteristic or behavior that defines each cohort. This might include factors such as acquisition date, product usage, or demographic information.
2. **Choose your metrics:** Decide which metrics you want to track over time, such as retention rate, revenue, or customer lifetime value.
3. **Create your cohorts:** Use your chosen characteristic or behavior to divide your population into cohorts. For example, you might create a cohort of customers who made their first purchase in January, and another cohort of customers who made their first purchase in February.
4. **Analyze your data:** Use a cohort analysis tool or spreadsheet to track the performance of each cohort over time. This might involve plotting a graph of your chosen metric(s) over time, with each cohort represented by a different line or color.
5. **Interpret your results:** Look for patterns and trends in your cohort data. For example, do certain cohorts have higher retention rates or spend more money over time? Are there any notable differences between different cohorts?
6. **Draw conclusions and take action:** Based on your analysis, draw conclusions about what is driving the differences between your cohorts. Use this information to make data-driven decisions about how to optimize your marketing, product development, or customer experience strategies.

	0	1	2	3	4	5	6
Jun 2021	2,50%	0,80%	5,00%	2,12%	1,35%	0,40%	1,04%
Jul 2021	0,00%	1,50%	4,09%	3,65%	1,04%	1,43%	
Aug 2021	1,22%	4,69%	5,60%	4,23%	2,15%		
Sep 2021	2,40%	5,66%	5,40%	3,54%			
Oct 2021	3,50%	2,67%	7,23%				
Nov 2021	1,65%	2,56%					
Dec 2021	1,34%						
	2,50%	2,98%	5,46%	3,39%	1,51%	0,92%	1,04%

In the picture you see the most common cohort visualization you'll come across in SaaS. It can be quite confusing the first time you see this diagram (time is going in two directions, half the cells are empty, etc. Like everything, it's simple once you understand it.

For VCs and specifically for Swisscom Ventures, the cohort analysis is the most used underlying tool to understand customer retention and identify churn over time. For example, we may find that the January cohort has a higher retention rate and generates more revenue than the February cohort. This information can inform us about the effectiveness of targeted marketing campaigns, personalized customer engagement, and product development initiatives.

Example

Take all new customers who start paying in a given time period (usually a single month around 6-12 months in the past) and analyze how they develop over a specific period of time (usually 6-12 months). In this example, we can see that month two has significant churn.

How to read a cohort analysis

Below is the most common cohort visualization you'll come across in SaaS. It can be quite confusing the first time you see this diagram (time is going in two directions, half the cells are empty, etc.). Like everything, it's simple once you understand it. Below are some pointers on how to read this diagram and why it looks the way it does.

Each row contains one group (cohort) of customers who started paying in a particular month. We follow the lifespan of each cohort (from left to right), starting in the month they converted. The columns (1, 2, 3, etc) represent the number of months since the cohort started paying.

Column 0 shows churn (if any) that happen in the same month the customer signs up.

Customer churn cohort (% of customers churned relative to previous month)

	Cohort value	0	1	2	3	4	5	6	7	8	9	10	11
Feb 2021	999 CHF	2,50%	0,80%	5,93%	2,12%	1,35%	0,40%	1,04%	0,90%	0,90%	0,90%	0,90%	0,90%
Mar 2021	293 CHF	0,00%	1,50%	4,09%	3,65%	1,04%	1,43%	1,04%	1,04%	1,04%	1,04%	1,04%	
Apr 2021	89 CHF	1,22%	4,69%	5,80%	4,23%	2,15%	2,46%	2,46%	1,18%	1,18%	1,18%		
May 2021	999 CHF	2,40%	5,66%	5,82%	3,54%	1,35%	3,49%	1,04%	1,32%	1,32%			
Jun 2021	293 CHF	3,50%	2,67%	7,23%	2,12%	1,04%	4,52%	0,90%	1,46%				
Jul 2021	89 CHF	1,55%	2,56%	5,00%	3,65%	2,15%	5,55%	1,04%					
Aug 2021	999 CHF	1,34%	0,80%	4,09%	4,23%	1,35%	6,58%						
Sep 2021	293 CHF	2,50%	1,50%	4,12%	3,54%	1,04%							
Oct 2021	89 CHF	0,00%	4,69%	3,80%	2,12%								
Nov 2021	999 CHF	1,22%	5,66%	3,93%									
Dec 2021	293 CHF	2,40%	2,67%										
Jan 2022	89 CHF	3,50%											
Average	89 CHF	1,84%	2,98%	5,04%	3,39%	1,51%	3,49%	1,04%	1,18%	1,11%	1,04%	0,97%	0,90%

The first two columns show the month and the value of the cohort for that month; the total MRR (or customer count) of customers who converted in that month.

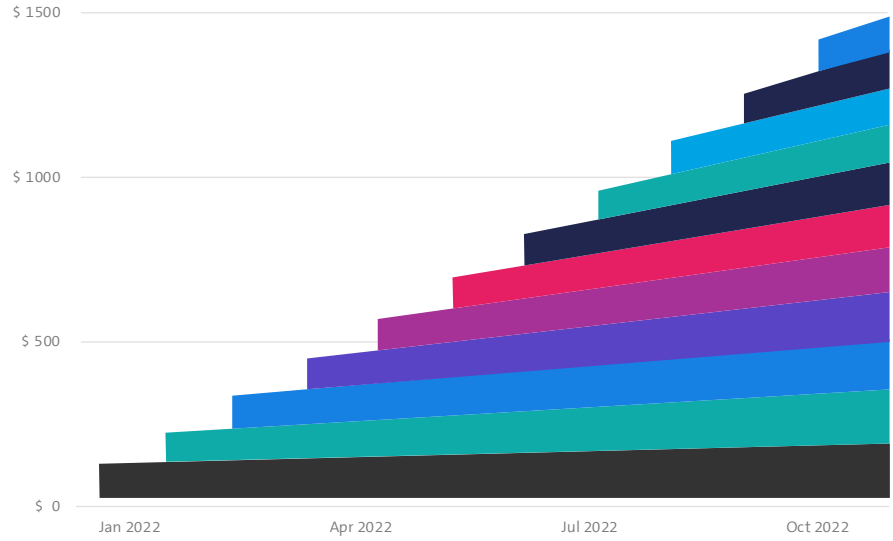
The reason these cells are empty is because this is the future, it hasn't yet been 6 months since November 2021 for example.

You could look at a cohort for just a single month, in which case there would be one row. The primary reason for stacking multiple rows like this is so you can see patterns evolving over time by scanning columns from top to bottom. In the above diagram we see the high churn rates observed in month two are improving in August 2021, and then holding at those lower rates.

Other ways to visualise a cohort analysis

Layer cake

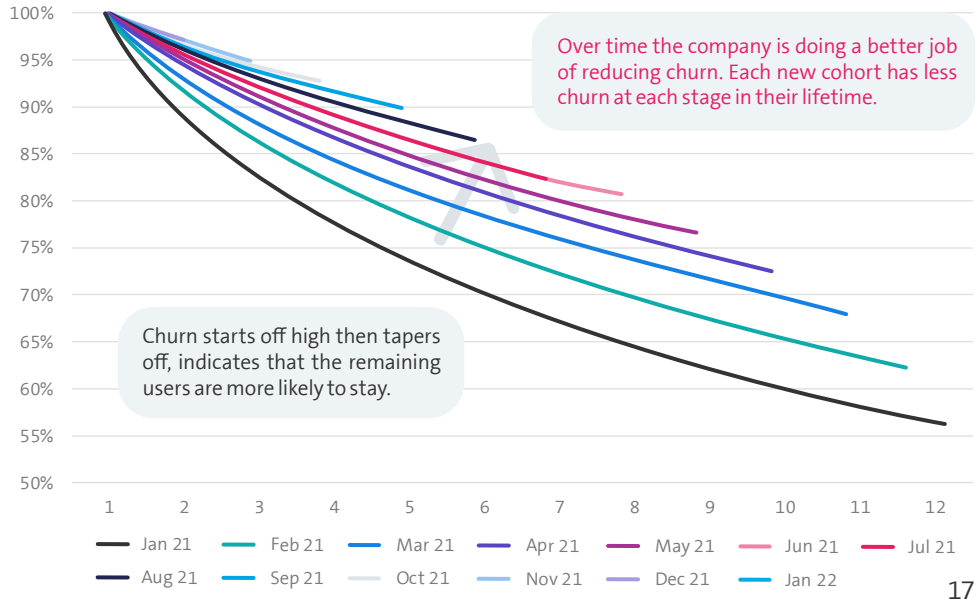
Account value by cohort at 5% negative churn.



Here each bar shows the MRR growth from customers added in each month of 2022. This cohort visualisation shows the power of having «negative churn».

Hanging ribbons

% of cohort retained over time



Customer Satisfaction

Net Promoter Score (NPS)

NPS has been proven as a leading indicator of growth, and is used widely as a benchmark against which businesses compare themselves. An NPS survey asks all customers a single question:

«How likely is it that you would recommend [product] to a friend or colleague?»

NPS $\frac{\%\text{ of promoters (scoring 9 or 10)}}{\%\text{ of detractors (scoring 0 to 6)}}$

Customer success is an organizational approach to ensuring that customers achieve their goals and receive maximum value from a product, through technology, data and communicative practices.

About Swisscom Ventures

Swisscom Ventures is the venture capital arm of Swisscom AG, the leading telecom and IT provider in Switzerland. Since 2007, we have invested in over 80 technology companies from our offices in Switzerland (Zurich, Bern, Lausanne) and the USA (Silicon Valley). With over CHF 650 million assets under management and advisory, of which two thirds is financed by 20 institutional investors and one third by Swisscom, we invest during the full life cycle of high potential startups. Our portfolio is mainly invested in deeptech technologies, such as artificial intelligence, robotics, semiconductors, bioinformatics or virtual reality. Our minority investments typically range from CHF 1 million per company at early stage up to CHF 20 million in growth rounds. As a strategic investor, we offer entrepreneurs access to our technical infrastructure and market channels in addition to financial support.

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