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The Comprehensive Guide to

E-Commerce KPIs

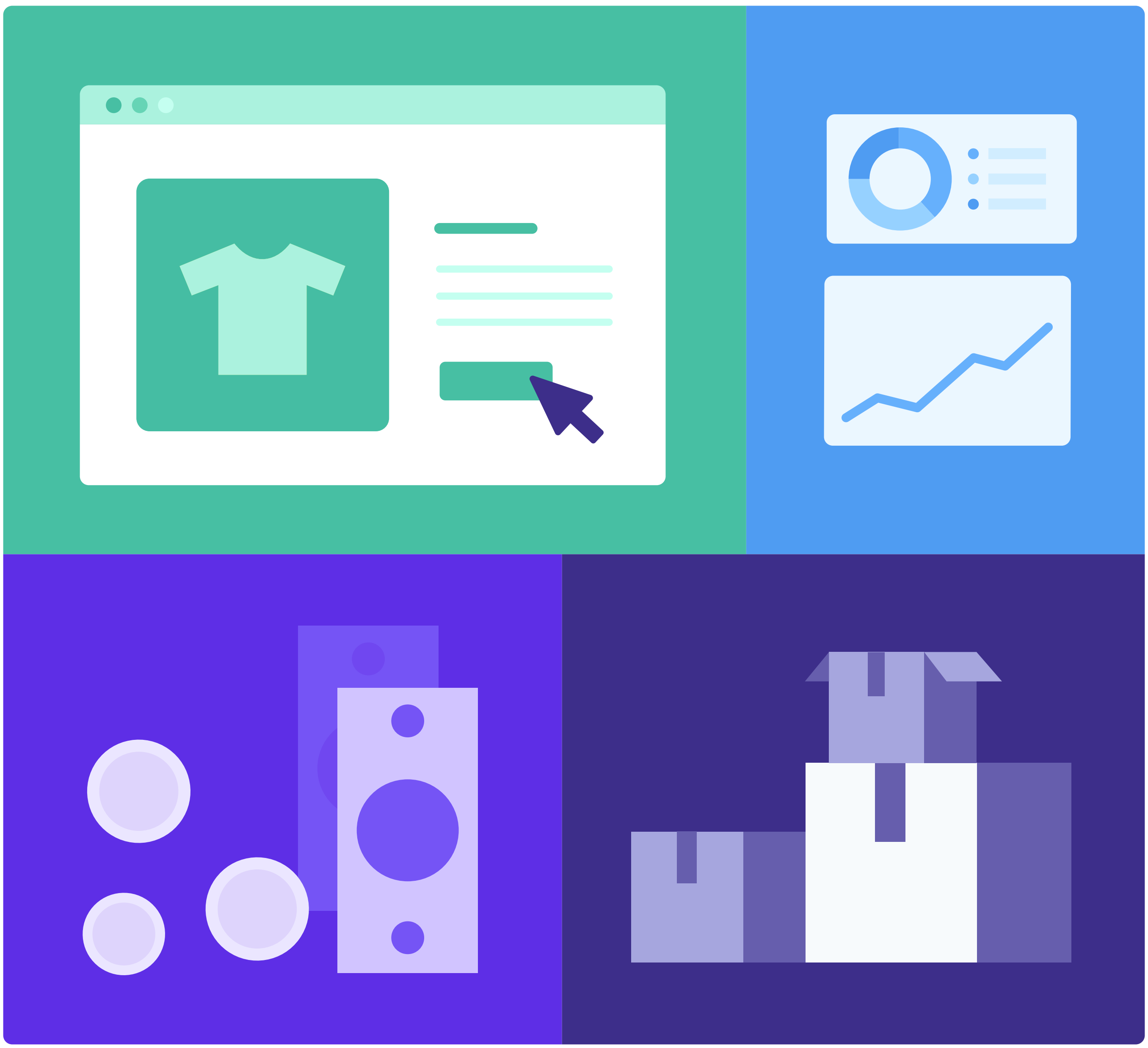


Table of Contents

Introduction

You already know that leveraging data has never been more important for your business. The wealth of data available to online consumer businesses can help you zero in on new opportunities, identify initiatives or areas within your organization that are underperforming, and make informed decisions on what to do next.

Not all data, however, is equally valuable for your business. With so much data available, it can be hard to know what you should be measuring, and the cadence you should measure it on. Even once you have the right tracking in place, it's not always clear how to use the information you're gathering to best help your business.

We've created this guide to help you figure out which KPIs to measure, how to track them, what they mean, and how to move from data to insight. We hope it helps you assemble a better picture of how your business is performing, where you can make improvements, and how you stack up against your competition.

What should you measure?

The KPIs you select will generally depend on your market and business model, along with your goals and objectives. Regardless of which ones you choose, all of them will revolve around the growth and financial health of your business.

As someone who runs a consumer business, it's important for you to focus your efforts on metrics that will increase brand awareness, reduce the rate of product returns, drive sales, improve the buying experience for customers, and ensure that your financial house is in order.

Within this guide, we'll highlight some key metrics to watch and break them out into categories, so you can better understand the purpose of each one.

How do you compare to peer companies?

Comparing your KPIs and best practices to those of other companies within the same industry is known as benchmarking.

Going through this comparison process regularly enables you to determine whether your organization is on the right track or even outpacing competitors. Even if your KPIs are lagging behind other companies in the same industry, benchmarking enables you to establish reference points, set achievement goals, and identify areas for improvement.

Core Financials

These metrics form the backbone of your business's financial health. They can be applied to your overall financials for a big-picture view, or to individual areas like channels or product lines for more specific analysis.

Gross Sales

What it is

Revenue, known as gross sales, is the amount of money your business (or channel) generated before any costs are factored in. Though net sales is sometimes equated to revenue, there's a clear distinction between between the two. Though net sales a better measurement of profitability, it represents the amount left over after returns, discounts, and allowances are taken out of your gross sales.

What it tells you

Revenue is the bedrock of your profitability. While you can take steps to improve profits like reducing overhead costs, ultimately the only way to grow as a business is to increase revenue.

How it helps you make decisions

At an overall level, your total revenue is an important indicator of your company's sustainability. At a more granular level, examining the revenue attached to specific products or channels can help you decide where to focus. For example, if a certain product is bringing in much less revenue than others, you might consider if it's worth continuing to offer it. On the other hand, a channel that brings in a large amount of revenue might be a good place to expand your marketing efforts.

How to calculate it

Calculating your revenue is fairly straightforward: multiply the number of units you've sold in a given time period by the unit price, and you'll have your revenue.

Q2 Revenue = Q2 Units Sold x Unit Price

In reality, you're more likely to be pulling revenue numbers from your reports rather than calculating it manually.

To get an accurate picture of your revenue, be sure to:

- **Look at revenue from all channels.** Besides just your online storefront (Shopify, etc), be sure to include any revenue from brick and mortar sales, wholesale invoices, and any other channel sales.

- **Make apples-to-apples comparisons.** Different channels' default revenue reports may cover different periods of time. Comparing data across non-equivalent time periods may give you a distorted view of your revenue.

- **Ensure you're looking at recognized revenue.** If you're using accrual accounting, remember that revenue is only recognized when the unit is fulfilled. To avoid inaccuracy, make sure you're only looking at transactions that were fulfilled within the specified time period.

Example

In Q1, an apparel brand sold jackets directly through its Shopify-based online store, through several boutique channel partners, and through its flagship retail location in New York.

From Shopify, the brand can pull a report that it made $1M in sales from its online store in Q1. However, $50,000 worth of those orders haven't yet been fulfilled, so the brand can't recognize that revenue - bringing their total Q1 revenue from online sales to $950,000.

For the same period, wholesale invoices from sales to channel partners totaled $1.2M, and sales from the retail location totaled $800,000.

Over all channels, **the brand made $2.95M in revenue in Q1.**

Gross Merchandise Value

What it is

This amount represents the total value of the goods or products that were sold over a specific period of time through e-commerce platforms. This metric can also be used to measure the effectiveness of online marketplaces that only facilitate transactions between people who want to buy and sell goods or products.

What it tells you

Gross merchandise value, also known as gross merchandise volume, can help you measure the online growth of your retail business or the volume of activity taking place on a third-party online marketplace.

Gross merchandise value can be a decent measure of ecommerce growth, since revenue hinges on the total amount of merchandise that's sold – or transactions that are handled – as well as the amount of fees that are charged in the process.

More specifically, gross merchandise value enables online marketplaces to understand how their business is growing by analyzing the volume and value of transactions that take place through their websites.

To be sure, gross merchandise value doesn't provide an accurate view of the revenue that an online marketplace generates from the sale of products or goods. When someone buys a product through an online marketplace, merchants will typically receive the full amount and pay the online marketplaces a fee to use its services – this is commonly a percentage of the total amount paid for a product, good, or service that's sold. In other words, online marketplaces generate revenue from the fees that merchants pay to use the platform, not the actual amount that customers pay for goods and products.

It's worth pointing out that these calculations are made without accounting for the fees and expenses associated with the sale of products, along with any returns from customers or discounts that were applied to transactions.

The fact of the matter is that there are a number of costs associated with producing goods, getting them in front of customers, and shipping out orders. Unless you deduct these costs from your gross merchandise value, this metric won't accurately reflect how much revenue was generated from online sales.

To that end, you can make your gross merchandise value calculations a little more accurate by subtracting the value of items that were purchased and returned by customers during the same time period.

Example

An online candle company offers four types of candles for $9, $12, $15, and $18. During the first quarter of this year, the company sold 1,650 units of the $9 candle, 1,575 units of the $12 candle, 925 units of the $15 candle, and 1,075 units of the $18 candle.

The formula to calculate the company's gross merchandise value would look like this:

Gross Merchandise Value = (1,650 x $9) + (1,575 x $12) + (925 x $15) + (1,075 x $18)
= $14,850 + $18,900 + $13,875 + $19,350
= **$66,975**

If you sell goods through online marketplaces or have your own website, gross merchandise value should be used with other sales and revenue metrics to get a more holistic view of how your business is growing. Though gross merchandise value enables you to see the total volume and value of the goods or products that were sold online, this metric won't reveal other key indicators of growth, such as the number of people who visited your online store and how many repeat customers made online purchases.

The bottom line is this: Gross merchandise value can help you determine whether your business is growing and generating revenue, but this metric alone shouldn't be used to guide important decisions.

When you do use gross merchandise value as a metric, it's best to compare results from similar time periods, such as a quarter-over-quarter, year-over-year, or month-over-month analysis.

How it helps you make decisions

In practice, gross merchandise value can be a good barometer of business growth when you need to drive sales and keep costs down.

If your gross merchandise value is gradually increasing over time, you're either selling more goods or more expensive ones. Both outcomes are an overall positive sign for your business, as long as you can keep up with the demand.

How to calculate it

Calculate your gross merchandise value by multiplying the amount of goods sold during a specific period of time by their sales price.

Gross Merchandise Value =
Retail Sales Price of Goods x Number of Goods Sold

Net Sales

What it is

Net sales is the money left over for your business after returns, discounts, and allowances are taken out of the gross revenue that's brought in from selling products or goods.

More specifically, here's a more detailed breakdown of everything that's removed from your gross sales:

Returns: As its name suggests, this value represents the products, goods, or merchandise that customers received and returned to you for a refund.

Discounts: These are incentives offered to customers so they can pay for their purchases quickly and generally within a certain timeframe. For example, a business that sells baked goods in bulk online can offer a 15 percent discount to customers who can pay for an order up front, rather than make a payment later when it's time to pick up their purchases from a store or bakery.

Allowances: These losses are incurred when you need to lower the price of products or goods that are damaged, defective, or worth less in value for another reason. To be clear, discounts offered as incentives to customers should be calculated as a separate category of costs.

Pro tip:

Don't add COGS, or cost of goods sold, to discounts or allowances when you're calculating net sales. COGS are subtracted once your net sales are calculated.

What it tells you

Since gross sales calculations don't include common reductions to your revenue, using net sales as a KPI will enable you to more accurately gauge how much money is actually being brought in from the sale of products or goods.

Your net sales calculations can also be leveraged to report the total amount of revenue that your company brought in during a certain amount of time on an income statement.

For investors, net sales can help them assess your company's financial health and determine whether you are properly managing costs that can negatively impact revenue from sales over time. Net sales is more accurate than gross sales and gross merchandise value in determining how much profit is actually being generated from sales.

How it helps you make decisions

Comparing your gross and net sales to competitors can help you identify issues and get them fixed quickly before they become onerous problems that inhibit your company's growth.

For instance, allowances are commonly caused by issues with storing products and either transporting or shipping them to customers. You can reduce allowances by reviewing current practices and changing the way that your business either stores products or gets orders to your customers.

Benchmarking can also help you determine whether your discount terms should be adjusted to be more competitive.

How to calculate it

You must add up the total amount of returns, allowances, and discounts that your company incurred during a specific time period before you can calculate your net sales. Once you have this data in hand, subtract the total amount of returns, gross sales, allowances, and discounts from your gross sales.

Net Sales = Gross Sales - Returns - Allowances - Discounts

Example

A cooking supplies retailer generated $1.54 million in sales during the third quarter of this year but also received about $14,600 in returned merchandise, gave customers $2,100 in price reductions as allowances, and offered $27,300 in discounts to customers for early payments.

The formula to calculate the retailer's net sales would look like this:

Net Sales = $1,540,000 – $14,600 – $2,100 – $27,300
Net Sales = $1,496,000

Sales Dilution Rate

What it is

Sales dilution is the difference between your gross and net sales. For instance, if your business generated $750,000 from sales and was left with a net amount of $710,000 after deductions from returns, discounts, and allowances were taken into account, the sales dilution would be $40,000. When expressed as a percentage of your gross sales, your sales dilution rate would be 5.3 percent.

What it tells you

Your sales dilution rate, expressed as a percentage, will indicate how much of your gross revenue wasn't actualized due to costs from returns, allowances, and discounts.

It's particularly important to monitor your sales dilution rate when you're trying to get a loan from an asset-based lender or pursue accounts receivable financing. Since both financing options primarily rely on a stable stream of incoming cash from sales as collateral, lenders who can either offer you a line of credit or provide a cash advance on money owed by customers will pay close attention to your sales dilution rate.

Lenders commonly use sales dilution rate calculations to determine whether a business should get a loan and how much it can be. For lenders, known as factors, who provide cash advances on money owed by customers, your sales dilution rate can determine how much money you will get as a percentage of customer orders; in other words, you will get a percentage of the total value of an invoiced order. The direct lender, meanwhile, will work behind the scenes and collect the full order amount from your customer.

How it helps you make decisions

Keeping tabs on your sales dilution rate can help you determine whether costly issues or inefficiencies are causing you to bring in less profit from selling goods or products.

If your sales dilution rate is rising over time, you may want to see whether there's a similar spike in returns from customers who weren't happy with their purchases for any number of reasons. You can then leverage this data to investigate whether customers didn't like specific products, noticed damages after they made a purchase, or found problematic defects, among other things.

If allowances are driving your sales dilution rate up, it would be worthwhile to determine why your products or goods are being devalued.

How to calculate it

Once you calculate your gross and net sales, divide the difference between those two amounts by your gross sales and multiply it by 100 to get the percentage.

Sales Dilution Rate =
((Gross Sales - Net Sales) / Gross Sales) x 100

Example

Let's go back to a previous example in which a cooking supplies retailer generated $1.54 million in gross sales during the third quarter of this year and had $1,496,000 in net sales after costs from allowances, discounts, and returns were taken into account.

The formula to calculate the retailer's sales dilution rate would look like:

Sales Dilution Rate = (($1,540,000 – $1,496,000) / $1,540,000) x 100
Sales Dilution Rate = ($44,000 / $1,540,000) x 100
Sales Dilution Rate = 0.0286 x 100
Sales Dilution Rate = 2.86%

Gross Profit

What it is

Your gross profit is the amount left over after you subtract the cost of creating and delivering your products (COGS, "Cost of Goods Sold") from your net sales. Note that your COGS only includes costs directly involved with providing your product - it does not include overhead costs like marketing, or rent for your office space.

COGS for ecommerce companies typically include:

- Fulfillment
- Freight and shipping
- Packaging
- Product manufacturing
- Storage
- Inventory shrinkage
- Raw materials

Pro tip:

Not all freight costs should be lumped into your COGS. As an example, the costs of shipping components or ingredients to a product manufacturer – known as transportation-in or freight-in costs – are included in your COGS. However, costs to ship products to your customers – or those that will ultimately use it – aren't typically in your COGS.

What it tells you

Gross profit tells you how efficient you are at producing your product. Even if you have very high revenue, you may have low gross profits if your product is very costly to create.

How it helps you make decisions

Gross profit relates to unit economics, or, in other words, the revenues and costs associated with the goods and products that you're selling. If gross profits are high, this generally indicates that you can sell goods or products for significantly more money than it costs to produce it.

Gross profit in dollars represents the money left over for operating expenses, including payroll, marketing, software, rent, and utilities, once you account for the costs to produce all of the products that your business is selling.

Ideally, your gross profit should grow at least as fast as revenue – this indicates that your costs are stable. If your gross profits are growing faster than revenue, certain production costs are decreasing as you make and sell more products or goods. This laudable scenario and the cost-saving benefits that go with it is known as "economies of scale" in microeconomics.

While the amount of gross profit that your business is generating can be a decent measurement of profitability, it's more beneficial and advantageous to track this metric as a ratio or percentage – this is known as your gross profit margin. To be sure, gross profit margin is the percentage of revenue that's greater than your company's COGS. Your gross profit margin will generally indicate how well your business is generating revenue and managing production costs. The overarching goal is to keep your gross profit margins as high as possible. A high gross profit margin indicates that your company is generating profits from the sale of products or goods and has sufficient cash to cover operating expenses, pay down debt, and hire more employees, among other things.

Gross profit margin is a more effective measurement of profitability since comparing gross profits from one month or year to another can sometimes offer a misleading picture of your company's financial health.

If gross profits are rising but gross profit margins are waning, then you should probably find out why production costs are increasing and look for ways to lower it.

It's also important to compare your gross profit margin against other companies in the same industry. If your competitors have a higher gross profit margin, they likely have more money in hand to market their products, hire talent, invest in technology, and more. If this troubling trend continues for too long, there's an increasingly higher chance that competitors will continue to outpace your business in the long run.

How to calculate it

Since you need to know your company's gross profit first, simply subtract your COGS from your net sales.

Gross Profit = Net Sales - COGS

You can then calculate your gross profit margin by dividing your gross profit by your net sales.

Gross Profit Margin (%) = Gross Profit ($) / Net Sales ($)

Example

A furniture startup sells custom luxury desks for $2,000 each. In Q1, they sold 300 desks, for $600,000 in total revenue. Once $50,000 in returns, discounts, and allowances were deducted from their gross sales, the retailer was left with $550,000 in net sales. Due to the high-end materials and skilled craft labor involved, each desk costs $1,000 to create, so in Q1, the startup's COGS equaled $300,000.

$550,000 - $300,000 = $250,000

The startup's gross profit in Q1 was $250,000.

By dividing the company's gross profit by its net sales, we discover that their gross profit margin in Q1 was 45%.

$250,000 / $550,000 = 45%

Contribution Margin

What it is

Contribution margin reflects how much money is left once your marketing and selling costs are removed from your gross profit.

What it tells you

While contribution margin isn't reflected in financial statements, this critical KPI enables you to see whether your gross profit is being undercut by marketing costs – related to your customer acquisition costs and customer retention costs – and, in some cases, selling costs, such as those incurred to fulfill and ship orders to customers. Once your contribution margin has been calculated, you can remove all other operational costs and your COGS to determine your net profit.

Since contribution margin isn't a strictly accounting metric, you can choose to only include marketing expenses in your calculations or also add in your selling costs. The latter option tends to be more common and provides you with a better understanding of how your marketing and selling workflows are impacting your gross profit.

How it helps you make decisions

Marketing products well and getting orders to customers quickly is important, but you certainly don't want these essential costs to increasingly cut into your gross profit over time.

Although you should always look for ways to improve the online shopping experience for customers and raise brand awareness, these efforts will be all for naught if variable costs are rising faster than your gross profit.

If marketing and selling costs are outpacing your gross profits over time, then you should probably look for ways to lower the amount spent on getting your products in front of customers and into their hands.

How to calculate it

The base calculation for contribution margin is simple: your marketing and selling costs subtracted from your gross profit.

Contribution Margin =
Gross Profit - Selling and Marketing Costs

Example

An online retailer of office supplies generated $2.6 million in gross sales and spent $375,000 on marketing initiatives and getting orders out to customers.

The formula to calculate the retailer's contribution margin would look like this:

Contribution Margin = $2,600,000 - $375,000
Contribution Margin = $2,225,000

Marketing as a Percentage of Sales

What it is

The percentage of your revenue that you invest as marketing dollars. For many businesses, this is a difficult balancing act. Too small, and you may have trouble reaching your intended customers; too large, and it may be difficult to see a positive return on your investment.

What it tells you

In a literal sense, the metric tells you exactly what it sounds like: the percentage of your sales income going toward marketing. In a more strategic sense, however, this number is an important marker for whether your business is growing sustainably, and if your marketing efforts are scalable.

How it helps you make decisions

For many businesses, marketing is one of the largest expense categories in their budget. This makes it particularly important to ensure that the business is seeing an appropriate return on that marketing investment, and also not spending an unsustainable amount.

The “standard” ideal percentage is usually given as 10-20%, but this may vary considerably based on individual company stage and market requirements. At early stage e-commerce businesses trying to break into awareness with their target market, marketing spend might be a high percentage of revenue. As your company grows, however, it’s important to continually evaluate this number against your results, and ensure that your marketing spending isn’t detracting from the rest of your business.

How to calculate it

As the name implies, this metric is straightforward to calculate: simply divide your marketing spend by your revenue to reach the percentage.

Marketing as a Percentage of Sales
= Marketing Spend / Revenue

Example

A kitchenware brand earned $1M in revenue across all channels in Q1. In that same quarter, the brand spent $300,000 on advertising in print media and food websites, in-store promotional materials, and a sponsored Instagram series with a popular recipe blogger.

$300,000 / $1M = 30%

Site Metrics

For e-commerce companies, website-related KPIs are particularly vital. Your website is likely to be one of your primary sales channels, and these metrics will help gauge if it's performing to its full potential.

Traffic

What it is

The number of unique visitors or page views that your website received during a given period. Though unique visitors and page views reveal a lot about online traffic to your website or a single web page within it, these two metrics actually provide very distinct, yet equally valuable perspectives:

> **Unique visitors:** This is the actual number of people who visited your website or a web page within it during a specific time period. For instance, someone who visited your site multiple times throughout a five-month period would still be counted as a single unique visitor.
>
> **Page views:** This is the total number of times people visited your website or a specific web page during a certain time period. For example, someone who visits your website 15 times would contribute to 15 page views.

What it tells you

Your web traffic is the foundation of your online success – if nobody is visiting your website, then you won't make any sales. Web traffic is a good indicator of how visible you are to your target audience, and how successfully you're drawing them in.

How it helps you make decisions

If your traffic numbers are low or trending downward, it's a sign to investigate why. Is your message not resonating with your target audience, or are you just not reaching them in the right place?

On the other hand, if your traffic numbers are high but you're not meeting your sales targets, that might indicate a breakdown in a different part of the funnel.

Examining traffic numbers for individual product pages and landing pages can also help you see how well certain products or campaigns are connecting with your customers.

How to calculate it

For traffic, there's no calculation involved. Instead, you'll use a tool like Google Analytics to measure how much traffic your site received.

Example

A consumer goods company makes most of their sales through their web store. Their analytics software reports that in Q1 their website was viewed 3,000 times, by 2,600 unique visitors.

Conversion Rate

What it is

The percentage of visitors to your website that achieve a certain goal that you have for your site. This usually means making a purchase, but can also include actions like signing up for an email newsletter or joining a rewards program.

What it tells you

Your conversion rate tells you how effective your website or landing page is at convincing visitors to do what you want them to do. Not all web traffic will convert into customers or subscribers, but a well-designed site optimized for conversion can help encourage more visitors to make the jump.

Pro tip:

To get an even more in-depth look at what customer acquisition strategies are working, find the conversion rate by channel, such as email, social media ads, search ads, and display ads.

How it helps you make decisions

Your conversion rate data can help you figure out which messages and designs are working, and which aren't. If one of your landing pages has high traffic but low conversion, for example, you can deduce that something is turning visitors off once they get there. If you have a different page with a high conversion rate, you might look into using similar design elements or messages on other pages.

How to calculate it

First, take the total number of conversions in a given period. Then, divide that number by the number of site visit sessions over that same period:

Conversion Rate = Number of Conversions / Number of Sessions

Example

An athleisure brand launched two new legging types in Q1. Looking over their site data, they found that the product page for the first type received 5000 views, and 1200 orders. (In this example, 1 order = 1 conversion.) The product page for the second type received 3500 views, and 1000 orders.

Product A: 1200 / 5000 = 24% conversion rate
Product B: 1000 / 3500 = 29% conversion rate

Despite attracting a lower number of pageviews, Product B's page converted customers at a higher rate than Product A's page. The next step for the athleisure brand might be to look at the messaging copy on Product A's page, or consider how they might boost traffic to the page for Product B.

Average Order Value

What it is

The average amount your customers spend when they place an order with you.

What it tells you

Knowing how much money your customers tend to spend with you is a valuable input for both marketing and pricing decisions. More specifically, AOV can help you see whether your marketing and pricing strategies are working. If your AOV is increasing, you're not only bringing in more money from each order but also offseting the costs to acquire new customers and retain existing ones. AOV can also be used to calculate your customer lifetime value, or CLTV, which can tell you how much someone may spend on average during their time as a customer.

Pro tip:

To ensure that this metric is more sophisticated and insightful, strip out shipping income from your calculations and look at it with discounts applied in two separate ways:

Net of discounts: This is when you assume that customers will use a cash discount and take this into account by recording sales at the reduced amount.

Gross of discounts: This is when sales are recorded at full value when an invoice is produced and a cash discount is taken into account separately when a customer uses it.

Comparing your average order value to your return rate will also give you a better idea of whether buying behaviors are impacting your calculations. For instance, if your AOV is $500 but every order has $400 returned on average, this indicates that your net AOV is actually low since customers are not keeping much of what they bought.

How it helps you make decisions

One area where AOV helps inform decision making is in marketing. First, it's easier to make marketing decisions that will yield positive ROI if you know what kind of order values you can expect. Secondly, once you know your AOV, you can plan ways to nudge it upwards - for example, if your AOV is $20, you might offer free shipping for purchases over $30.

How to calculate it

Many e-commerce platforms like Shopify will automatically calculate AOV for you. To find it on your own, divide your revenue by your number of order:

Average Order Value = Total Revenue / Total Number of Orders

Example

A vegan cosmetics company made $1M in revenue in Q1,
with 40,000 orders placed.

1M / 40,000 = 25

Their AOV for that quarter was $25. To encourage higher AOV, they began offering free shipping on orders over $40, and also started a loyalty program where customers could earn a free trial-size product for every $100 spent.

The company will want to closely track their AOV trends over the coming months to evaluate if the new programs are working.

Basket Size

What it is

Basket size represents the average number of items that customers bought every time they placed an online order during a specific period of time.

What it tells you

Apart from knowing the average number of items that were in each online order, you can leverage basket size to see why your average order value for a specific time period either increased or decreased.

For example, let's say an online clothing retailer has a relatively stable average order value of $163 and an average basket size of 3.2; in other words, a customer's average order includes 3 items with an overall value of $163. As the summer season ends and sales begin, the retailer's average order value in September shoots up to $294.

Although the retailer's revenue appears to be increasing by slightly more than 80 percent, a deeper dive reveals that the number of transactions made in September rose just slightly compared to the previous month. After reviewing the basket size for online orders made in September, the retailer found that the uptick in sales was largely driven by the number of items that customers bought every time they placed an order – in that particular month, the average basket size rose from 3.2 to 7.1.

How it helps you make decisions

By consistently tracking your average order value and basket size, you can quickly analyze the relationship between changes in sales revenue and the size of online orders placed during the same period of time.

You can then make informed decisions about rolling out promotions, strengthening brand loyalty among customers, and offering competitive prices for your products, among other things.

How to calculate it

Since ecommerce platforms will often track customer interactions with your online store, find the total number of transactions for a specific period of time and divide that number by the total number of items sold during that same timeframe.

Basket Size =
Total Number of Items Sold / Total Number of Orders

Example

According to data compiled by its ecommerce platform, an online craft supplies retailer received 5,479 orders and sold 21,496 items during the second quarter of this year.

The formula to calculate the retailer's basket size would look like this:

Basket Size = 21,496 / 5,479
Basket Size = 3.92

Funnel Metrics

What it is

Funnel metrics – a subset of your overall web traffic – measures how effective your website and marketing is at driving visitors to a sale. As its name suggests, the e-commerce funnel is a representation of a customer's online journey with your business. In its simplest form, your e-commerce funnel can be broken down into at least five separate stages in descending order: All Sessions, Sessions with Product Page Views, Sessions with Add to Cart, Sessions with Checkout, and Sessions with Transaction. With that being said, you should be monitoring online traffic to key web pages within your website that target customers at specific stages in the e-commerce funnel that's most relevant to your business.

What it tells you

Ideally, your customers have a seamless journey from arriving on your site to making a purchase. Your funnel metrics show you how well that journey is working, and if there are any "leaky funnel" spots where your customers drop off.

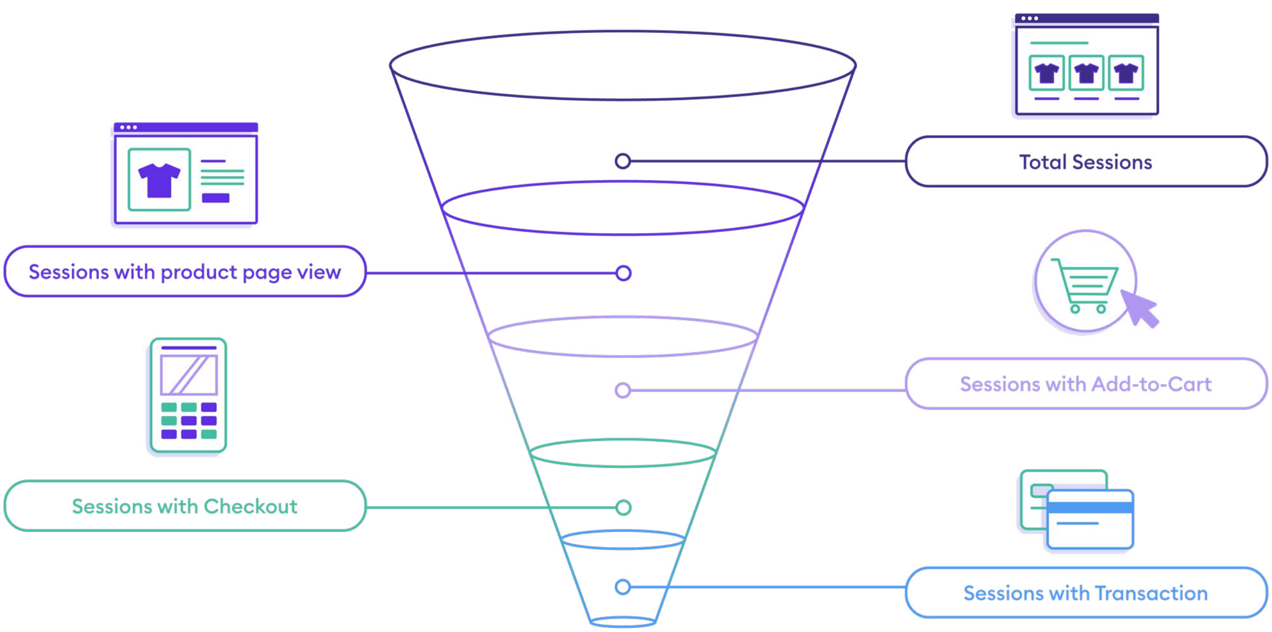
How it helps you make decisions

Your funnel metrics help you optimize the customer journey on your website, and troubleshoot where you may be losing potential sales. If you notice a big drop in the percentage of people who move forward from a certain page, that's a signal to examine what might be going wrong, and what changes you can make to improve.

How to calculate it

Divide the traffic numbers from each page by the numbers from the page before it in the funnel to get a percentage:

Percentage of viewers who went from A to B =
Page B views / Page A views



Example

A specialty coffee brand sells their product directly to consumers through their website. Most of their customers arrive on their site through an Instagram ad campaign, which brings them to a landing page introducing the different coffee roast types. From there, most customers click through to one or more product pages, make a selection, then check out and make the purchase.

In looking at their funnel pages, the coffee company determined the following:

3000 visitors came in through the landing page last month
1800 visitors (60%) went to a product page from the landing page.
900 visitors (50% of previous, 30% overall) added one or more coffee bags to cart
600 visitors (66% of previous, 20% overall) proceeded to the cart page
200 visitors (30% of previous, 6% overall) successfully checked out

While a 6% conversion rate is nothing to sneeze at, the large drop off between visitors who made it to the cart page and visitors who actually completed a purchase is a red flag. The coffee brand will likely want to dig in on their checkout process and determine what's causing so many potential customers to give up rather than complete their transaction.

Customer Lifecycle Metrics

These metrics are designed to give you a granular-level view of your customers and their behaviors, from the moment they arrive on your site through all the purchases they make with you.

In addition to drawing conclusions from data for your entire pool of customers as a whole, many companies analyze groups of customers who shared common characteristics or experiences within a specific period of time, such as when they placed an order or how they found your company. These groups are known as cohorts.

Companies analyze cohorts to determine whether their engagement with the business is actually improving over time. This approach to data analysis can be particularly helpful since a company's growth can sometimes mask engagement issues. In practice, a steady influx of new customers can overshadow the lagging engagement of those who have been around for a while.

The metrics we discuss in this chapter can be applied to both your customer base as a whole, and to specific cohorts to gain a deeper understanding of their behavior.

Customer Lifetime Value (CLTV or CLV)

What it is

This is the estimated amount that someone is likely to spend during their entire time as a customer. Though CLTV generally tells you how much someone will spend during their time as a customer, you must factor your customer acquisition cost (CAC) or cost of goods sold (COGS) into the equation to really understand how much profit you'll make.

What it tells you

Customer lifetime value (CLTV or CLV) offers an estimate of how much money you can expect to bring in over time. This KPI can also help you determine how many customers must be acquired for your business to be profitable.

Because CLTV is a measure of profit rather than revenue, you should use a formula that incorporates customer margins into your calculations. By viewing a customer's lifetime value in the form of revenue, you're not factoring in any of the costs that will likely be incurred to retain and support them over time.

How it helps you make decisions

You can leverage your CLTV to improve your communication with existing customers, especially those who bought products from you in the past or are long-time subscribers. This is particularly useful since it's easier – and less expensive – for ecommerce businesses to engage with existing customers and convince them to make a purchase. With your CLTV in hand, you can see how much money is spent by specific groups of people and create segmented marketing campaigns for each one that are designed to foster brand loyalty.

For example, you can use CLTV insights to create segmented email marketing campaigns for high-value customers that offer them exclusive promotions or discounts. Knowing your CLTV can also help you build loyalty for new ones and ultimately lower your customer acquisition costs.

Insights from a cohort analysis can also help you see which products, goods, or services bring in the most revenue and offer the most value to customers. These findings, in turn, can help you determine whether your team should double down on efforts to promote specific products, goods, or services. Alternatively, a cohort analysis can also help you determine whether popular products, goods, or services should be sold together so customers see the value in paying more for what they want over time.

Since CLTV benchmarks can vary widely among cohorts and by industry, there are no broad, hard-and-fast reference points that all e-commerce businesses should use.

Pro tip:

As a general rule of thumb, you should track your CLTV quarterly and then use the purchasing behaviors of customers to adjust how often this metric is checked. What you're selling can also determine how often your CLTV should be tracked. For example, if you're selling seasonal attire or anything else that most people will only buy once a year, it may be prudent to track the CLTV for annual cohorts. If you sell something that people buy often and repeatedly, it may be a good idea to track LTV within shorter cohorts.

How to calculate it

There's generally a multi-pronged approach to calculating your CLTV, since you typically need to calculate these KPIs first:

Average order value: This is calculated by dividing your total revenue by the number of purchases that were made from the same period of time.

Average order value = Total Revenue / Number of Orders

Average purchase frequency rate: This is calculated by dividing the number of purchases by the number of unique customers who made purchases during that same period of time.

Average purchase frequency rate = # of purchases / Unique customers

Gross profit margin: This is the percentage of revenue that's greater than your company's cost of goods sold. Calculate your gross profit margin by subtracting your cost of goods sold from your revenue and then dividing that amount by your revenue.

Gross profit margin = (Revenue - Cost of goods sold) / Revenue

Average customer lifespan: This is calculated by adding up all the years that each customer actively bought from you and dividing that amount by the total number of customers.

Average customer lifespan = Average active years of customers / Total number of customers

Once you calculate the values for these four KPIs, multiply your average purchase value by your gross margin. Multiply the result by your average purchase frequency rate and then multiply that number by your average customer lifespan to get your CLTV.

CLTV =
((Average purchase value x Gross profit margin) x Avg purchase frequency rate) x Avg customer lifespan

Pro tip:

You can also take these CLTV insights to the next level by dividing this metric by your CAC, or customer acquisition cost. This metric – known as your CLTV-to-CAC ratio – will tell you the total average amount that someone will spend during their time as your customer compared to the average cost that must be incurred to acquire that person.

Checking your CLTV-to-CAC ratio regularly can help you see whether money is being well spent on sales, marketing, and other customer retention initiatives. Your CLTV-to-CAC ratio can also help investors determine how valuable your company can or will be over time.

Example

In the span of a year, an online beauty company brought in $10 million through 600,000 product sales made by 240,000 customers. According to the company's estimates, their gross profit margin is 15 percent and their average customer generally remains loyal to the brand for an average of 5 years, or 60 months.

The formula to calculate the beauty company's CLTV would look like this:

Average purchase value = $10,000,000 / 500,000
Average purchase frequency rate = 600,000 / 240,000
Gross profit margin = 15%
Average customer lifespan = 5
CLTV = ((20 x 0.15) x 2.5) x 5
CLTV = $37.50

Customer Acquisition Cost (CAC)

What it is

Your customer acquisition cost (CAC) represents the amount of money that was spent to acquire a single customer. Customer acquisition costs cover all of the marketing and sales expenses, including salaries, that are incurred as part of your lead generation activities.

What it tells you

Customer acquisition costs are typically viewed as a decent measure of profitability since it compares the amount spent on attracting customers with the number of customers that were actually acquired during the same time period.

Pro tip:

You should check your CAC at least once a month. If you're running a lot of marketing campaigns, check your CAC weekly.

How it helps you make decisions

Businesses are always looking for ways to reduce their CAC, or in other words, maximize the amount of customers that are brought in for each dollar spent. If you're spending a lot of money on attracting customers and not securing very many of them, you're operating at a loss. To get a better idea of where your efforts are paying off or not panning out, you can separate costs out by acquisition channel, such as paid ads or inbound marketing, and calculate your CAC for each one.

How to calculate it

You can calculate your customer acquisition costs by dividing the total cost of your sales and marketing efforts by the total number of customers that you acquired during a specific period of time.

CAC = Total marketing and sales costs / Number of acquired customers

Example

If an online sporting goods company spent a total of $275,000 on marketing and sales for a single year and acquired 85,000 customers during that same period of time, their CAC calculation would look like this:

CAC = $275,000 / 85,000
CAC = $3.24

To get a better idea of which channel was most successful and profitable, let's say the sporting goods company spent $150,000 on paid ads and acquired 50,000 customers. The remaining balance, totaling $125,000, was set aside for inbound marketing, which acquired 35,000 customers. Using these scenarios, the company's calculations would look like this:

Paid advertising
CAC = $150,000 / 50,000
CAC = $3

Inbound marketing
CAC = $125,000 / 35,000
CAC = $3.57

Customer Retention Cost

What it is

Customer retention costs, or CRC, represent the total amount of money that your business spent to nurture newly acquired customers and ensure they don't churn, or in other words, stop buying your products or using your services.

What it tells you

Customer retention costs enable you to see how much money was spent on cultivating relationships with newly acquired customers and building brand loyalty.

How it helps you make decisions

You can use your CRC in conjunction with your CLTV to determine whether your retention costs are exceeding the amount that customers are spending on your products, goods, or services over time. And, depending on which formula you use, there's a good chance that you may actually need to know your CRC so you can calculate your CLTV.

Alternatively, your CRC can be compared with your CAC to determine whether the costs of acquiring customers and keeping them around is being properly distributed. With this in mind, it's important to remember that your CAC represents a one-time cost for each customer, whereas your CRC will be a recurring cost for as long as a customer wants to stick with your company. On the whole, it costs more to acquire a customer than retain them over time since their subsequent purchases over time are intended to offset ongoing retention costs.

You should revisit and calculate your CRC annually to ensure that your retention efforts and strategies are paying off over time.

How to calculate it

Generally speaking, your customer retention costs should include all expenses associated with assisting, nurturing, and engaging with newly acquired customers. These expenses include retention initiatives and programs carried out by your customer success, account management, marketing, customer engagement, professional training teams.

You can, however, analyze these costs on a more granular level by determining how much money was spent to retain each newly acquired customer and how much you may need to spend on average throughout a person's time as your customer.

Your customer retention cost is calculated by dividing your CRC for one year by the total number of customers who either continued to buy products from your business or otherwise didn't churn during that same period of time.

CRC Per Customer = Customer Retention Costs / Number of Repeat Customers

Example

An online retailer of customized gift boxes spent $91,000 on a wide variety of customer retention efforts over the past year and attracted 12,593 people who made more than one purchase within that same period of time.

Using that information, the estimated CRC per customer formula would look like this:

CRC Per Customer = $127,500 / 12,593
CRC Per Customer = $10.12

Repeat Rate

What it is

This metric shows you how many of your current customers placed an order and came back later to shop in your online store. This value, expressed as a percentage, is a good measurement of your customer retention efforts.

What it tells you

Repeat rates can help you understand how often and how many customers return to your online store after they make a purchase. More importantly, repeat rates serve as a good barometer for brand loyalty, especially since these customers are already familiar with your business, as well as the quality of your products or services.

Dividing your customers into cohorts, calculating the repeat rate for each group, and comparing the metric for each group against each other can help you identify buying trends, as well as spot retention initiatives that aren't working like they should.

For instance, tracking repeat rates based on what first-time customers buy can help you understand which products are convincing people to return to your online store.

You could also find out which discounts or offers are encouraging people to come back to your online store by tracking repeat rates based on what coupon codes were used by customers to make their very first online purchase.

Pro tip:

How often your repeat rate should be checked will depend on the type of product that you're selling. If you sell something that people buy once a year, then your repeat rate should be checked annually. If you sell something that someone should theoretically buy from you every week, then your repeat rate should be checked every week.

How it helps you make decisions

You can use repeat rates to broadly measure the performance of your marketing efforts and roll out email nurturing campaigns that keep your business top of mind. It's particularly important to follow up with customers after they buy something from your online store while your products and services are still fresh in their minds. You could, for instance, send them a personalized email with the details of their purchase, along with links to products that they may like based on their buying preferences.

How to calculate it

Divide the number of customers who placed more than one order in your online store by the total number of customers who visited within a specific time period.

Repeat rate =
Repeat customers / Total number of customers

Example

Of the 2,500 customers who bought a variety of baked goods from an online bakery last month, 1,200 of them made purchases in the past. Based on that scenario, here's how you would calculate their repeat rate:

Repeat rate = (1,200 / 2,500) x 100
Repeat rate = 48 percent

Pro tip:

It’s worth mentioning that you can think of your repeat rate in other ways, too.

Rather than focusing on the number of customers who made online purchases more than once within a certain time period, you can focus on the number of repeat orders that were placed. This approach may be a more insightful way to monitor your repeat rates since one person – counted as a single repeat customer – can place multiple orders in your online store.

If you want to focus on repeat orders rather than repeat customers, your repeat rate formula would look like this:

Repeat rate = (Repeat orders / Total number of orders) x 100

As an example, let’s go back to the online bakery, which was able to determine that 1,600 of the 4,800 orders placed in the same month were made by repeat customers. In this case, here’s how you would calculate the online bakery’s repeat rate:

Repeat rate = (1,600 / 4,800) x 100
Repeat rate = 33.33 percent

Operational Metrics

These particular KPIs offer insights on the products that are produced by your business and sent out to customers. Beyond identifying which products aren't very popular, operational KPIs are designed to help you save money and bolster customer satisfaction by ensuring that products aren't sitting in storage for too long and are being delivered quickly. Operational KPIs can also identify inefficiencies or areas within your business that are actually causing you to lose money.

Inventory Turnover Ratio

What it is

Inventory turnover, or inventory turnover ratio, tracks the amount of times that you sell and replenish your stock of products during a certain period of time.

What it tells you

Your inventory turnover will indicate how quickly products are moving through your online store. A high inventory turnover will generally signal that sales are going strong since products or goods are being sold quickly. A low inventory turnover, meanwhile, is a sign of weak sales and an indication that you may actually have too many products or goods on hand. In other words, money that could be spent on acquiring new customers is actually being used to hold excess inventory.

How quickly you can sell inventory is a key measurement of overall business performance, especially for online retailers. Online businesses that sell inventory quickly and get it out to customers efficiently tend to be high performers within their respective industries. What's more, the costs to hold on to products and goods will only increase as time passes.

Pro tip:

How often your inventory turnover ratio is checked will depend on how frequently you buy inventory. Ideally, this metric should be checked every month or quarter.

How it helps you make decisions

If your business' inventory turnover ratio is low, you can address excess inventory issues early on before you end up with too many products or goods and no way to get it out the door quickly. On the other hand, if sales are happening too quickly, you can take action quickly to restock products and goods for customers.

You can also compare your turnover ratios to those from previous time periods or other major players within the same industry for benchmarking purposes. Inventory turnover ratios can even be leveraged to forecast what your stock will look like in the future.

How to calculate it

There's one KPI that you must determine before your inventory turnover ratio can be calculated.

Average inventory value: This can be calculated by adding the value of your inventory at the beginning and ending of the current time period before dividing that amount by 2.

Average Inventory = (Beginning Inventory + Ending Inventory) / 2

Once you've obtained the values for those KPIs, simply divide the cost of goods sold by the average inventory value.

Inventory Turnover Ratio =
Cost of Goods Sold / Average Inventory Value

Example

An online jewelry business made $5 million in sales and listed $700,000 in COGS on their income statement. Their reported average inventory value is $80,000. Here's how you would calculate their inventory turnover ratio:

Inventory Turnover Ratio = $700,000 / $80,000
Inventory Turnover Ratio = 8.75

You can then use this information to find out the average number of days that it takes for the company to sell its inventory by dividing the 365 days in a year by the inventory turnover ratio. In this case, it would take 41 days for the jewelry business to sell its inventory.

Total Order Fulfillment Cycle Time

What it is

Your total order fulfillment cycle time will indicate how long it took for a customer to receive their purchases from the time they placed an order.

What it tells you

This particular KPI allows you to determine whether orders are taking too long to get into your customers' hands. Apart from having frustrated or unhappy customers, long wait times can be symptoms of a problem within your company's order fulfillment process or an issue with the shipper that's charged with delivering an order to a customer.

Pro tip:

If data is readily available, your total order fulfillment cycle time should be checked at least once a week to ensure that your workflow is operating like clockwork.

How it helps you make decisions

Customers have high standards even when they shop online, so long wait times can compel them to take their money elsewhere. If customers cancel their orders, you not only lose revenue from the sale but also end up wasting the time and money spent on fulfilling the orders. If your total order fulfillment cycle time is too high, then you can start to investigate the cause for the delays.

If the problem is within your company, you can streamline ineffective processes, invest in equipment to eliminate tedious tasks, or hire more staff to accommodate an influx of orders. While you may have little control over the order once a shipper picks it up, constantly dealing with high total order fulfillment cycle times may be a sign to find a more reliable or efficient delivery partner.

How to calculate it

Calculating your total order fulfillment cycle time is actually quite simple so long as you have a system in place to track orders. All you have to do is add the amount of time that it takes to complete three separate stages of the order fulfillment process:

> **Source time:** This measures the time in between a customer placing an order and the time when you have all the materials in hand to start fulfilling an order.
>
> **Production time:** This measures the amount of time that it takes to produce and pack up an order.
>
> **Delivery time:** This measures the time it takes for an order to reach your customer after it leaves your business.

Total order fulfillment cycle time =
Source time + Production time + Delivery time

Example

It takes 2 hours for a floral business with an online store to have all the materials they need to complete an order once it's placed. It then takes another 3 hours to create an arrangement and pack it up to be shipped. In all, it takes an outside courier service another 2 hours to pick up an order and deliver it to a customer in town.

Using this scenario, here's the floral business' total order fulfillment cycle time in hours:

Total order fulfillment cycle time = 2 + 3 + 2
Total order fulfillment cycle time = 7 hours

Return Rate

What it is

This is the percentage of all your purchases within a certain period of time in which buyers received an order and chose to return it.

What it tells you

A high return rate isn't a good sign, and returns from online orders are problematic all around. It's a hassle for customers who need to return your item in a store or exchange it for something they like. It's also an issue for employees at individual store locations who must dedicate time to process returns, add it to their inventory, and get it on the sales floor. If customers can return purchases by mail, the costs to ship items back to your business can really add up over time.

Pro tip:

It's best to check your return rate at least once a month. If your transaction volume is high enough, it may be prudent to check your return rate once a week.

How it helps you make decisions

If your return rate is high, you can take a look at more specific KPIs to identify processes that should be improved or costly issues that must be addressed. You can also track return rates by product type, vendor, name, size, and more to find out what isn't resonating with customers.

How to calculate it

To calculate your return rate, you must first find out how many products or items were sold and then returned during a specific time period. This value is then divided by the total number of products or items that you sold during the same time period and multiplied by 100 to get the percentage of returned orders.

Return rate =
(Amount of orders returned / Total number of orders) x 100

Example

An online retailer sold 75,000 pairs of a specific sneaker and 900 were returned. Here's how you would calculate the return rate for this online retailer:

Return rate = (900 / 75,000) x 100
Return rate = 1.2 percent

Closing

Tracking the right e-commerce KPIs is integral to effectively measuring your company's performance, and getting the data you need to drive informed decisionmaking. The metrics we've covered in this guide will help build a strong foundation to analyze the health of your business, and position it for even greater success.