



THE ULTIMATE GUIDE FOR MARKETERS

Data-driven eCommerce

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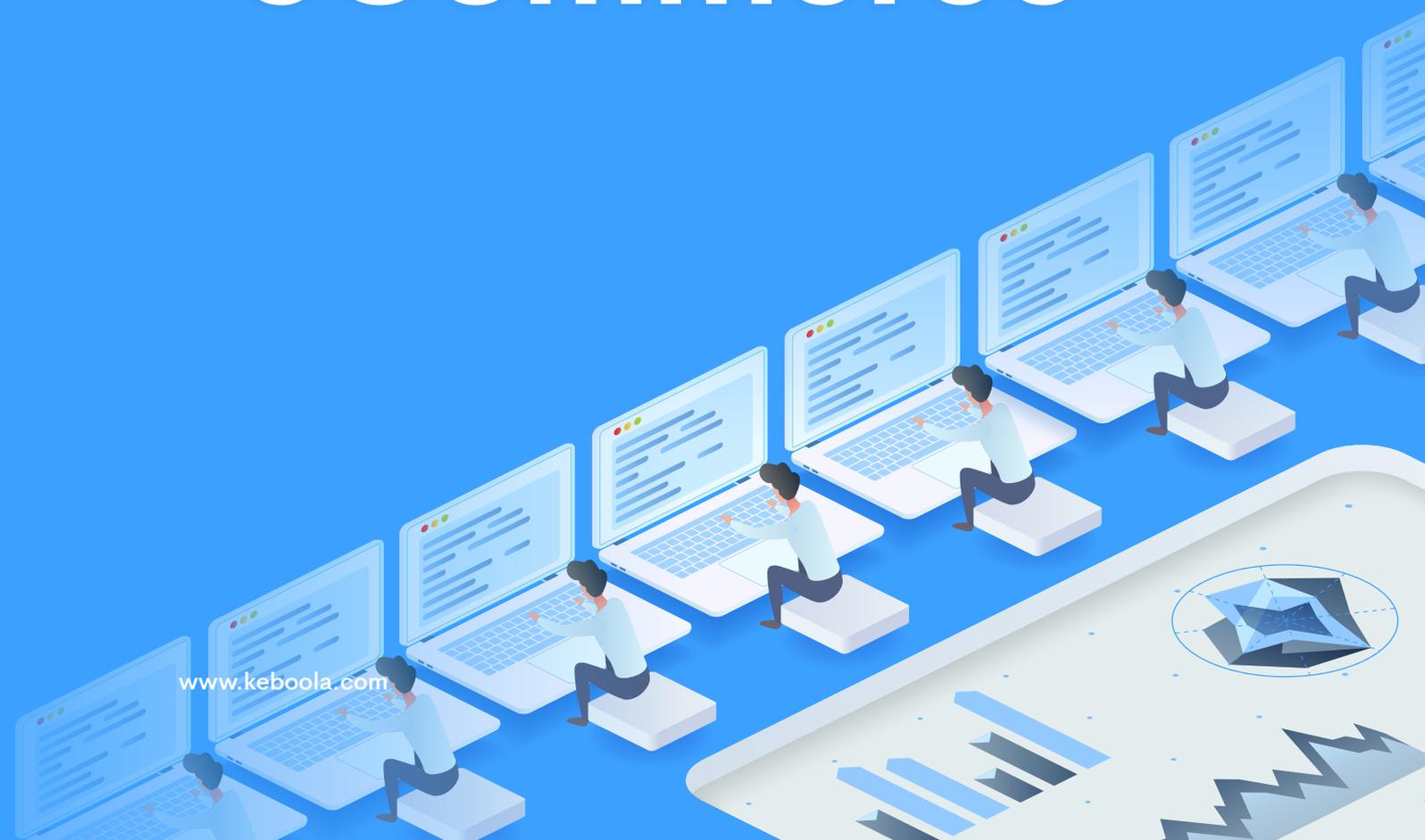


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CHAPTER 1

Data-driven marketing 101

Introduction – What is data-driven marketing?

Back in the old days, marketing was ridden with a lot of guesswork. Sometimes, unexpected campaigns brought new leads and converted prospects into customers. Other times, the best-designed campaigns flopped, the market remained unmoved and all you could hear after the launch of a campaign was silence.

Data-driven marketing rose from the pains of this insecurity and took on the overwhelming growth of data for its support. It refers to strategies, processes, and campaigns in marketing, all of which are guided by the data collected from customers via digital analytics, market research, qualitative insights, and customer behavior.

Data-driven marketing offers multiple benefits:

Better business results. From [cutting costs](#) to producing higher returns on ad spend, using data to drive your marketing often leads to a healthier bottom line.

Improved operational clarity. Data improves operational clarity in three ways:

- 01.** *It's clear whether or not a campaign was successful.* In data-driven marketing, you evaluate campaign performance by measuring the success with data: has the number of new potential customers, or prospects converted to customers, reached the desired goal?
- 02.** *It takes the guesswork out of the game.* Whenever you set up a marketing campaign, there are multiple ways to hit your goals. In data-driven marketing, you don't have to argue about which creative is better – just choose your top contenders and let the market decide. From A/B experiments to [machine-learning algorithms](#) embedded in ad-buy software, data-driven marketing takes multiple creatives and uses data to decide which one works best for our customers.
- 03.** *Strategic alignment.* Before turning to data to determine our future marketing efforts, leaders had to guesstimate which channels were the best performers. Some felt that TV commercials brought in the customers, while others

argued it was the multiple conferences that they attended. With data-driven marketing, you can measure the effectiveness of each of your channels by attributing leads and purchases to them directly. This clarifies which channels you should double down on in your future marketing strategy.

Refined customer experience. Data-driven marketing offers information that helps you to tailor your campaigns to every customer. By personalizing the creatives, marketing messaging and value propositions based on data, customers find that your marketing speaks to them on a personal level and so are more responsive to your products and services. Personalized marketing is not just more effective, but also more satisfying. The improved customer experience leads to higher trust and loyalty, which in turn results in customers loving your brand and repurchasing in the future.

The transformational potential of data-driven marketing

Data-driven marketing boasts a wealth of benefits. However, its value also runs on a far deeper level: it changes how companies are structured and how they run their operations.

Instead of egos and HiPPOs (highest paid person's opinion) running your strategy, you decide to give your customers a voice when it comes to shaping and developing your brand, communications, and product.

This opens the door to more customer-driven business development, as well as empowering employees to voice their ideas. Any idea can be tested and win over the customer's heart when data - not HiPPOs - is the ultimate judge.

Going beyond traditional marketing

DIGITAL ADVERTISING

Personalize your ads. It's simple to use data to personalize ads to your target audience. For example, Google Ads uses [keyword insertion](#) for search ads. By using

the same keywords, like the ones that your potential customer just typed, you tailor the ad to their search, thus increasing the chances of them interacting with it.

Retarget qualified website visitors. Google Analytics allows us to track consumer behavior online. Combine [Google Analytics with your advertising platforms](#) to target only those website visitors who have demonstrated an interest in your offerings (e.g. read 3+ blog posts, spent a significant amount of time online, etc.).

A/B test your creatives for maximum results. Create multiple creatives (e.g. ads), then use machine-learning algorithms embedded in ad-buy software (such as Facebook ads) to run A/B tests and determine which one is the best.

EMAIL CAMPAIGNS

Personalize content. Export the email addresses from your email marketing tool and match them with other information you have in-house (e.g. past purchases from your CRM, social media, sign-ups to your conferences, etc.) in a single place. Use the enriched information for personalized content creation. Personalization can be as simple as using your inhouse information to automatically fill slots in an email. For example: "Dear {first_name}, I am reaching out to see how happy you are with your {last_purchased_product}?"

A/B test email flows. Customer behavior is hard to predict. Will they prefer the email with the beautiful design or the one which is in plain text? Which email will lead to more click-through rates and purchases? Instead of guessing, run a [small A/B test](#) on a sample of your customers. The winner of the A/B test can automatically be sent to the other email addresses.

Use predictive customer behavior analytics. Analyze your current customer base and customer data for information about purchasing behavior. Use the data analysis to understand which products are usually purchased together. Find customers who purchased one of those products, but not the others, and send them an email campaign to try and sell them the other products. Using machine-learning approaches and micro-segmentation can yield [3-times more purchases](#) than non-data-driven product suggestions.

SOCIAL MEDIA

Get inspired by search results. Use web analytic tools, such as [Google Search Console](#), to understand the things that people search for before landing on your website. Use the search queries with the most hits to inspire your social media posts. If a lot of your web visitors searched for “How to do X”, be sure to write a social media post about it. The same strategy can be used for better content marketing.

Follow the trends. Consumer behavior is notoriously hard to predict, but you do not need advanced predictive analytics to optimize your social media. Analyze the engagement levels (likes, comments, shares) on different posts and determine which topics and post types produce the highest social media activity among your target audience.

STRATEGIC DECISION-MAKING

Segment your customers. Knowing your customer is paramount for surviving the cut-throat competitive landscape. Segment your customers to tailor to their different needs via separate marketing efforts. For example, if you sell beverages, have different marketing funnels for different segments (for example, tea lovers vs. coffee lovers).

Tap into predictive analytics. Predictive analytics allows you to anticipate customer behavior. We spoke above about recommender systems that outperform general recommendations when it comes to product purchases. But you can also predict repurchase times and shorten the length between repurchase cycles. How? By targeting those customers who are predicted to repurchase soon.

Data-driven marketing examples can be tempting. They sound exciting, they're novel, and any marketer worth their money is itching to try them. But as with every other activity, being fast to market or having good ideas is not enough. To nail your marketing, you need to deliver consistently. Execution is everything. To execute successfully, implement a data-driven marketing strategy to drive your efforts to fruition.

How to implement a data-driven marketing strategy

1. Start by setting business objectives.

Every marketing strategy, including a data-driven one, begins with setting business objectives. The business objectives should be formulated as S.M.A.R.T. goals to make them effective:

Specific. The goal needs to be specific enough for people to immediately understand what the bottom line is without any ambiguity. Are you trying to raise ROAS by 12%? Hit a specific revenue goal? Increase the average weekly number of new leads by X amount? Are these goals for all products, or just specific ones?

Measurable. Every goal needs to be measurable. Some goals are easy to measure, e.g. the number of new prospects, customers, and ROI changes. But consider some of the harder things to measure, such as social media engagement (we could count the number of likes, shares, comments, or all of the above) or brand affinity (hard to measure, unless you implement a [sentiment analysis](#) over your customer reviews or check [NPS](#) changes). In general, 'softer' goals (those which aim to improve customer satisfaction, opinions and values) are harder to measure, but not impossible.

Achievable. The goal needs to be attainable. If it's impossible to achieve, you are playing lip service to the data-driven marketing strategy and will probably feel demoralized by the impossibility of it.

Relevant. The goal must be beneficial to the company. This does not necessarily mean increasing the revenue (by acquiring new customers or upselling existing ones); it could mean increasing brand loyalty or customer satisfaction. The latter still affects the bottom line, but on a longer time scale.

Timely. The goal needs to be set against a timeline, with a start and end date. This prevents you from constantly waiting for the results of a campaign. If there are no results, that's fine - the goal could not be determined as successful and you can move on to other goals.

2. Translate business objectives to marketing campaigns.

Every business goal can result in multiple marketing campaigns and strategies. This is where your expertise has the opportunity to shine. Formulate multiple tactics to reach your goal and shortlist the best contenders based on your experience.

3. Establish what data is needed for the launch of the marketing campaigns.

Some marketing campaigns require data before they can be launched. For example, imagine you are launching an upselling email marketing campaign - you would need a list with customer information (name, age, previous products, recommender product for upselling for every individual). Other campaigns can only be evaluated using data after the launch, for example, Facebook remarketing ads to convert leads from a landing page blog to paying customers. Establish exactly what data you need to make the campaign great.

4. Implement a data collection process.

Once you know the data that you'll need for your marketing campaign, figure out how to collect it. In some cases, this can be trivial (e.g. Facebook campaigns can be run within the Ads management platform). In other cases, this can result in a cross-departmental chase for engineers. Use data management platforms that help you to aggregate data about your customers from different marketing platforms (e.g. Google Ads, Facebook Ads, LinkedIn Ads, Bing Ads, CRM, Email marketing tools). Enrich the data, then analyze it (for instance, use a recommender algorithm to understand which products you should recommend to each customer).

5. Run the marketing campaign

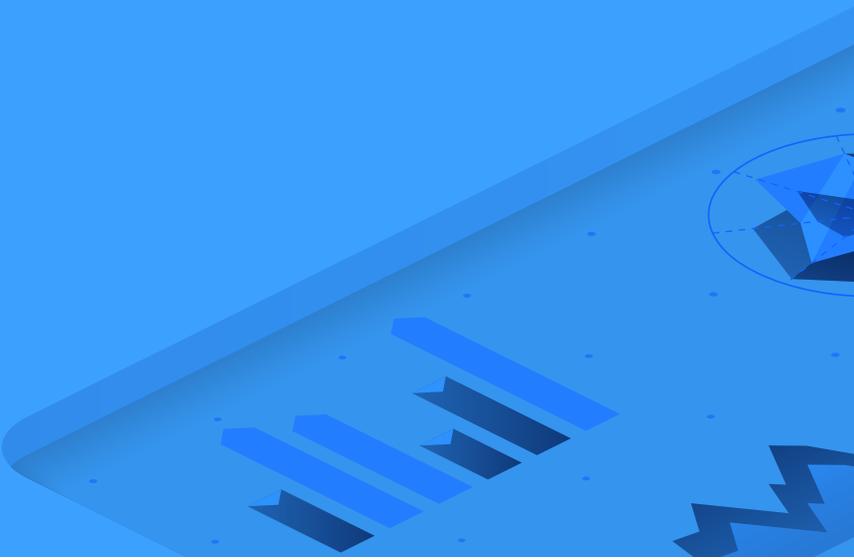
6. Evaluate the marketing campaign based on data

Evaluate the success of the marketing campaign by comparing it to the SMART goal. Have you reached the predetermined measurable success that you set out to achieve?

7. Automate

When you nail your goals, automate them - there's no need to manually run the same data collections and marketing campaigns. Rely on software and tools (such as data management platforms), which re-run all of the aforementioned steps for you. This saves you time while guaranteeing a high standard of repeatable marketing processes.

CHAPTER 2



Measuring the success of marketing campaigns

Essential insights you gain by looking at the data

Understand how your eCommerce is performing. Without numbers to guide you through your revenue, profits, and trends forecasting, you will be flying blind. Analytics tells you how well your store is doing (revenue), does it make financial sense to scale it (positive profit) or to optimize it first (negative profit or loss), and what to expect from the future (trends).

Understand what drives sales and shift your strategic focus. It is not enough to know whether your e-shop is selling, you have to ask yourself the question “why?” as well if you want to repeat the recipe that led to success. Knowing which items are frequently repurchased and which ones collect dust on the shelf helps you repurchase the right quantity without risking stale inventory. Knowing which customer demographic spends more than others helps you pour money into marketing to better prospects. Seeing that certain regions are not buying the hook can inform you to redirect your efforts and limited resources to the locales that bring in profit. Etc.

Develop and offer better products. The success of an eCommerce shop depends heavily on what products are offered and advertised to customers. The right product metrics help you determine what products to offer (product selection), which products go well together (recommendations and upsells), and what products are causing you financial damage (cost of fulfilling returns eats into the profit margin)

Let us look at an example.

Imagine you are running an email marketing campaign to re-activate your dormant buyers, aka shoppers that have stopped purchasing with you.

Your campaign goes through the following steps:

Send out emails to **1542347** dormant buyers.

1436289 recipients open the email.

143623 readers click on the “special offer for returning customers” link in the email.

120299 visitors follow the link and land on your special offer landing page.

86921 read through the landing page.

43244 click on the "add to cart" button on the bottom of the landing page.

33245 initiate checkout.

12190 successfully finish checkout and purchase items.

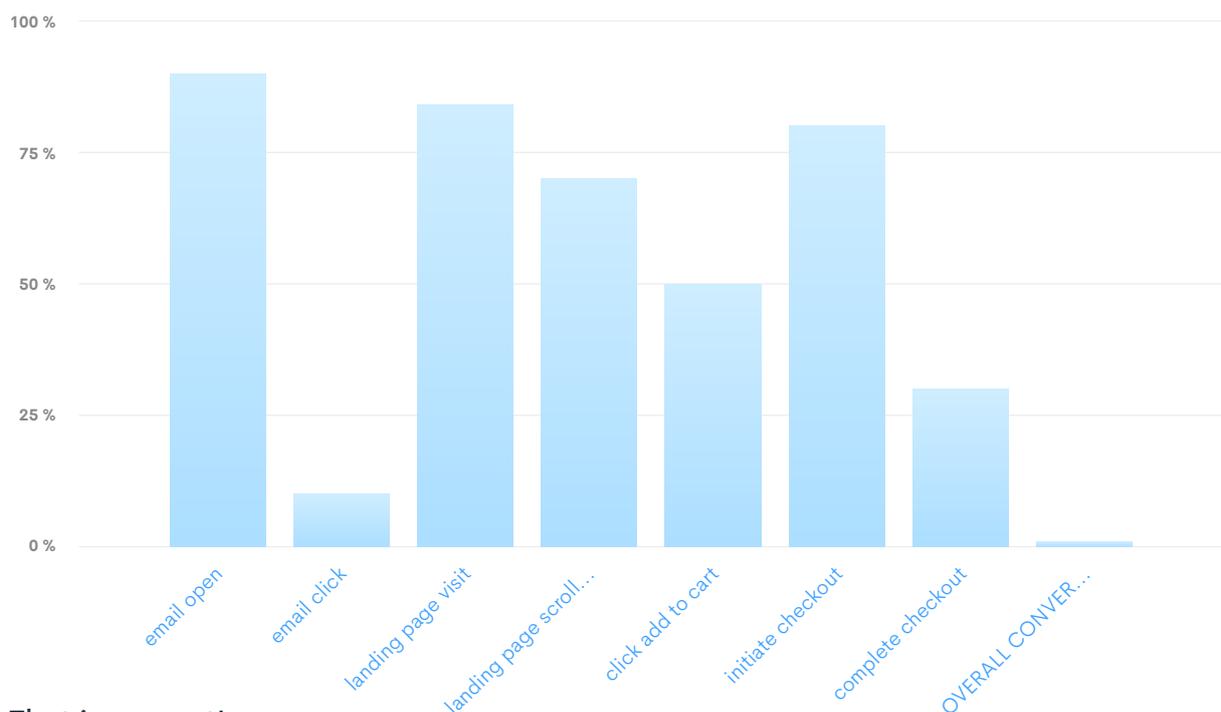
Looking at the overall funnel you might be inclined to calculate the success of this campaign by dividing the number of purchasers (**12190**) by the total number of dormant customers who entered the campaign (**1542347**).

If you did it, you'd realize the overall success was quite small: less than 1% converted in this campaign.

But this does not tell you anything about how to improve the campaign.

Instead, calculate the metrics as a conversion funnel - how users moved from one step of the campaign to the next:

If you also visualize the metrics, you get a sense of where the campaign failed:



That is correct!

The biggest drop-off happened at the “email click” step. Meaning, your users did not click on the link with the special offer in the email.

With this piece of insight, you can start correcting the funnel where it leaks the most - on the email clicking part.

Analyze the email and see what you could do to make the link click more appealing.

Maybe it was not clear they should click on it, so you need a redesign. Or maybe you should have offered a more appealing offer (“50% off in the next 30 minutes!”).

Knowing which metrics to track - in this case, conversion rate through the funnel - can help you run your e-shop more successfully.

6 Crucial eCommerce KPIs to track

Here we will look at 6 different analytic categories and explore what numbers you should follow to keep a finger on the pulse:

1. Performance metrics

Performance metrics are all about those benjamins. Keeping an eye on transactions, revenue, and profits can help you gauge if you are running a financially healthy business.

All performance metrics are tracked within a time window. For example, you want to know what was the weekly number of orders, or monthly revenue, or yearly profits.

But unlike product metrics, which go into more details about the financial outcomes of selling certain products, performance metrics are useful to get a big picture of your financial operations.

NUMBER OF PURCHASES

The metric number of purchases counts how many transactions have been

completed in a period. These are also called customer orders, unique purchases, or sales.

No matter what your vendor calls them, they are easy to compute: simply count the number of distinct transaction ids in your sales tables (usually provided by your eCommerce vendor) by date (e.g. by week, month, quarter, or year).

The metric signals the volume of business you are doing.

As a rule of thumb, you want to see the number of orders increasing over time. If you see a decline, it is an alert to start digging deeper into what is causing the order number to drop.

REVENUE

The metric revenue - also called total revenue or total sales - puts a monetary value on your orders.

It measures the cumulative amount of money the customers paid for their transactions in a given time.

PROFIT

Profit and profit margin tell you what share of the revenue you can keep after paying for all the expenses. This includes the cost of goods sold (COGS), material expenses, logistic costs, advertising costs, and all running costs.

It is always important to keep an eye on profits since more orders or more revenue does not equal financial success. If you are selling products, which make a greater loss than profit (e.g., are too discounted), you might be running yourself out of business with every new order.

AVERAGE ORDER VALUE (AOV)

Average Order Value or basket size is an indication of how much was the average order worth in \$.

Track this metric through time to see if you are increasing the average order amount. An increase - under the same customer acquisition costs - shows you are getting more profit per order. Also, if your shop is running a recommendation system, a higher AOV shows the recommender works well (and vice versa).

The four metrics (number of purchases, revenue, profit, AOV) are the minimal standards to understand if you are running a financially healthy business.

But there are other business aspects you want to keep an eye on. For example, how is your customer acquisition going?

2. Marketing metrics

Choose your marketing metrics based on the marketing strategy you are running.

It is best to think of marketing metrics as tightly coupled with the marketing channels you are using to attract your leads and customers.

CONTENT MARKETING

Content is the new king.

Soon-to-be customers often learn about new brands and products via social media and blogs, where they stumble upon fresh content that picks their interests.

Measure the success of content as an acquisition channel via the following metrics:

Number of followers	Content engagements	Traffic
<p>Twitter, Instagram, Facebook, Medium, and other social media platforms often have a metric such as followers or subscribers. Keeping an eye on the number of followers tells you if your content resonates with your audience. Your marketing campaigns will bring the relevant content in front of more eyeballs with each new follower.</p>	<p>Likes, retweets, hearts, claps, comments, shares, are all a clear message from your audiences that they LOVE your content. Evaluate the content you send into the world by the number of engagements your followers leave you.</p>	<p>Analyze the number of visitors you get from your content. This can be either done via UTMs in your links or by using devoted software. Content is ultimately not just a branding channel but also a performance channel. Its goal? To get your brand in front of the digital masses. And then drive those masses to your e-commerce.</p>

SEO

Search Engine Optimization (SEO) is also a content strategy. But instead of building a community on social media, SEO uses content to engage users of search engines (Google, Yahoo, ...).

To measure the success of SEO on your marketing performance, check the following metrics:

Keyword ranks	Organic traffic	Content engagement
<p>How high are you ranking for your target keyword that appears in organic searches? The higher you are, the more likely a search engine will return your content and a user will visit your site.</p>	<p>How many visitors you get from organic traffic, aka visitors who came to you via a search engine.</p>	<p>A useful metric for blog posts and landing pages (the most common content assets for SEO) is to measure engagement as a metric of content read. Check average time per blog article or average scroll depth (how far down the blog have readers scrolled) as proxies of how engaging was your content.</p>

PAID ADVERTISING

Whether you are advertising with Google Ads, Facebook Ads, LinkedIn Ads, or some other PPC (pay-per-click) provider, the same metrics will give you a good estimate of paid advertising performance:

CPM	CTR	CPA
<p>CPM or Cost-Per-Mille is a measure of how much it costs for 1000 people to view your ad. This metric is especially important for optimization, because the majority of advertising platforms charge you based on this metric. The cheaper CPM is, the lower your other costs (e.g. CPA) are going to be.</p>	<p>Click-Through Rate (CTR) tells you what percent (%) of people who saw your ad clicked on it. It is a measure of ad engagement and is directly proportional to the number of e-shop visitors who came from ads.</p>	<p>Cost Per Action (CPA) is all about success. It tells you what you pay on average for an ad clicker to perform an action (mostly buy an item or subscribe to your newsletter). It can be used to better understand your average marketing expense. If your CPA is 10\$, but you sell your items for 50\$, you made 40\$ on this sale (not including other costs).</p>

3. Customer metrics

You have to obsess over your customers if you want to be successful.

Customer metrics allow you to understand unit economics from the perspective of customers instead of the e-shop as a whole.

NUMBER OF NEW CUSTOMERS

The number of new customers (per week/month/quarter) shows how well you are acquiring new purchasers.

It is an excellent metric to evaluate your revenue growth (new customers => new money) as well as your general eCommerce growth. As you expand and grow your eCommerce, the number of new customers should grow alongside.

NUMBER OF RETURNING CUSTOMERS

The number of returning customers (per week/month/quarter) is an indicator of how well your upsell, cross-sell and activation campaigns are working.

It is always healthy to keep a steady number of returning purchasers in your arsenal since existing customers are 5x cheaper to sell to than acquiring new customers.

CUSTOMER ACQUISITION COST (CAC)

CAC tells you what you spent on average to acquire a new customer.

The formula is simple:

$$\text{CAC} = \frac{\text{TOTAL EXPENSES in a month}}{\text{NUMBER OF NEW CUSTOMERS in that month}}$$

CAC gives you a single number to estimate how much money (on average) had to be poured into the overall machinery called YourAwesomeWebShop to get a new customer.

Use it with Average Order Value (AOV) to understand if you are making a profit on the first purchase ($AOV > CAC$) or whether you need to upsell customers a couple of times before the customer acquisition runs a profit ($CAC > AOV$).

CUSTOMER LIFETIME VALUE (CLV)

As you saw in the example above, sometimes Customer Acquisition Cost can be greater than the Average Order Value.

You spent \$100 to get a new customer, but then they ordered \$20 worth of items. That is \$80 lost on that customer. Yikes.

However, this does not mean you should close shop. Customers often purchase small orders, but they repurchase, and through their lifetime their overall revenue pays off.

Customer Lifetime Value measures just that – how much money did a customer bring through all of their purchases put together.

In the example above, if the customer repurchases 6-times, their CLV will be ($6 * \$20 =$) \$120. Which is \$20 more than their CAC. Ka-ching!

LV is therefore a measure of long-term retention.



4. Product metrics

Most eCommerce vendors offer a product performance report by default that allows you to analyze the most relevant product metrics for each product item (SKU):

NUMBER OF PRODUCTS SOLD (PER WEEK/MONTH/QUARTER).

Products that sell in higher quantities are your best betting horses. This metric tells you directly what products are the most popular ones and what product you should stock up on.

PRODUCT REVENUE.

Never analyze just the number of products you sold, but also their total revenue (per week/month/quarter). More expensive products sell in lower quantities, but their cumulative revenue can often outperform cheaper products sold in greater quantities.

PRODUCT AVERAGE PRICE.

Understanding the average price per product is crucial whenever you are running internal promotions, for example by giving discounts or coupon codes.

NUMBER OF PRODUCT RETURNS.

Even the best-selling product can drive your business under if it causes you to lose more money on returns than you made on sales. Number of product returns (per product) is a direct indicator of how happy your customers are with the product bought once they get it in their hands.

5. Conversion optimization metrics

Conversion optimization is the art and science of improving funnels. A funnel is any sequence of steps a user takes from the beginning to the desired action.

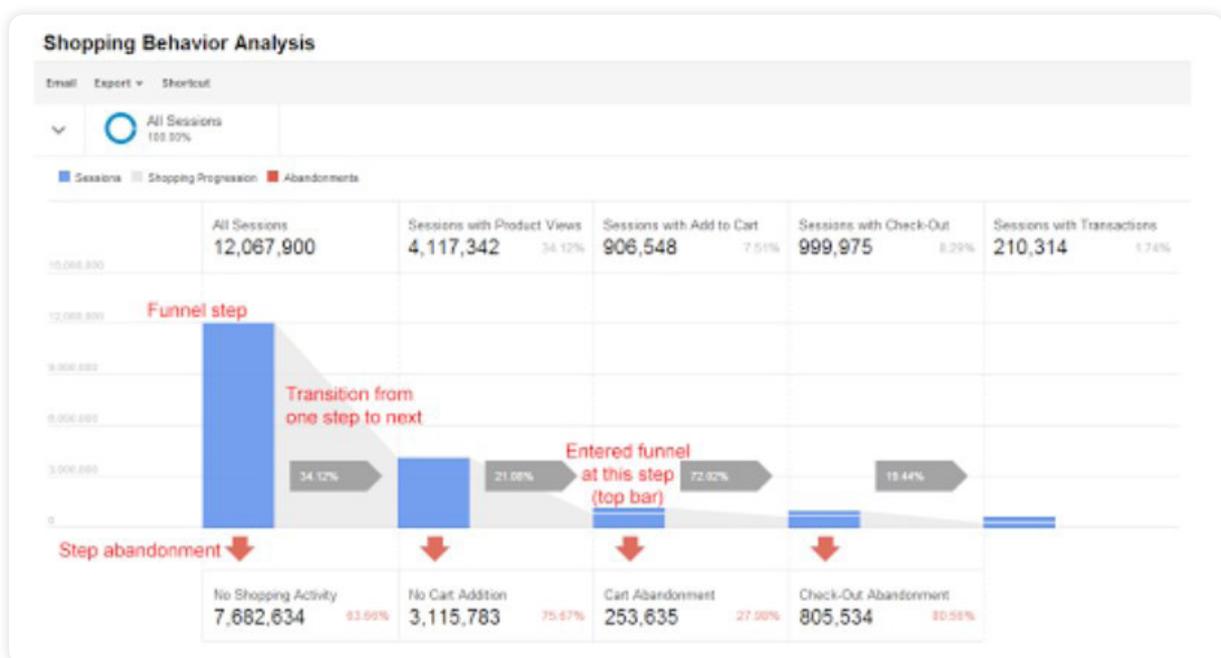
For example:

- Sees ad > clicks on ad > lands on landing page > adds item to shopping cart > initiates checkout process > completed checkout and buys the product
- Searches for your product > your blog post appears as the top result to the search query > clicks on the link to your blog post > lands on your blog post > reads your blog post > signs up to your newsletter

No funnel is perfect. At each step, a percentage of users leak out. The goal of conversion specialists is to improve the conversion rate from one step to another.

The metric for any funnel is conversion rate. Conversion specialists build up analytics like the one we saw above with the email marketing example, and then run experiments to change the conversion rate and push more users through the funnel.

An informative example is Google Analytics' [Checkout Behavior Analysis](#), which is offered under the Enhanced Ecommerce extension:



The analysis shows the dropout behavior (cart abandonment) at each step of the checkout. The percentage of dropout helps you prioritize which aspect of the checkout process you should optimize first - the higher the dropout, the higher the priority to fix that leaky funnel.

6. User Experience metrics

User Experience (UX) measures the subjective quality of how users interact with your e-commerce and content.

The set of metrics surrounding UX are more qualitative, but they try to find general truths about shoppers' behaviors and how to improve them.

Most commonly UXers determine metrics to optimize via UX interviews or recordings of shoppers' behaviors on your e-commerce shop.

For example, they might analyze which buttons are receiving the most clicks, and using that information they adjust the UI and UX of your shop to help shoppers complete their actions with more ease.

UXers refer to this area of eCommerce analytics as "friction analysis". They measure where people get stuck via behavioral observation: moving the mouse cursor aimlessly, looking around the screen with no action, repetitive clicks on the website element without changes, etc. Once they determine the set of "friction" activities, they count them.

The number of repeated behaviors without an outcome is one of the main "friction metrics" for UXers. The goal is to remove any friction and ease shoppers along the funnel.



CHAPTER 3

Set yourself for success: Best practices & first steps

Setting up analytics

Collect all data first, analyze second. Always make sure to have all the data you need before you start creating metrics and analyzing them.

Keep all your data centralized. Do not implement 17 solutions for 17 data sources. Take all your data (Facebook Ads reports, Google Ads reports, Performance data, etc.) and keep it in a common database. Having data in one place will help you run analyses across data sources. For example, CAC and LTV need both marketing spend and new customer data (usually from 2 separate data sources) to be computed.

Visualize, visualize, visualize. A picture is worth 1000 words. Make sure to compute metrics, of course, but also to visualize them. Graphs, charts, dashboards, and visuals help you spot trends with the naked eye and get insights faster.

Turn your metrics on autopilot. There is no need to recompute all metrics every week in an Excel report. Use eCommerce analytic tools that help you automate the entire metric computation end-to-end: from data collection to metric visualizations.

Best analytics tools for your eCommerce

1. Data collection

Build your eCommerce analytics platform on solid foundations. The quality of the data you collect will directly affect the quality of insights you derive from that data.

Luckily, there are plenty of tools that make data collection easy for eCommerce sites.

On top of the list is [Google Analytics](#). With its [beginner-proof ease of installation](#) and an extensive list of features (more on this later), Google Analytics is on the top of the list for eCommerce owners. Did we mention it comes free of charge?

Despite being a comprehensive tool, Google Analytics does not cover all data

collection use cases. When your online shop needs a more powerful data collection set up, several analytical vendors can speed up your time-to-insights:

- [Kissmetrics](#) is a software specialized in instrumentalizing your website and mobile apps for product and marketing analytics. You can build up your data collection plan and metrics within their platform, to track users, events, or properties.
- [Mixpanel](#) is also a software that allows you to instrumentalize your web and mobile sites with tracking. Mixpanel positions itself as the go-to product analytic software, which helps you collect data about how your users interact with your product (eCommerce website in this case).
- [Amplitude](#) is another software in the product intelligence field. It works similarly to the ones above. You can set up your tracking plan from within Amplitude and once deploy, the tool does the heavy lifting for you.

So, how do the three software providers differ? In general, there are more similarities than differences between them. All three are tracking software, ideal for data collection, but they also offer additional features such as real-time analytics, custom dashboards, integration with other tools, etc. So when push comes to shove, the best custom-tracking tool will depend on your operational specifics.

2. Performance analytics

One of the main questions each eCommerce business should ask themselves is, "How is my business performing?"

The main e-shops offer performance analytics within the platform. Just sign in into your [Shopify](#), [Magento](#), or [Woocommerce](#) online store and access a range of metrics that help you gauge your performance:

- Financial metrics - revenue, cash flow, discounts, and gross margin.
- Product metrics - number of products sold, returned, and in stock.
- Metrics breakdowns by time, shipping region, and product category.

The out-of-the-box performance analytics offered by eCommerce providers is strong, but not extensive.

There are limits to how deep you can dive into data to answer questions, and the default dashboards cannot connect data with other sources to answer really interesting questions.

For example, do customers acquired via Facebook ads purchase more on their first order than customers acquired via email marketing? Is the average order value (AOV) different by demographic segment? How about the customer lifetime value (CLTV), can we understand which segment will bring the most revenue not just on the first order, but on all future repurchases as well?

Later we look at tools that help us answer the really fun questions.

3. Marketing analytics

Marketing campaigns serve two main purposes:

- Acquire new direct customers.
- Capture and nurture leads to become customers.

3.1 Customer acquisition

The best way to acquire new customers is by running ad campaigns on one of your favorite platforms: Facebook ads, Google ads, LinkedIn Ads, ... just pick your winning horse.

Each advertising platform comes with a built-in tracking system and dashboards to track your metrics. All you have to do is install a pixel or code snippet on your website, and the ad vendor takes care of the heavy lifting.

What is great about the ad-software space is that all your campaigns are already analyzed within the vendors' dashboards. You can track marketing metrics to determine the success of your marketing efforts via:

- Ad spend
- Number of impressions
- Number of clicks
- Click-through rate
- ROAS (return on ad spend)
- Cost per conversion (where conversion is customer acquisition)
- Etc.

3.2 Lead capture and nurturing

Leads are captured and nurtured through a combination of SEO and email marketing.

SEO is might seem hard to track, but Google Analytics has a lot of reports and tools which help you keep track of your SEO performance:

- Activate [Google Search Console](#) to understand which queries let people find you online.
- Analyze your website visitors through the ["Organic traffic" segment](#) to understand how their website behavior differs from other non-organic audiences.
- Look at [landing pages reports](#) to understand which pages drive traffic and convert traffic into leads (by also setting up the right goals on your email capturing forms).
- Use additional tools like [OptiMonk](#) which helps you capture leads and track conversion rates without breaking a sweat.

Once your leads are captured, email marketing kicks in. You might rely on [Mailchimp](#), [CustomerIO](#), [ActiveCampaign](#), [Klaviyo](#), or some other email marketing tool. That is alright because each one of the email communication vendors offers automated analyses. With it, you can track lead nurturing metrics:

- Email open rates
- Email click-through rates
- Email response rates

The final step of lead nurturing, aka converting leads into customers, is not automatically tracked by the email vendors.

Currently, eCommerce analytic tools are great for keeping track of how hot a lead is down the nurturing funnel (keeps on opening, reading, and clicking on emails), but they do not close the loop. You will either have to send that information from your backend to the email software or perform a custom analysis outside the email vendor software to gauge the lead-to-customer conversion rates metrics.

4. Customer analytics

When you are a small retailer, it is easy to talk to your customers and understand their individual needs and pains. But when your eCommerce grows it becomes hard to pick up the phone or be on every email chain.

This is where customer analytics comes in. It opens the window into understanding who your buyers are.

The majority of customer analytics is focused on understanding the different segments of customers. Here, it is not so much about metrics, but about specific segments, and how they comparatively differ.

So, what are the different types of segmentation analyses you can perform?

ACQUISITION COHORTS ANALYSIS.

Acquisition cohorts group customers by the time (month, quarter, ...) in which they were acquired. It is important to analyze data by acquisition cohort to see the trends in clientele change. Early adopters of your products will behave differently than the recently acquired customers.

RETENTION ANALYSIS.

Retention analysis looks at how long a customer stays active. If your eCommerce store is based on subscriptions, a customer is retained as long as they are paying for the subscription. If you sell digital or physical goods, though, a customer is retained for as long as they re-purchase. This one can be tricky to track because

different products have different repurchasing cycles. For example, I might buy a TV once every 5 years, while I buy bread once a week.

CUSTOMER PROFILES.

Segmentation by profiling is extremely useful, but also very open-ended. For example, you can look at high paying customers vs low paying customers, customers who used discounts at purchase vs those who paid the whole price, customers from APAC vs those from EMEA, customers who saw 4 ads before purchasing vs those who came via SEO, and email nurturing, etc. The breakdown possibilities are virtually limitless, and different breakdowns give you insights into different customer stories.

So, which eCommerce analytic tools best support customer analytics?

- Google Analytics is very useful for [acquisition cohorts and profiles analyses](#). You can create custom segments based on breakdowns by demographic, acquisition channel, and a myriad of dimensions to compare your e-shop clients between themselves.
- [Mixpanel](#), Amplitude, and other similar solutions are great for retention analyses. You set up a custom event of purchase and/or website visit, and the tool can group your customers into "has returned" or "has churned" buckets.

5. Product analytics

Product analytics focuses on providing insights into how your products-offering is performing. Among others it lets you assess the most important product metrics:

- The number of sold items by product and product category. It lets you gauge the top-selling products.
- The number of items on stock (in inventory) and in shipping.
- Where your products are being shipped to and what is their shipping status.
- How often a product is added to the shopping cart, and what % of those convert to actual purchases.
- Etc.

Product metrics go beyond e-commerce analytics, they can also be used for converting website visitors into paying customers or for improving the customer experience. For example:

- Run scarcity campaigns on product pages (“Only 4 products left in stock”).
- Offer customers a way to track their product shipping in real-time.
- Build recommendation engines to bundle or upsell customers during their checkout.
- Etc.

So, what tools can be used to track product metrics? There isn't a market-leader devoted tool that focuses just on product analytics. Usually, eCommerce owners build their own product analytics with a combination of:

- 01.** Reports within their e-shop platform (e.g. look at [Product analytic reports](#) in Shopify).
- 02.** Add an e-commerce plugin to upgrade their e-shop vendor's reports (e.g. [Metriilo for Woocommerce](#)).
- 03.** Export data themselves and analyze it with devoted data visualization tools like [Looker](#).

6. Conversion optimization and User Experience

Conversion optimization and user experience are areas of web analytics that try to understand why website visitors are not converting into customers more.

The story is focused on conversion funnels and the customer journey. A conversion funnel could take a cold lead through the following customer journey:

- Show a Facebook ad to a Facebook user.
- The user clicks on the ad and lands on your product page.
- The user likes the product and adds it to the cart.
- The user checks out the cart and purchases the product.

At each step, a customer can either convert to the next one or abandon the funnel.

As an e-store owner, you have two general ways of increasing sales and revenue:

01. Drive more traffic through the existing sales funnels (for example, by spending more on ads), so a greater overall number would convert.
02. Improve the conversion rates of your existing traffic, so a greater percentage of visitors convert from one step of the funnel to the next one, without paying for more visitors.

Conversion optimization and user experience sweat the details of why visitors move from one funnel step to the next one. The eCommerce analytic tools that help them understand conversion are:

GOOGLE ANALYTICS BEHAVIOR FLOW REPORTS

They showcase how users move from one step of the funnel to the next one, so you understand if there are any bottlenecks in your funnel where users drop off. Maybe, some product pages work better than others. Look at those landing pages where visitors leave without doing anything.

GOOGLE ANALYTICS CHECKOUT BEHAVIOR REPORT

[The Checkout behavior](#) focuses on the last mile of shopping: the cart. The report shows you how users move from one step of the checkout process to the next one and where visitors abandon their carts, so you can better understand which aspects make you lose money due to a cart abandonment. If you see a huge number dropping off at "Payment Method" you either do not offer the customers' preferred payment options, or they do not trust you with their credit cards (aka work on trust signaling).

Another way to improve conversion rates and user experience is to not focus on the overall flow but to concentrate on the bottlenecks within a specific step of the user journey. Analytic tools that can assist you are:

- Heatmaps and scrollmaps. Tools like [Hotjar](#) and [Crazy Egg](#) offer an insight into customer behavior on a specific page. Heatmaps showcase which parts of the page visitors interact with (click or spend time on), and can be used to assess

if your product pages bring attention to the right details. Scrollmaps track how deeply visitors scroll on a page and can tell you if the users just cruise passively on the top fold or actually scroll down and read your content.

- A/B testing tools. A/B testing uses two variants of the same element (e.g. two variants of CTAs on the product page) to determine which one converts better. Among the best eCommerce analytic tools for A/B testing are [VWO](#), [Optimizely](#), [Crazy Egg](#), and [Unbounce](#).





CHAPTER 4

Bridging the gap between data, analytics, and action

How to gather customer information & put it to good use

Let's look at 7 use cases of how to better collect customer data in your eCommerce and put it to good use.

Lower cart abandonment

Online shoppers can be fickle. They browse, add items to the shopping carts, but then leave without even saying goodbye.

Statista reports that [88% of online shopping orders were abandoned](#). Aka, almost 9/10 shoppers leave their carts without purchase.

Converting more browsers into shoppers increases your bottom line, without adding to your customer acquisition costs.

What customer information do you need to lower cart abandonment?

Start by establishing a baseline. Use [Google Analytics Enhanced Ecommerce](#) to automatically track customer behavior and collect checkout customer information. The Checkout Behavior Analysis Report shows you how customers move from one step of your checkout page to another and shows the current conversion rate. This is the conversion rate you need to improve.

Understand the online shopping experience. Once you have the baseline, understand what drives customers away from your checkout page. Implement tracking tools like [Hotjar](#) that measures customer interaction in real-time. Use heat maps and session recordings to understand where visitors are clicking and what information is missing. If you see multiple clicks on the "return policy" you need to communicate more clearly how returns work. If you see people hovering over estimated delivery times and leaving, you need to reconsider if the speed of your shipping is fast enough to compete with Amazon-like one-day deliveries.

Wow with personalized content. Show personalized offers with discounts or specific items the visitors left in their cart using tools like [OptinMonster](#) once the

visitor returns to your e-shop. Personalizing content can [increase your revenue by 18x](#). And the tools take care of the gathering consumer data themselves. They track items added to the cart, as well as which visitor is returning.

Improve your product offering

Nothing sells better than a good product. To choose better products for your e-commerce business, you need to gather the right customer information:

Analyze transactional data. In-demand products are sold products. Look at how frequently a product was purchased based on customer purchase orders. You do not need to gather any additional customer information. Your online retail store does that in the backend automatically. Make sure to stock up on your best-sold items.

Collect social media information. Customers discuss their top purchases on social media. From images on Instagram to shoutouts on Twitter. Use tooling that automatically collects the information about a product brand and what customers are saying. Once you have the data you can perform sentiment analysis over the text to establish if a product is loved or hated.

Gather reviews. If you do not already offer customers review options for your e-store, check your competitors. Looking at reviews can tell you if customers are happy with a product or just meh. This is an excellent source of customer information to discover new potential winners.

Collect customer feedback. Products might sell well, but without customer feedback, you cannot tell if your customers are happy with the product they bought. Some of the best-sold products can cut into your margins if consumers return them en masse because of dissatisfaction. Send out customer surveys to understand how happy customers were with their purchases, and whether you should keep offering a product.

Personalize product suggestions

Recommended products are old news for eCommerce businesses. On product pages and checkout pages, you can often find additional product suggestions like "Customers also bought" or bundle offerings pairing the chosen product with similar ones.

The problem? The product suggestions are seldom personalized. And that ticks customers off.

So. Which data do you need to collect to offer better personalizations?

Start with individual shopping habits. When recommending products, first look at what that specific customer bought in the past. For example, if Anna bought a T-shirt next to pants in the past and only has a T-shirt in her cart today, suggest she adds a pair of pants as well. Apply the recommendation with some common sense. No one wants to repeat [the fiasco where a customer who bought a toilet seat was automatically recommended to buy several more](#). You already collected the data in your order database, you just need to put them to good use by building artificial intelligence models for individual recommendations.

Recommend based on segments. One-size-fits-all recommendations seldomly work. For example, if you retail drinks and see that the two most purchased items are green leaf tea and sport isotonic drinks, you would not recommend those two together. They are two different personas who buy those drinks: one is a sports enthusiast, while the other is a classic tea lover. For this type of recommendation you also already have collected data, but you need to gather it in such a form, so it can be used for recommender systems. Use machine learning algorithms to segment product purchases into segments, and recommend the product to the relevant customer segment.

Offer better customer service

Why is eCommerce customer service important? [Because 84% of customers said customer service is one of the key factors helping them decide whether to purchase from a company or not.](#)

So, what customer data do you need to collect to improve customer service?

Gather common customer queries. When the same question is asked of your customer team multiple times it means it is better answered elsewhere. Instead of wasting time writing the same answers repeatedly, create a knowledge base or FAQ with the most frequent questions and answers.

Survey your customers for feedback. Asking customers how satisfied they are with a complaint resolution helps you understand where you are excelling at customer service and where your team needs to improve. It also lets customers know that you care about their opinion, which increases customer retention and loyalty.

Optimize your product availability

Nothing gets customers more disappointed than looking for a product they want to buy and seeing those dreadful words “out of stock”.

Stop yourself from leaving money on the table by anticipating when demand for a product will rise and stock up ahead.

Predictive analytics allows you to anticipate the rise and fall in customer demand and keep your inventory at a ready.

What data do you need to gather from your customers to create predictive analytics models?

Past order purchases. History can be a great teacher. If we listen. Customers often repurchase with a specific pattern. If they love a specific grind of coffee, you can expect them to repurchase whenever their provisions run out. Let us say Luke drinks 3 cups a day, so he orders a new batch every 2 weeks. Monika, on the other hand, is more of a coffee-as-a-treat kind of person, so she repurchases every 3 months. Gather the historic purchase frequency of your individual customers to understand when they will be likely to repurchase. Combine the individual predictions to understand when you need to re-stock.

Seasonality and trend data. Customers open their wallets wider at specific times of the year. Seasonal holidays, Black Friday, and Cyber Mondays are just some of the common examples. But industries and products have their seasonality as well. Skis sell best during autumn and water sport retailers see their orders rise with spring. Collect data from your e-shop and other online retailers to understand when customers are more likely to buy certain products.

Improve customer retention

Acquiring new customers is more expensive than retaining existing ones.

How can you identify loyal customers and make the most out of that data?

Start by establishing a baseline. Kickstart your customer retention data gathering by understanding who your most loyal customers are. Collect information on repeat purchases and segment your customer base in at least 3 buckets: (1) new customers, (2) long-term customers (the loyal ones), (3) churned customers (aka should have re-purchased, but have not). Looking at the ratio between the three buckets will help you determine your long-term trends. Ideally, your customer base should be growing and retained customers should be bigger than churned ones.

Dig deeper with surveys. Once you identify which customers are loyal and which ones have stopped purchasing from you, you can send your customer base a [Net Promoter Score \(NPS\)](#) questionnaire. It will help you understand who among your loyal customers is a promoter of your brand. Really dig into that satisfied segment. Understanding them helps you tailor your product offerings to the highest payers as well as gauge the ideal characteristics you should look for when acquiring new customers.

Attract better customers

Customer acquisition can be challenging. Turning website visitors into new customers involves a combination of advertising and conversion rate optimization skills.

We have touched upon conversion rate optimization when we talked about lowering the cart abandonment rate.

But when it comes to advertising, data gathering can be your friend:

Install tracking software from advertising platforms. Facebook pixel and Google Ads both offer free software which helps you track and collect data about users, who clicked on your ads. There are multiple ways to implement customer tracking on your e-commerce site. But whichever way you chose, the tracking software will

give you insights into important metrics that help you understand your customer journeys. You will answer questions such as:

- How many users clicked on an ad, landed on my product page, but then bounced?
- Which audiences convert from visitors to buyers?
- Which ads perform better for customer acquisition?
- Etc.

But the tracking software does just give you insights. It also helps you automatically optimize your ads. By collecting data about which visitors converted into buyers, Facebook Ads and Google Ads [fine-tune their machine learning algorithms and showcase your ads to people who are more likely to purchase.](#)

Gather customer data into better-performing audiences. Both advertising platforms allow you to collect additional customer data and use it to acquire new customers cheaper. With Google Ads' [Customer Match](#) and Facebook 8Lookalike Audiences, you can pair the information gathered via tracking pixels with your backend information (e.g. customer emails, customer addresses, average order value, ...) to create better-performing audiences for your advertising. This will lower your customer acquisition cost and show your ads to more qualified leads.

The holistic picture of your marketing efforts

The analytical tools we presented are excellent insight drivers to help you improve your eCommerce. But the shortcoming of each eCommerce analytics software mentioned above is that it does not offer you a holistic picture.

For example, you might be running a cross-platform Black Friday marketing campaign by serving ads in both Google Ads and Facebook Ads. Each platform can tell you what your ROAS was for Google or Facebook separately, but you would be left scratching your head to determine what the overall ROI of the marketing campaign was.

Those are the interesting questions, which a single tool cannot answer. Because you need to join data across tools to answer:

- What is the customer acquisition cost, and how does it compare across acquisition channels?
- What is the customer lifetime value and how does it break down by segment?
- Is the average order value changing based on region?
- Etc.

To build the analytical capabilities of answering those questions, you need to join the data across the tools into a single analytic platform.

Introducing Keboola

Customer data is often dispersed across multiple sources. Before you can use it in your advertising optimization or product recommendations, you have to join the sources together.

The best practice to automate all your data collection is to rely on data platforms that do the heavy lifting for you.

Keboola, for example, is an end-to-end data platform, which allows you to:

01. Automatically collect data from multiple tools with a couple of clicks. With its easy-to-use interface, you can:

- Collect data from your digital advertising platforms (Facebook ads, Google ads, Bing ads, LinkedIn ads, etc.).
- Extract social media data such as likes, shares, and follows across multiple platforms (e.g. Instagram, Facebook Pages, Twitter, Snapchat) and keep track of your audience.
- Capture data about your email campaigns and conversations with ease – just use Keboola's devoted extractor components for Sendinblue, Mailgun, Mailchimp, ActiveCampaign, and more.

- Take control of your sales, support, and CRM data by moving it from the platform to your in-house database, which can be done using the Pipedrive component, the Hubspot extractor, Intercom, and many more. Take it a step further and use B!Q Deal Predictions to automate prospect and lead qualification using machine learning.

02. Bring all your data into a single database, so it can be more easily analyzed.

03. Use the analytic and machine learning tools to create advanced analyses, such as AI-driven product recommendation, predictive analytics to inform you when your product needs to be re-ordered with suppliers, build customer churn and customer lifetime value models, etc.

04. Send all the data to dashboarding software so you can keep track of your KPIs and metrics in real-time.

The state-of-the-art engineering is optimized to run the entire data pipeline from data collection to data analysis, and fast. This means that you will always be working with fresh data.

Ready to take data-fuelled actions?

KEBOOLA OFFERS A NO-QUESTIONS-ASKED, ALWAYS-FREE TIER, SO YOU CAN PLAY AROUND AND TAP INTO THE POTENTIAL OF BRINGING ALL YOUR ECOMMERCE ANALYTIC TOOLS TOGETHER.

[Try it today!](#)

