Learn about e-commerce analytics tools

Monitor e-commerce stores for growth and revenue

Make updates to an e-commerce store based on data

Identify and update listings based on data

Video: Evaluate product performance
5 min

Ungraded Plugin: Identify: Underperforming products
30 min

Reading: Key metrics for product performance
20 min

Practice Quiz: Activity: Analyze product performance for an e-commerce store
7 questions

Reading: Optimize product offerings based on data
20 min

Practice Quiz: Activity: Suggest a new product category based on search data
1 question

Reading: Activity Exemplar: Suggest a new product category based on search data
10 min

Review: Analyze trends for an online store

Key metrics for product performance

You learned earlier about **product analytics**, which involves monitoring and evaluating data to gain insights into how users interact with a product or service. In this reading, you'll learn more about the key metrics used to evaluate product performance.

Introduction to product analytics

Monitoring product performance is important because it helps a company evaluate the success of a product and identify opportunities for improvement. It also helps the company plan their inventory and avoid selling products that consistently underperform.

For a product that's launched recently, such as in the past six months, it's a good idea to monitor performance over the entire lifespan of the product. If the company has been selling the product for six months or longer, it can be helpful to compare the results quarter-over-quarter or year-over-year to discover how the product's performance has changed over time.

It's also helpful to compare a product's performance to similar products, such as several backpacks in different styles. Another helpful strategy is to compare the product performance of different variations, such as a gray and blue backpack in the same style. Certain colors or sizes might perform better than others.

Number of product views

One of the basic metrics to monitor is the number of times a product was viewed. This metric gives you an idea of how many visitors were able to find the product on the website. This metric also gives you an idea of whether the business's customers are interested in this type of product.

Here is an example of how the number of item views (the number of times the item details were viewed) appears in Google Analytics:

Item name SHOW ALL ROWS		↓ Item views
	Totals	2,536,976 vs. 2,518,379 ↑ 0.74%
1	Google Small Standard Journal Navy	
	Jan 1 - Mar 30, 2021	45,301
	Oct 2 - Dec 29, 2020	31,225
	% change	45.08%

Number of add-to-carts

Another basic metric to monitor is the number of times a product was added to cart. This metric is a strong indicator of how much a business's customers are interested in buying a product.

Here is an example of how the number of add-to-carts appears in Google Analytics:

Item name SHOW ALL ROWS		Add-to-carts
	Totals	1,015,020 vs. 1,078,024 ↓ 5.84%
1	Google Small Standard Journal Navy	
	Jan 1 - Mar 30, 2021	17,521
	Oct 2 - Dec 29, 2020	14,979
	% change	16.97%

Number of units purchased

It's also helpful to monitor how many units of the product were purchased. This indicates that customers were interested enough in the product that they decided to buy it.

Here is an example of how the number of number of units purchased appears in Google Analytics:

Item name SHOW ALL ROWS		Ecommerce purchases	Purchase-to-view rate	Item purchase quantity
	Totals	9,852 vs. 15,755 ↓ 37.47%	7.28% vs. 10.88% ↓ 33.11%	17,205 vs. 27,758 ↓ 38.02%
1	Google Small Standard Journal Navy			
	Jan 1 - Mar 30, 2021	79	0.47%	188
	Oct 2 - Dec 29, 2020	63	0.6%	101
	% change	25.4%	-21.31%	86.14%

Product revenue

Product revenue describes the amount of revenue generated by a product. It gives you an idea of how much the product benefits the business, although you'll also need to consider other product metrics for a more complete understanding of the product's performance.

Here is an example of how the product revenue appears in Google Analytics:

Item name SHOW ALL ROWS		Ecommerce purchases	Purchase-to-view rate	Item purchase quantity	Item revenue
	Totals	9,852 vs. 15,755 ↓ 37.47%	7.28% vs. 10.88% ↓ 33.11%	17,205 vs. 27,758 ↓ 38.02%	$198,706.38 vs. $395,554.62 ↓ 49.77%
1	Google Small Standard Journal Navy				
	Jan 1 - Mar 30, 2021	79	0.47%	188	$1,068.60
	Oct 2 - Dec 29, 2020	63	0.6%	101	$570.70
	% change	25.4%	-21.31%	86.14%	87.24%

Product conversion rate

The **product conversion rate** is the percentage of customers who purchase a product after viewing it. You can calculate the conversion rate using this formula:

(Product conversions / Unique visitors to the product page) × 100 = Product conversion rate

For example, a store sold 50 units of their best-selling coat in the last 90 days, and 2,000 people viewed the product page during this time period. This means there were 50 product conversions and 2,000 unique visitors to the product page.

This is how the store would calculate the product conversion rate for this coat:

(50 / 2,000) × 100 = 2.5%

The product conversion rate for the coat is **2.5%**.

Unique vs. recurring purchases

Another key metric is the number of unique purchases compared to the number of recurring purchases. A unique purchase means the customer only bought the product once. A recurring purchase means the customer bought the product twice or more.

This metric is especially important for products with a short lifespan or for subscription-based products and services. For example, there should be a high number of recurring purchases for electric toothbrush heads or meal delivery kits.

Net profit margin

Net profit margin is the percentage of revenue left over after expenses are paid. It allows you to compare the profitability of different products, no matter how much they cost. You can calculate the net profit margin using this formula:

(Net profit / Total revenue) × 100 = Net profit margin

For example, imagine the store mentioned earlier wants to find the net profit margin for their best-selling coat. They know that the coat generated a net profit of $1,500 and a total revenue of $5,000 within the last 90 days.

This is how the store would calculate the net profit margin for the coat:

(1,500 / 5,000) × 100 = **30%**

The net profit margin for the coat is 30%.

Return on ad spend (ROAS)

The return on ad spend (ROAS) helps measure the success of advertising for a specific product. You can calculate ROAS using this formula:

(Number of units sold × Cost per unit) / Ad spend = ROAS

If the store mentioned above wanted to measure the ROAS on their best-selling coat, they could analyze the numbers for the last 90 days and enter them into this formula.

This is how the store would calculate the product's ROAS:

(50 × 100) / 1,250 = **$4**

The ROAS for the coat is $4, which can also be expressed as a ratio (4:1) or a percentage (400%).

Average order value (AOV)

The **average order value** tracks the average amount of money a customer spends each time they complete an order.

If an underperforming product is priced higher than the average order value, it may not be selling well because it's priced higher than customers are willing to spend.

In other cases, a product might increase the average order value. For example, if customers who purchase a coat often purchase accessories, such as a hat or gloves, these accessories increase the average order value for the site.

Return rate

The **return rate** is the percentage of products sold that are returned by customers. If a product's return rate is high compared to similar products in the same category, there may be issues with the product quality or how the product is represented online.

However, keep in mind that some product categories may naturally have a higher return rate than others, such as clothing or shoes, because customers aren't able to try them on before buying.

You can calculate a product's return rate using this formula:

(Number of units returned / Number of units sold) × 100 = Return rate

If the store mentioned above wanted to measure the return rate on their best-selling coat, they could analyze the numbers for the last 90 days and enter them into this formula.

This is how the store would calculate the product's return rate:

(5 / 50) × 100 = **10%**

The return rate for the coat is 10%.

Quarter over quarter performance

The quarter over quarter performance is the percent change of quarterly results. A quarter is typically a three month period. A digital marketer can use this percent change to compare the quarterly performance of most metrics.

You can calculate the quarter over quarter performance change by using this formula:

(most recent quarter metric) - (prior quarter metric) = (metric change)

Then, take the metric change and divide by the prior quarter's metric:

(metric change) / (prior quarter metric) = (quarter over quarter percent change)

This is how you would calculate quarter over quarter performance for the number of units purchased metric listed above:

188 units purchased - 101 units purchased = 87 units purchased

87 units purchased / 101 units purchased = 86.13% quarterly change

Key takeaways

Product analytics makes it easier to monitor and evaluate a product's performance over time. Tracking key metrics can help companies evaluate the success of a product and discover opportunities to improve a product's performance.

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