

Impact of Google Analytics on E-commerce Website

Aditya P. Vedpathak

Aditya P. Vedpathak D.Y.Patil Institute of MCA & Management Akurdi, Pune

Abstract—This research paper is a study on impact of google analytics on E-commerce Website .This study is based on secondary research. The analysis was carried using a demo account of google analytics on the e-commerce website :- google merchandise store. This research author has used graphical representation techniques. Also dashboards available in google analytics, highlighting various useful reporting segments in google analytics and other elements which help a e-commerce website owner.

Key Words: google ,analytics , e-commerce ,website ,traffic.

1.INTRODUCTION

In this Era of Technology ,Web analytics tools are used to track web traffic patterns, particularly where visitors are coming from, what web browsing technology they are using, and how visitors are interacting with a website. Web analytics had a humble start as server error logs and were first used by IT professionals to evaluate the user interfaces of websites. Soon Multinational companies like Google were offering commercial web analytics tools designed for non-technical audiences, especially marketing and budgeting departments to determine the digital advertising budget.

Google analytics is now one of the most important and widely used tool for analysis of website traffic, which channel the traffic is coming from , as well as consumer behaviour on the website it gives insights in how the consumer behaves on the e-commerce website ,what they purchase or how much product has been sold. This research ,focuses on educating readers about its impact on E-commerce.

The study uses Google Analytics, due to its open source and cost free customizable nature, ease of use and natural integration with other renowned Google products such as Google Ads. The study further explains some of the distinct advantages of Google Analytics such as high customization and wide range of reporting functions including the impact and effect it has had on the E-commerce segment. Key objective of the research is make people aware about the power and impact of blending. Google Analytics is the most generally utilized nearby web investigation administration; albeit new devices are developing that give extra layers of data, including heat maps and meeting replay.

Google Analytics is applied by "page tags", it is known as the Google Analytics Tracking Code, which is a piece of JavaScript code that the website owner has to add to every page of the website. The tracking code runs on the client browser when the client browses the page (Javascript should be enabled) and then it collects visitor data and sends it to a Google data collection server. Google Analytics is the most widely used website stats service. Google analytics strictly does not sell data to third parties as it is more valuable to them than selling it to anyone else. Google Analytics offers varied features for businesses to get the hold over user behaviour on web site, which helps businesses, formulate, modify and improve their web strategies.

2.OBJECTIVES

1. To show the impact of Google analytics on E-commerce website.
2. To show how Google Analytics can be beneficial to the E-commerce website owner by easy to understand statistics in google analytics.
3. To show the Advantages of google Analytics using examples of e-commerce website data on google analytics demo account.
4. To understand the importance of using google analytics and how it can give insights of consumer behaviour on the website.
5. To Overview various dashboards in google analytics.

3.SCOPE

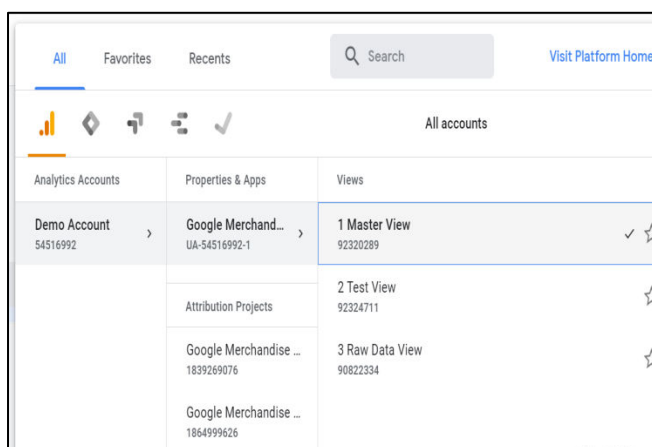
1. The Research period was from 1st week of January 2020 to last week of October 2020.
2. Study was carried on the e-commerce website (<https://www.googlemerchandisestore.com/>) by using the google analytics demo account

4.BODY OF PAPER

The concept of a View in Google analytics – A view or reporting is a analytics account property that can have its own unique configurations settings. multiple views can be created for a single property and each view can be configured to show a different subset of data for the property

There are three types of views available in Google analytics :-

1. **Master View**- This view is used for the analysis of your data. Here you configure the filters, goals, segments, etc.
2. **Unfiltered view (raw data)** - This is backup data; you can also use it to check the progress of the filters (Various Filters are used by Views to channel the data into smaller groups. Filters are used to include specific subsets of traffic, remove unwanted data, or to search and replace certain pieces of information).
3. **Test View (optional)** - It is a view used for checking the filters before applying to your master view.



Analytics Accounts	Properties & Apps	Views
Demo Account 54516992	Google Merchand... UA-54516992-1	1 Master View 92320289
	Attribution Projects	2 Test View 92324711
	Google Merchandise ... 1839269076	3 Raw Data View 90822334
	Google Merchandise ... 1864999626	

Fig 1. Various types of views in google analytics.

Views can help a website owner experiment with various reporting segments of analytics as well as create various metrics in the test view and once it is finalized it can be added to the master view which makes a permanent change, unfiltered view has backup data which can be used to check the progress of filters.

Google analytics Homepage -Once google analytics is set up and the javascript code is embedded in the website,the immediate data analysis starts within 24hrs.

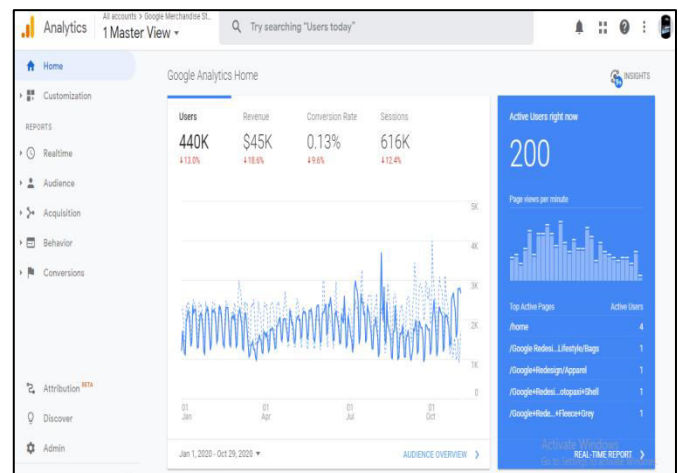


Fig 2. The homepage of google analytics data is from 1st January 2020 – 29th October 2020.

Users - the number of new and returning people who visit your site during a set period of time., a Google Analytics cookie will be set for someone who visits the site for the first time and a unique identifier will be assigned to them. This will help identify the person as a (new user), the number of users from 1st jan to 29th October 2020 is 440k as seen in Fig 2.

Revenue - The total revenue or grand total associated with the transaction the total revenue from 1st jan to 29th October 2020 is \$45 k as seen in Fig 2.

Conversion rate - A conversion can refer to any desired action that you want the user to take. The conversion rate is known as the number of conversions divided by the total number of visitors The conversion rate from 1st jan to 29th October 2020 is 0.13% .

Sessions–It is a group of user interactions with the website that takes place within a given time frame, the number of sessions from 1st jan to 29th October 2020 is 616k.

Realtime Users – in the homepage itself the number of users active on the website in realtime is displayed it is one of the savvy features of google analytics.

As seen in Fig 2above you can view users, revenue, conversion rate ,sessions data without manually having to do anything , As viewing data has become so easy, by this data the website can be improved, modified or certain changes can be made to improve the user experience.

Google analytics Dashboards –

Since analytics is a feature rich tool it allows users to customize data visualization through creating custom dash boards ,custom reports as well as custom alertsDashboards and reports can be created in Google data studio through Data provided by your E-commerce website to google analytics.

Audience Overview Dashboard – It shows the interactions of users towards the website.

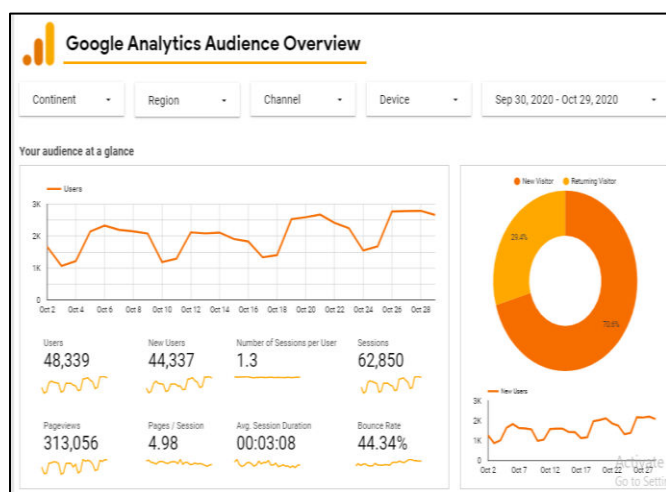


Fig 3. The audience dashboard overview data is from 30th September –29th October 2020.

Fig 3 shows number of users who have been on the site which is 48,339 till 29th October ,the new users which is 44,337 ,number of users per session = 1.3 ,total sessions = 62,850 ,Number of Pageviews = 313,056 ,Bounce rate = 44.34%.

As seen in the dashboard the bounce rate (It represents the percentage of visitors who enter the site and then leave rather than continuing to view other pages within the same site) is around 40% which is a excellent anything 41 to 55 percent is roughly average.

Behaviour Overview Dashboard - Behaviour reveals what your visitors do on your website. the reports especially tell you what pages people visit and what actions they take while visiting.the website.

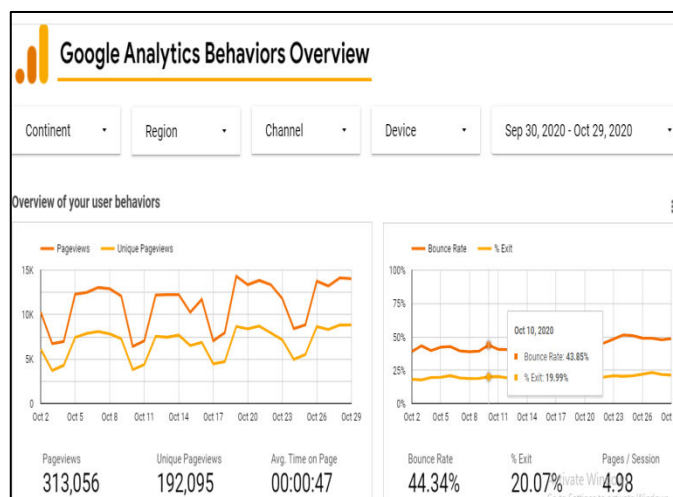


Fig 4.1 The behaviour dashboard overview data is from 30th September –29th October 2020.

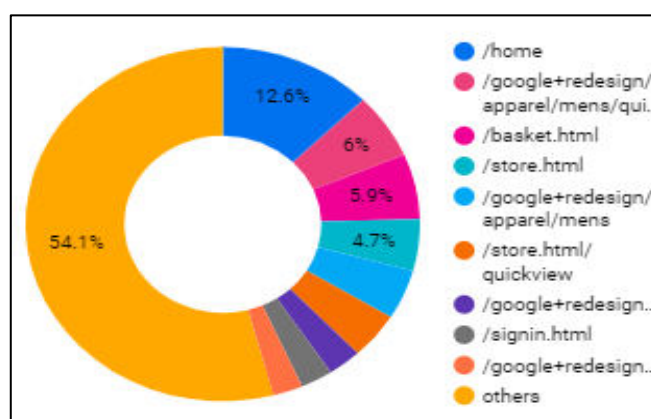


Fig 4.2 The behaviordashboard overview data of the most popular pages is from 30th September –29th October 2020.

Behaviour overview dashboard is very helpful in getting statistics relevant enough for a website owner to make changes on the least popular pages these insights can help improve consumer experience by having improvement done by the website owner or developer.

Acquisition Overview Dashboard -

Acquisition section tells you where your visitors originated from, such as search engines, social networks or website referrals. This is a key section when determining which online marketing tactics are bringing the most visitors to your website.

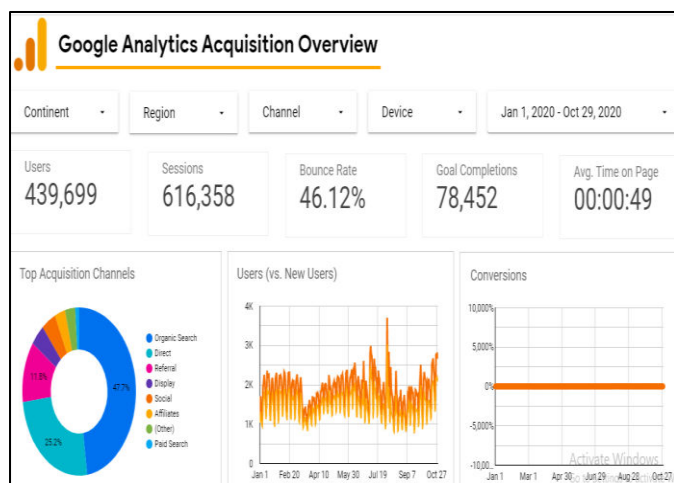


Fig 5.1 The acquisition dashboard overview data is from 1st January –29th October 2020.

Goals –They measure how well the site or the app fulfills the target objectives set. It represents a completed activity, known as a conversion, that contributes to the success of the business as seen in Fig.5 78,452 goals are completed.

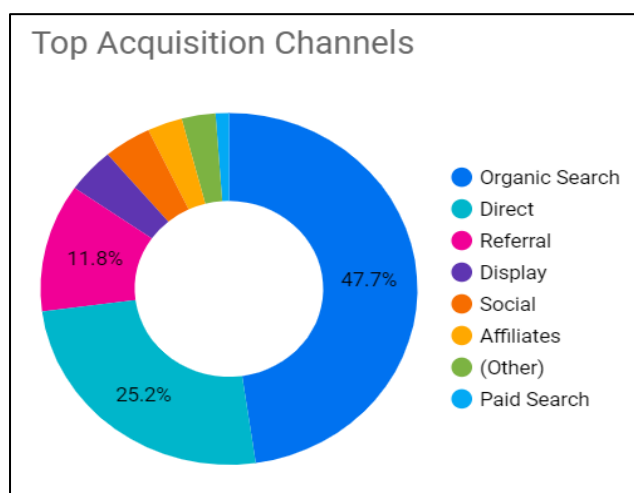


Fig 5.2 The acquisition dashboard overview data of top acquisition channels is from 1st Jan – 29th Oct 2020.

Organic search –It is a method for where someone can enter a string of words or phrases by which the website is visible in the search engine.

Direct Search - It Refers to visitors who reach your website directly.

Referral - Referral traffic is A method used by reporting visits that came to your site from sources outside of its search engine.

Display - Banner ads on blogs and image ads on news sites are some common generators of display traffic.

As seen in Fig 5.2 it shows that visitors of the website are using organic search or direct search to reach it which is a healthy sign as less money can be spent on advertisement it also makes the owner of the website understand how the consumers are reaching the website as budget of advertisement can be adjusted and other ways can be implemented to attract customers by providing discount and various other offers since organic search and direct search is high.

Enhanced E-commerce -

The Enhanced E-commerce segment of the google analytics tool is very advantageous segment for any e-commerce website at it can provide in-depth information about –

1. Clicks on a product link.
2. Views on the product details page.
3. Clicks on internal promotions.
4. Adding or removing a product from a shopping cart.
5. Initiating the checkout process for a product

Purchases and Refunds.

Enhanced E-commerce overview –

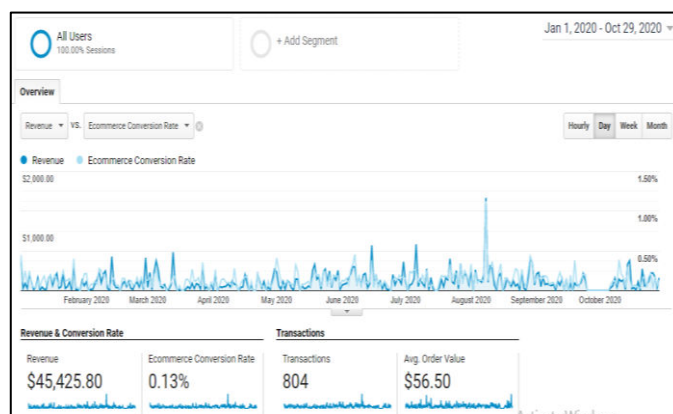


Fig 6. The the enhanced E-commerce overview data is from 1st January – 29th October 2020.

The revenue of \$45,425.80 is a good amount for a E-commerce store within 10 months ,the average order value of a product is \$56.50 .As the amount spent by the consumers will increase the value will increase as well. Enhanced e-commerce segment of google analytics has provided owners of an e-commerce website with in-depth valuable reports and statistics.

Campaigns	Internal Promotion	Order Coupon Code	Affiliation
18 Transactions	803,788 Impressions	78 Transactions	737 Transactions
\$1,283.30 Revenue		\$4,801.45 Revenue	\$41,443.77 Revenue
\$71.29 Avg. Order Value		\$61.56 Avg. Order Value	\$56.23 Avg. Order Value

Top Sellers	Product	Product Revenue	% Product Revenue
Product	1. Google Zip Hoodie F/C	\$2,040.00	4.49%
Product Category (Enhanced Ecommerce)	2. Google F/C Longsleeve Charcoal	\$1,620.00	3.57%
Product Brand	3. Google Unisex Eco Tee Black	\$1,210.00	2.66%
	4. Google F/C Longsleeve Ash	\$1,107.00	2.44%
	5. Google Badge Heavyweight Pullover Black	\$1,102.00	2.43%
	6. Google Sherpa Zip Hoodie Charcoal	\$710.70	1.56%
	7. Google Crew Socks	\$656.00	1.44%
	8. YouTube Icon Tee Charcoal	\$616.00	1.36%
	9. Google Campus Bike	\$600.00	1.32%
	10. Google Mens Microfleece Jacket Black	\$600.00	1.32%

Fig 6. The the enhanced E-commerce overview data is from 1st January – 29th October 2020.

Order Coupon - It Lets you see how your order-level coupons performed in terms of the following metrics:

1. Revenue (total revenue from ecommerce transactions; depending on your implementation, this can include tax and shipping)
2. Transactions (total number of completed purchases on your site)

As seen in the above data 78 transactions have taken place and \$4801.45 of revenue is generated within 11 months both metrics are shown seamlessly.

Internal Promotion - It allows marketers to analyze which position, promotion, and creative works best on your own site. By being smarter with ads that are placed inside websites, we can make data-driven decisions on ways to better optimize our sites. 803,788 internal promotions have taken place.

Impressions—it is counted each time a ad is shown on a search result page or other site on the Google Network. Each time it appears on Google or the Google Network, it's counted as one impression. sometimes, only a section of an ad may be shown.

Affiliation - A product affiliation to designate a supplying company or brick and mortar location. In this case google is the affiliation.

5.CONCLUSIONS

1. Google analytics helps give in-depth insights about consumer behaviour data on the website.

2. Google analytics has a Enhanced E-commerce segment which makes tracking consumer behaviour as well as revenue easy and efficient

4. Google analytics has the ability to give the audience, acquisition and behaviour overview .This data can be used to make improvements in the user experience as well as increase retention rate.

5. Google merchandise store is functioning efficiently and profitably as the spending on the advertisement is low and most of the traffic is generated through direct and organic search ,this means the consumer has high product awareness and the website need not spend too much on advertisement.

6. The impact of google Analytics on E-commerce has been overwhelmingly positive it helps in getting detailed views on consumer behaviour , acquisition , audience on a e-commerce website as well as the information about the website generated revenue through purchases of products.

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