GOOGLE ANALYTICS

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ABSTRACT

Google Analytics is a specific illustrative instrument from Google which serves to trace guests & assemble an extensive variety of profitable data concerning them. This instrument has ended up being extremely standard for site heads and has a tremendous offer of business part. The instrument's straightforwardness of utilization has developed it as an OK distinctive choice for customary web investigative mechanical assemblies. Then again, with regards to conveying unrefined statistics, belongings get troublesome; Google Analytics tries to maintain assembled data developing a fitting ability to passage rough data. It is a venture course founded examination device & gives a straightforward perspective of site movement and promoting viability. It has capable & development includes that provide knowledge into sites & enhance site ROI. This exploration rag comprises of contextual investigation on Google Analytics that exhibits components and creates the report. On the assessment's premise of web utilization, site proprietors can improve the proficiency of showcasing, and web traffic flow. This paper likewise exhibits the Google's restrictions analytics and proposes better way to deal with the concerns.

Keywords: Analytics, Rough Data, Web Traffic Flow.

I. INTRODUCTION

In today's computerized world, practically everybody is reliant on Internet. Web empowers E-business, E-learning, informal communication, managing an account, exchanges and so on over online sites. To get additional clients or guests, E – commercial & site proprietors must bid improved excellence site. Web Analytics fill need comprehension & advancing network utilization. It gathers investigations & intelligences information nearby records & sorts of guests, online visits & a great deal more.

Google Analytics is greatest broadly utilized web investigation presentation that comprehends the conduct example of site guests. Google Analytics rose up out of Urchin Software Corporation, which Google bought in 2005. Throughout the ages, Google examination has figured out how toward pick up ubiquity in light of its straightforwardness and various propelled highlights for site proprietors and expert advertisers. The webpage proprietors and advertisers can recognize how guests really interface to sites by utilizing the device. Auto produced data by Google Analytics encourages the location proprietors and the advertisers to enhance spot plans; initiative focused on movement & expand benefits.

Web analytics tool	Subscription charges (USD)	Best feature
Google Analytics	Free (Standard), $150,000 Annual (Premium)	Integration with google products
Spring Metrics	$49 per month	Simplicity
Woopra	$0 - $1999 plans	Desktop application
Clicky	Free	Mobile version
Mint	$30 per website	Real time stats
Chartbeat	$0 - $9.95 per month	Real time stats
Kissmetrics	$149 per month	Timeline view

User Testing	$39 per user	Detailed analysis of users
Crazy Egg	$9 per month	Uses heatmap technology
Mouseflow	$13 per month	Video analysis of user actions

WHAT IS GOOGLE ANALYTICS?

WHY BUSINESSES NEED WEB ANALYTICS?

Paradigm shift of businesses to operate in e-commerce mode have resulted in significant investment of their efforts in strategizing their sales and marketing efforts over the internet (Phippen, Sheppard & Furnell, 2004). It is critical to measure the returns on investments spent on the web strategy and web analytics tools offer the businesses the medium to do so. Most web analytics tools have features to collect click-stream data and processing and presenting the website data as meaningful information (Nakatani & Chuang, 2011). As most businesses aim to outperform their competitors, web analytics helps them proactively optimizing key business processes and by identifying patterns of likes and dislikes of the customers.

GOOGLE ANALYTICS AS A WEB ANALYTICS TOOL:

There are numerous web analytics tools available today. Most of these web analytics tools are part of hosted web analytics services offered by handful of companies such as Google, IBM, and Mint etc. While most features of these web analytics tools are offered as free services, some feature are offered in premium subscription. A comparison table of web analytics tools is listed below:

Apart from offering most of the important features such as user actions, navigation reports as free services, Google Analytics hold edge over other web analytics services due to its natural integration with other Google products such as Google AdWord. Google Analytics is also preferred over its competitors as it provides time series data and comes with guarantee of Google technology (Plaza, 2009). A study by Nakatani and Chuang (2011) on selection of web analytics tools, suggested that Google Analytics is the most preferred web analytics tools among the small and medium size enterprises (SMEs). Google Analytics is the most widely used web analytics services used in the world ("Web Technology Surveys", n.d.), it is therefore worth to study Google Analytics in detail.

FEATURES OF GOOGLE ANALYTICS:

Google Analytics offers varied features for businesses to get the hold over user behavior on web site, which helps businesses, formulate their web strategies. Prominent features of Google Analytics are briefly described below:

Advertising and Campaign Performance

Advertising Reports: Google Analytics Ad reports allow users to view conversion rates and returns across all digital channels. Integration with Google AdWords further improves effectiveness of Ad reports (Google Analytics, n.d.).

Campaign Measurement: This feature of Google Analytics lets user to analyze performance of each campaign and help them make decision of on strengthening a campaign, if it is performing weakly. This feature also allows measurement of offline campaigns (Google Analytics, n.d.).

Cost Data Import: Cost data imports let users compare the cost details on the digital marketing channels to allow them make better decisions on marketing programs (Google Analytics, n.d.).

Mobile Ads Measurement: Google Analytics help capture prominent metrics such as time-on-site, bounce rate and conversion rate even on mobile devices. It also provides performance issues and trends break down data by device (Google Analytics, n.d.).

Search Engine Optimization: With the Search Engine Optimization (SEO) reports in Google Analytics, businesses can understand how Google Web Search queries led visitors to their website (Google Analytics, n.d.).

ANALYSIS AND TESTING

Advanced Segments: With Advanced Segments, businesses can isolate and analyze subsets of the web traffic, like paid traffic or visits that led to conversions. With this data the comparison can be made with historic data (Google Analytics, n.d.).

Annotations: This is quite handy feature of Google Analytics for web analyzers. With Annotations, users can add shared or private notes right on the reporting graphs, which helps collaboration in data analysis (Google Analytics, n.d.).

Content Experiments: This feature gives the business directions on the web pages which are likely to bring maximum traffic to their websites. With content experiments, businesses can try versions of the contents and collect data on the content which is liked by users (Google Analytics, n.d.).

Dashboards: With Google Analytics, it is easy to create dashboards using drag and drop features. Users can select which data/report they want to see in their dashboard. The level of details needed in the dashboard can also be decided by users (Google Analytics, n.d.).

Real-Time Reporting: With real time reporting, users can see the number of users accessing their website in real time and also the content they are viewing right now. This feature is quite useful in calculating effectiveness of new campaign (Google Analytics, n.d.).

Audience Characteristics and Behaviour

Audience Data & Reporting: Google analytics helps identifying the type audience, the frequency of their visits to the website and the sources from which they are coming to the website (Google Analytics, n.d.).

Browser / OS: With this feature, businesses know what devices and browsers the users are using to browse their website. Based on this data, website layout design decisions can be made (Google Analytics, n.d.).

Flow Visualization: Flow Visualization reports let businesses analyze the path a visitor takes on their website like the pages they moved through and find the webpage where they exited the website (Google Analytics, n.d.).

Map Overlay: With this feature, businesses can take an informed decision on the best places to invest by understanding which part of the world their visitors come from (Google Analytics, n.d.).

Social Reports: With Social reports the businesses can measure the impact of social media on the conversion rates (Google Analytics, n.d.).

Traffic Sources: With traffic sources businesses can evaluate the effectiveness of referrals, direct traffic, organic (unpaid) search keywords, and custom campaigns (Google Analytics, n.d.).

Cross-device and cross-platform measurement

Data Collection and Management API: Applications, plugins, and other customizable features help businesses integrate Google Analytics into existing workflows, use third-party solutions or build own apps with the Google Analytics API (Google Analytics, n.d.).

Filters: Filters make it easy to include/exclude certain data from the reports based on relevance (Google Analytics, n.d.).

User Permissions: Configuring user permissions allows role based access distribution to the users of Google Analytics. As there is a Google Analytics mobile app available for Android users, setting up appropriate permissions is also interesting and important from the mobile security point of view (Erturk, 2012).

Product Integrations

Adsense: AdSense is a medium for earning profit by placing ads on the websites and search results. By natural integration with Adsense, Google Analytics helps content publishers display their ads in the best possible position on the website site (Google Analytics, n.d.).

AdWords: With integration of Google Analytics with Google AdWords, businesses can find out what users do after clicking their ad. This helps them find out the effectiveness of the ad campaign (Google Analytics, n.d.).

Google Tag Manager: Google Tag Manager is handy and easy to use feature to tag the content on the website without taking help of IT department (Google Analytics, n.d.).

Sales and Conversions

Attribution Model Comparison Tool: Attribution model comparison tools allow differentiating the factors contributing the success or failure of advertising campaign with the sophisticated reporting structure (Google Analytics, n.d.).

Data-Driven Attribution: This feature is only available in Google Analytics Premium and helps in deriving valuable information about the effectiveness of keywords search leading to website traffic (Google Analytics, n.d.).

Ecommerce Reporting: This reporting feature offers multiple choices to business users to identify the best-selling products and services, effectiveness of the promotions. This reporting also includes the types of transactions leading to purchase (Google Analytics, n.d.).

Goal Flow: Goal flow helps to identify the navigation patterns of the users. Data such as where the users enter the site, which pages they get stuck into most often, pages where the users leave the site, is displayed in the Goal flow (Google Analytics, n.d.). With this data, necessary adjustments can be done to the marketing as well as website design.

Multi-Channel Funnels: Multi-Channel Funnels demonstrates the individual impact of all digital marketing activities such as search, display, social, affiliates, email etc. (Google Analytics, n.d.). This data can also help forming the marketing strategy.

Site and App Performance

Alerts and Intelligence Events: Google Analytics has this feature to generate an alert when it notices sudden spike in traffic from certain geo-graphical area (Google Analytics, n.d.). This information is quite useful in making investment decisions about marketing and sales.

Event Tracking: This features captures the user activities on the website such as downloads, video plays, ad clicks etc. (Google Analytics, n.d.).

Site Search: This feature collects the data for all user search activities within the website (Google Analytics, n.d.). With this information, website can be improved to make the widely searched content more accessible to users.

Site-Speed analysis: Site-Speed analysis shows information about site loading speeds from all the users (Google Analytics, n.d.). This information can be used to improve the performance of the website.

II.   LITERATURE SURVEY

In modestly fresh arena of Web Usage Mining there is a proportion of prospective towards up gradation of the appreciation of guest behavior. Composing by and large emphases on the aftereffects of Web Usage Mining that provoke change s in the meantime, generally disregard to get more significant into the first's epitome stage that is to assemble records. The paper editorial by P. Perner and G. Fiss (2002) exhibited exploration on a particular outline to fathom the method's execution. It take a gander at the aftereffects of Web Usage Mining examination in an e-exchange shop keeping in mind the end goal to accomplish a sharp showcasing process solidly joined with guest conduct. The fact appears to clear up that the key records made, in the midst of a customer session, affects the yield and mining procedure used. The point by point portrayal showed the key step of social event records as of the web server

III.   ADVANTAGES

- Unrestricted: Google analytics is free of cost which is the coolest feature as compared to its competitors.
- Ease of use: It is usable by most of the population and it does not require any programming skills as well as analysis is much easier and can be done by experts and non-experts.
- Easy to Learn: One can easily access and learn through online tutorial. It has made learning easy.
- Easy setup: It can be easily installed and by anyone who possesses basic knowledge of Computer unlike in other competitors.
- Views from different dimensions such as Topography, Timeframe and Basis thereby increase the effectiveness.

- Detailed Visitors Profile: Visitor's details include the duration of the stay, web pages retrieved, number of links visited upon etc. Bounce Rate allows viewing the amount of visitors.

IV.   APPLICATIONS

- Transportation
- Logistics and delivery
- Web search or Internet web results
- Manufacturing
- Security
- Education
- Healthcare
- Military
- Insurance
- Digital advertisement
- Fraud and risk detection
- Travel
- Communication, Media and Entertainment
- Energy and Utility

V.   CONCLUSION

The use of Analytics is taking incredible walks in practically all roads over the globe. On the off chance that we can get information and examine it, it can help in expanding our general occupation productivity to a ton. Improving productivity also increases the overall profitability of the company as well as reducing the number of errors and uncertainty. Whenever utilized correctly, data analytics can achieve a significant positive effect on our general public and world everywhere and increment the general efficiency of specific areas.

VI.   REFERENCES

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