Chapter 10

Web Analytics: Assessing the Quality of Websites Using Web Analytics Metrics

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ABSTRACT

Over the decades, people are using internet for interconnecting distances across the universe which acts as an information hub. Internet changed the face of business, communication, etc. Consumers are overloaded with the abundance of websites and information offered. This creates a need to foster the quality of websites. Nowadays website designing trends has been evolved with numerous characteristics. This involves design simplicity, performance, improved bandwidth rate, content is designed first and device agnostic where interoperability and portability comes into action. Web analytics is a measure that can be utilized to optimize web usage and to improve the quality of websites. It is used to improve the effectiveness of the website and for optimizing web usage to an extent. This chapter deals with how website quality can be improved using web analytics. The quality of website is evaluated using web analytics with respect to the website metrics that matters.

INTRODUCTION

Web analytics is an art of improving websites which requires a deep level of creativity, balancing user-centric design, promotions, content, images and more. It helps to understand the site and to improve the site with continuous process. Web analytics supports webpage and site re-design, monitors information that the visitors expect, identifies how to improve access to environment information. Typically web metrics involves page tagging, visitors, top requests to pages, click streams, content improvement and DOI: 10.4018/978-1-4666-9764-5.ch010
Web Analytics
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data values obtained from logs. The main aim of web analytics is to assist developers in improving the quality of websites. The quality of site depends on the performance and usability of sites. Increased quality reflects the effectiveness of the firm. The Web Analytics Association (WAA) defines web analytics as the practice of measuring, collecting, analyzing and reporting on internet data to understand how a site is used and how to optimize its usage. The goals of web analytics encompasses of better understanding of visitors, web design decisions relies on data, to improve website and to improve conversions and sales. It deals with large volume of data, understands the increased complexity of data and not time consuming which improves visitors or customer’s satisfaction. Web analytics is purely based on behaviour of visitors. The logs are used to record the behaviour of visitors and client environment. Conversion is term that refers to how a visitor is transformed as customer of the particular site. This act of converting rate includes availability, improved layout, bandwidth which enforce the loading time of a site. A user once visits a website or webpage and later on by its content and look & feel, secure gateway paves a path to conversion rate, i.e. visitor to customer which reflects the quality of a website. Data collection for web analytics can be acquired via various sources of data. This involves server logs, JavaScript tagging, web beacons and packet sniffing (Waisberg et al., 2009). These data can be analyzed with the help of traffic sources. The traffic source involves various factors influencing the insights of the visitors and their actions. The quality and effectiveness of website can be improved by the web analytics process. The outcome of the process shows the factors of a website that need to be optimized to attain increased quality.

The website development should be goal-driven and user-centric, where the users are the parameter measured for the success of the site. The objectives of website leads to the metrics identified to increase the site performance. The website should be developed in such a way that it addresses the metrics associated with its quality, performance, availability and lifespan. Lifespan of a site refers to the time period of site existence. The existence of a site relies on number of users/visitors it holds. The other such site that fails to hold on the user needs vanishes without proper quality, maintenance and revenue. The business goals of the websites are the objective to the company which can be achieved by their customers. Content management is a key factor to an effective website development. The web metrics helps to improve the quality of web sites. The quality of any particular site can be illustrated into design metrics, user interface metrics, performance and content evaluation metrics. The eight common metrics for website analysis includes visitor type, visitor length, system statistics, visitor path, keyword search, top pages, referral logs and error logs (Booth, D., & Jansen, B. J, 2009). Website changes are based on environment or content change and customer changing needs. Therefore web analytics deals with collecting, analyzing and interpreting the web metrics. Web site quality is concerned from customer’s or visitor’s perspectives. The web quality characteristic includes efficiency, functionality, usability, availability, reliability and portability (Rio, et al., 2010).

Web analytics is a study of visitor, navigation and traffic patterns to evaluate the success of the website. There exists a plenty of web analytics tools available for developers to evaluate the website quality and effectiveness. Based on the evaluated metrics, steps are assigned to re-design or to optimize the site. The web metrics are categorized among the different type of websites. The main objective of this chapter is to elaborate how web analytics helps to the betterment of website quality. The chapter mainly focuses on the web analytics process, various data sources, the challenges of web analytics process, web analytics metrics involved in improving the quality of websites and a comparative analysis of web analytics metrics and website quality. It also defines the web analytic tools available in the market and the right choice on tools. The thresholds on the metrics identified helps to improve the quality of the evaluated website. This reflects ways to increase performance of a site. The developer gains knowledge