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| **DATA ANALYTICS** |

**WEBSITE TRAFFIC ANALYSIS**

PHASE II (PROJECT)

**Problem statement:**

**Website traffic analysis tools provide data and insights that can be used to create a better user experience for website visitors and to understand if a website is accomplishing its intended purpose.  However, these tools collect a significant level of personal information and the unexamined and haphazard use of analytics can lead to the unnecessary collection of information about our users that could constitute a breach of trust.  This advisory provides guidance on striking a balance between using the tools effectively and ensuring that user privacy is respected.**

**ABSTRACTION:**

This chapter is an overview of the process of Web analytics for Websites. It outlines how basic visitor information such as number of visitors and visit duration can be collected using log files and page tagging. This basic information is then combined to create meaningful key performance indicators that are tailored not only to the business goals of the company running the Website, but also to the goals and content of the Website. Finally, this chapter presents several analytic tools and explains how to choose the right tool for the needs of the Website. The ultimate goal of this chapter is to provide methods for increasing revenue and customer satisfaction through careful analysis of visitor interaction with a Website.

**INTRODUCTION:**

Web analytics is the measure of visitor behavior on a Website. However, what kind of information is available from Website visitors, and what can be learned from studying such information? By collecting various Web analytics metrics, such as number of visits and visitors and visit duration, one can develop key performance indicators (KPIs) – a versatile analytic model that measures several metrics against each other to define visitor trends. KPIs use these dynamic numbers to get an in-depth picture at visitor behavior on a site. This information allows businesses to align their Websites’ goals with their business goals for the purpose of identifying areas of improvement, promoting popular parts of the site, testing new site functionality, and ultimately increasing revenue.

Marketing communication on Internet can have various forms considering various focused targets. According to defined aims the enterprise subsequently selects tools used to communication. The basic tools of Internet marketing are following:

**x Advertising – it is tool for convincing and information people. It is used to induction of immediate interest in product and to creation of long-term relation with customer.**

**x Sales promotion - on Internet it can be focused on products marketed on-line in e-shops, but also in brick-and-mortar store. In this case the Internet is communication medium above all and informs of certain activities for promotion.**

**x Public relations - marked as PR - are used on Internet, just as in classical marketing, especially to build firm and brand awareness.**

**x Direct marketing – it represents direct communication with selected segment of customers through special offer with aim to gain the quickest feedback and simultaneously to build long-term relations with these customers.**

Each of mentioned tools has specific form of application. The most frequent forms of Internet marketing

realization with aim to find information searched by internet user are as follows: PPC (pay-per-click), PPA (pay-per-action), space advertising, records to catalogues, priority listings, SEO, viral marketing, advergaming, and participation in various social networks Madlenak, Svadlenka (2009).

1. **Target and methodology :**

**\*Object of research described in this article is impact of selected tools of Internet marketing on website traffic. The main goal of research is to monitor influence of Internet marketing selected tools application on official website traffic. For this research there were selected following tools and their monitoring: implementation of business website and personal website of the business website owner, where short blogs are published and use of social network Facebook.**

**\*The first confirmation is related to impact of personal website of the business website owner, where short reflections on various topics connected with business in form of blogs are published. In compliance with this the hypothesis H1 was set: Web traffic at the official business website is supposed to depend on web traffic at the personal website of the business website owner.**

**\*The second confirmation is related to impact of competition spread at social network Facebook.In compliance with this the hypothesis H2 was set: Web traffic at the official business website is supposed to depend on range of competition on users at social network Facebook.**

**\*To discover impacts of selected Internet marketing tools on website traffic, the real firm of providing e -commerce from Banska Bystrica region was chosen. This firm was object of research considering decisive assumption that it has not implemented tools of Internet marketing and offers possibility of website reengineering and comparison of web traffic before and after implementation of selected tools.**

**\*To monitor of web traffic and measurement of related data necessary to research solution, Google Analytics tool was used.**

**Solutions and discussion :**

**Reengineering of website**

**The most simple way to increase official website traffic is its reengineering by change of its design. This change was realized also by analysed official business website. Original used website was not sufficiently well arranged due to bigger number of bookmarks, which do not fulfil their content and they were not filled by actual information.**

**Bookmarks on web comprised Introduction, About us,**

**Products, Services, Gallery, References, Partners and Contact. Opening website contained onlypresentation of pictures without text. So visitor was not able to find out which firm is it about.**

**Quality website is the basis for application of Internet marketing. By suggestion there was put emphasis above all on simple and transparent structure for quick and intuitive orientation of visitor with consider to target group maybe unskillful to use Internet. Innovated website was created for target group 20-65 years aged. Actualized website was activated 1.4. 2013 and was based primarily on firm logo colors.**

**Menu was situated on horizontal level to be transparent and not meddle in body of page. Number of bookmarks was simultaneously reduced as well.**

**Demographics and System Statistics**

**The demographic metric refers to the physical location of the system used to make a page request. This information can be useful for a Website that provides region-specific services. For example, if an e-commerce site can only ship its goods to people in Spain, any traffic to the site from outside of Spain is irrelevant.**

**In addition, region-specific Websites also want to make sure they tailor their content to the group they are targeting. Demographic information can also be combined with information on referrers to determine if a referral site is directing traffic to a site from outside a company’s regions of service. System statistics are information about the hardware and software with which visitors access a Website.**

**This can include information such as browser type, screen resolution, and operating system. It is important that a Website be accessible to all of its customers, and by using this information, the Website can be tailored to meet visitors’ technical needs.**

**Internal Search**

**If a Website includes a site-specific search utility, then it is also possible to measure internal search information. This can include not only keywords but also information about which results pages visitors found useful. The Patricia Seybold Group (http://www.psgroup.com/) identifies the following seven uses for internal search data:**

>Identify products and services for which customers are looking, but that are not yet provided by the company.

>Identify products that are offered, but which customers have a hard time finding. Identify customer trends.

> Improve personalized messages by using the customers' own words. • Identify emerging customer service issues

> Determine if customers are provided with enough information to reach their goals.

> Make personalized offers. (Aldrich, 2006) By analyzing internal search data, one can use the information to improve and personalize the visitors’ experience.

**Referrers and Keyword Analysis :**

A referral page is the page a user visits immediately before entering to a Website, or rather, a site that has directed traffic to the Website. A search engine result page link, a blog entry mentioning the Website, and a personal bookmark are examples of referrers. This metric is important because it can be used to determine advertising effectiveness and search engine popularity. As always, it is important to look at this information in context. If a certain referrer is doing worse than expected, it could be caused by the referring link text or placement.

**Errors:**

Errors are the final metric. Tracking errors has the obvious benefit of being able to identify and fix any errors in the Website, but it is also useful to observe how visitors react to these errors. The fewer visitors who are confused by errors on a Website, the less likely visitors are to exit the site because of an error.

**Web browser and operating system:**

The same basic collected information can be displayed in a variety of ways. Although the format of the log file is ultimately the decision of the company who runs the Web server, the following four formats are a few of the most popular:

• NCSA Common Log

• NCSA Combined Log

• NCSA Separate Log

• W3C Extended Log

**Page Tagging:**

**The second method for recording visitor activity is page tagging. Page tagging uses an invisible image to detect when a page has been successfully loaded and then uses JavaScript to send information about the page and the visitor back to a remote server. According to Web Analytics Demystified the variables used and amount of data collected in page tagging are dependent on the Web analytics vendor**.

**CHOOSING KEY PERFORMANCE INDICATORS:**

**In order to get the most out of Web analytics, one must know how to choose effectively which metrics to analyze and combine them in meaningful ways. This means knowing the Website’s business goals and then determining which KPIs will provide the most insight.**

**Define Primary Goals for Your Website**

**\*To know the primary goals of a Website, one must first understand the primary goals of its key stakeholders.**

**Identify the Most Important Site Visitors**

**According to Sterne, corporate executives categorize their visitors differently in terms of importance.**

**Determine the Key Performance Indicators**

**The next step is picking the metrics that will be most beneficial in improving the site and eliminating the ones that will provide little or no insight into its goals.**

**Identify and Implement the Right Solution**

**This step deals with finding the right Web analytics technology to meet the business’s specific needs. After the KPIs have been defined, this step should be easy. Use Multiple Technologies and Methods Web analytics is not the only method available for improving a Website. To achieve a more holistic view of a site’s visitors, one can also use tools such as focus groups, online surveys, usability studies, and customer services contact analysis.**

**The purpose of website traffic analysis:**

Website traffic analysis tools help you identify the types of users that visit your website, their interests, and every action they take on your web pages. As a result, you'll discover how to improve user experience (UX) and get a clearer picture of how well your website is performing.

# **8 Benefits of Website Traffic Analysis :**

# ****1. Know your visitors****

## ****2. Track where traffic is coming from****

## **3. Use an IP lookup database**

## **4. Use a personalised URL**

## **5. Gauge the success of other marketing activities and see your match rate rise.**

## **6. Know exactly what your customers are looking for.**

## **7. See where you are losing customers.**

## **8. Find out how to optimise your website**

## **CONCLUSION:**

Analyzing website traffic data from the previous month is essential for understanding your website's performance and making informed decisions. By utilizing tools like Google Analytics, Google Search Console, and WP-Admin, you can gain valuable insights and drive improvements.