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Master's Thesis Abstract

Recovering of Company's Website

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Summary

Small business operating in villages usually face the problem of lack of customers, especially if they offer luxury products. The budget of such companies is often limited and therefore they cannot afford an expensive advertising. The company website is one of the few solutions that can get customers from outside the rural areas and thus create new business opportunities and increase revenues of such companies. The main goal of the thesis is to attract customers to a company website and thus help small businesses seeking customers in their difficult situation. The theoretical part starts with the basics. It describes what systems are suitable for different kind of web pages and the main part is focused on factors that influence an overall website performance.

The second part shows how to achieve the stated goal on an example of a small joinery company *Atyp truhlářství Lang*. The company is present on the Internet since April, 2009. The work with a real website allows to compare results before and after the changes implementation. The practical part starts with an analysis of the original website. It determines strengths and weaknesses of the web and it provides suggestions for improvement. After this, the academic work deals with the implementation of suitable factors. The final chapter evaluates the original and new version of the site and represents how the made changes are reflected in the site traffic.

Keywords

Website design, SEO, on-page factors, off-page factors, CMS, Content Management Systems, increase site traffic

Objectives and Methodology

The main objective of diploma thesis is to increase the website traffic, its attractiveness for customers and thus help small companies located in rural areas to get new clients. The first part helps to achieve the stated goal by dealing with aspects influencing the overall web page performance and also provide basic knowledge related to the website design. Consequently, the sub-objective of this part is an identification of factors that significantly affect the site traffic. The second part aims to apply the gained knowledge on an example web page of small company *Atyp truhlářství* which faces a problem of a lack of customers. It starts with the analysis of the original website that shows its strangeness and weaknesses. This will provide an information about possible improvements. The part of author's own work aims to implement suitable factors from the theoretical part into the website design. The objective of the final part is to compare the changes made with the original design and determine if the new site solution has really improved the number of visits and its attractiveness for customer.

The essential information for the master's thesis elaboration were obtained from an analysis of printed sources as professional books, journals, annual reports and online resources as well. Statistical data reflecting the original website traffic were extracted from MySQL database. The new data about number of visitors were already get in friendlier form of Google Analytics outputs. In addition to that, author also discussed his academic work with website experts and used his own knowledge acquired during the university studies of information technology.

Results and Conclusion

The website overall performance is greatly influenced by the system on which it operates. For this reason, the literature review provides an overview about Content Management Systems and Static Site Generators. There are explained differences between these two approaches to a website design and are given recommendations about what kind of pages are suitable for each approach. The main part identifies 30 on-page and off-page factors that have a positive or negative impact on the final website traffic.

The practical part consists an analysis of the examined site. It discovered the following weaknesses. The positioning is very bad in Search Engine Result Page and it is almost impossible to find the web without an exact knowledge of the company name or its location. Content can be considered as extremely poor with overall 279 words only. There were also two technical issues. The first caused a traffic data loss for the last five years due to exceeding 50MB of MySQL memory limit. The second was related to plugins deployment that used up the whole PHP memory limit. It resulted in WordPress strong unstability. The website speed test was disastrous. The small page size of 762,52kB was loaded for 4,38 seconds. An acceptable result would be less than 2 seconds. Concerning security, the site did not use secured protocol and the next risk could pose deployed plugins that are frequent targets of hacker attacks. The used template was not mobile-friendly and therefore it was difficult to browse the pages on mobile device. In addition to that the graphical appearance had a low attracting power, it was not able to adequately impress the customers. The site was visited by an average of 25 people a day in 2011. Furthermore, only 63% of visitors come from the Czech Republic. Unfortunately, more actual data could not be obtained because of the data loss. After considering of all mentioned issues above was proposed a complete website recovery with an implementation of suitable factors from literature review.

The examined website is extremely static without a dynamic content and the frequency of updates is relatively low. The web pages are managed by a technical contributor and it is the reason why graphical user interface of CMS is not required. After evaluation of all previous technical, speed and security issues was selected a static site generator for the website design.

The important chapter is represented by implementation of suitable factors that should as a complex lead to an increase of a site traffic. First important factor is a content. The original word count of 279 words was improved to 1809 words which is 7 times more than in the past. Before writing the articles, an analysis of relevant terms were made. Those terms are included across the web content. The new articles are meaningful and they provide product details and customer reviews. Moreover, the content is structured, there are 9 unordered lists included and main titles are differentiated by importance. Each page has internal links to other subpages. The text clarity and an inclusion of relevant terms are equal to a better rank of a page. The number of images has decreased from 112 original images to selected 42 images on the new website. This is because of a very bad image quality of most old pictures. The high quality images can cause customer interest for the product, higher time on site and lower bounce rate. Meta descriptions were implemented individually for each web page with regard to the page content. The new website was accepted by a certification authority (CA) and the unsecured Hypertext Transfer Protocol was replaced by Secured Hypertext Transfer Protocol (HTTPS). It means the site is trustable and secure for browsing. There are no plugins used and therefore an attack risk is much lower. The template was tested on 17 screen resolutions. All tests were successful and the site is fully responsive. Almost 33% of customers use some mobile device to browse a web. The current web eliminates the loss of visitors coming from mobile devices. Furthermore, Google officially announced that secured and responsive websites get priority. The site speed test had two rounds. The first test can be considered as very good. The page load time was 842ms and overall page size was 1.1.MB. Nevertheless, after the compression of large files the site became even faster. The page size decreased by 30% to 771,6kB and the final load time speed up by 31% to 580ms. Currently, the website is faster than 96% of all tested domains which is a perfect score. The adjusted site speed is 7,5 times faster than the original speed. No flash, advertisement or other disruptive elements are available on the web. The web page is newly available on Google+, Pinterest and Twitter. These factors are able to boost direct page traffic. The design is clean and simple just to avoid leaving customers confused. The readability is also very good. Combination of black/blue text on the white background or white text on the black/blue background doesn't cause any readability issues. Social buttons and a quick company contact is present on each page in header and footer section. Another change was made in traffic measurement. The website started to use Google Analytics for tracking visitors. The actual traffic data are more accurate and the possibility of data loss is reduced.

The main goal of diploma thesis was to improve the website traffic. The web page was measured from 01.12.2015 to 29.02.2016. The average site traffic was 23,0 visits a day in December 2015. This number reflects the original site traffic which was around 25 visits a day with a decrease of 8%. The biggest change in traffic development was found between 08.01.2016 – 13.01.2016 when the average site traffic was 77,2 visits a day. Those changes are explained by an influence of social media. Author has written a post about Atyp truhlářství on Facebook on 8th January 2016. The post was shared by 8 people and it attracted many people to visit the website.

From January 14th to the end of the month, the average daily traffic was 32,3 visits. The last month was noted slightly higher traffic of 32,6 visits a day. The comparison of data from December 2015 and from February 2016 shows a visible increase in number of visits in February 2016 where the traffic was higher by 41,7%. There is a positive increasing trend in a number of visits since the beginning of December 2015. Moreover, majority of visitors 81,3% come from the Czech Republic and it is a better result than by the original web pages with 62% only.

The recovery of a small joinery website *atytruhlarstvi.cz* was successful. It improved the website traffic and many other aspects as content, speed, security, responsiveness, social media etc. The web design itself and implemented factors can be considered as crucial elements that influence the final number of visits. For this reason, the made changes on a web page can really help small business in rural areas to get new customers. There were also identified factors that affect an overall website performance with an emphasis on a positive site traffic development. An overview about different website design approaches is provided as well.

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