



Traffic Analysis on Business-to-Business Websites

## Masterarbeit

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# 1 Introduction

*“But it's the people who can understand that data that really matter.”*

Bryan Eisenberg, author and marketing consultant (Barker, 2014)

In the age of artificial intelligence and big data, huge volumes of data are captured for making the customer entirely transparent. Company websites provide big potential in getting insights into the visitor's behaviour. For finding out what moves actual and potential customers today and in order to optimize the corporate website, the traffic of the website can be analysed with the help of Web Analytics tools. These tools enable to capture, measure and analyse clickstream data with the purpose of deriving concrete actions (Ghandour, Benwell & Deans, 2011: 2).

In the last decade, a countless number of tools entered the market. Simultaneously, the dissemination of using Web Analytics tools within organizations increased rapidly in the last years. This upcoming trend can also be seen in the Web Analytics literature. Several scientists concentrate on developing Web Analytics implementation models, finding criteria how to find the most suitable tool and analyse Web Analytics indicators across different application areas. The authors of these articles all agree that the value of the data in Web Analytics tools depends on the human being that interprets the data and derives actions (Zumstein & Gächter, 2016: 378). The statement of Bryan Eisenberg (Barker, 2014) at the beginning of this thesis, emphasizes this irreplaceability of the users in the Web Analytics process. Companies consist of several business units that differ in their business tasks as well as target groups. This differentiation is mirrored by the requirements on Web Analytics data. The more precise and relevant the data is, the more accepted and used the data will be. In this context, two gaps in research can be identified from which the research questions (RQ) of this master thesis are derived.

Web Analytics tools offer countless possibilities for tracking, measuring and analysing a website. In contrast, future users of the Web Analytics tools representing the business units have a limited knowledge of the functionalities of the tools and the definition of requirements regarding their needed information. They know what kind of business problems they actually deal with, whereas they do not know how traffic data can help to solve these problems.

*RQ1: How can the Web Analytics indicator selection be constructed in order to establish a simple and targeted indicator selection considering the creation of relationships between the business problems and the indicators?*

Several business units within a business-to-business company can profit from behavioural traffic data of their website visitors. Due to the circumstances of having time restrictions and an overflow of information, the users need a clear presentation of the most important data that really matters to their special business. Thereby, the implementation should be practicable, regardless of time, place and knowledge of the involved persons.

*RQ2: How should a Web Analytics implementation process be structured in order to make an individualised data provision for several business units in a company possible?*

These research questions will be answered by conducting a literature review as well as analysing expert and user interviews. The focus of this master thesis is to develop an indicator selection process focussing on the involvement of the future users from different business units for developing individual Web Analytics dashboards. The master thesis uses Action Research as the underlying research methodology for answering the previously described research questions. Therefore, an Action Research process is developed influenced by compositions by Kemmis and McTaggart (2002: 278) as well as Davidson and Heslinga (2006: 21).

The thesis consists of eight chapters dealing with the implementation of Web Analytics in a business-to-business company. Chapter two gives a theoretical understanding of Web Analytics as a part of Traffic Analytics as well as Web Analytics service providers, website metrics and website types. Chapter three deals with the research methodologies and methods that will be used in the context of this thesis as well as a description of the research procedure using Action Research. On that basis, the Action Research process is applied in the following chapters. Chapter four describes the problem diagnosis on which an indicator selection process is developed. This process is implemented in an international operating manufacturing company with headquarters in Germany and subsidiaries in more than 60 countries, which is described afterwards. The results are discussed in chapter five. Implications for research and recommendations for practice are presented in chapter six. Chapter seven deals with limitations concerning the research. Chapter eight summarises the findings of this master thesis and addresses further research.

knowledge about the application of Web Analytics indicators in their business environment. Furthermore, a later addition of financial metrics simplifies the decision of what kinds of indicators are important for them. Consequently, the individual value estimation of every indicator is easier as well. Besides that, interfaces should be established between the valued Web Analytics indicators and other tools that provide financial metrics in the business unit. This conjunction enables noticing impacts and effects comprehensively.

To sum it up, much more important than the Web Analytics tool itself is the priority within the company. A structure should be established that supports the matter of course using the data.

## **6.2 Further Research Opportunities**

As detected in the context of this master thesis, the need of individual Web Analytics dashboards was high in the considered company. This determination is assumed to be the same in other companies. But the literature review yielded that this was near to neglected in the literature until now. That is why the customized selection and definition should have a strong emphasis on developing a Web Analytics implementation framework.

Two ways of selecting Web Analytics indicators were presented in the context of this master thesis. Chapter 4.2 described an on-site method with the help of indicator cards that were used in the considered company and the results described in chapter 4.3. Chapter 5.5 presented a way of combining a telephone conversation with an online survey in order to make a location-independent indicator selection possible. For proving a general applicability of the described methods, an applicability test has to be done in the future.

Furthermore, the Web Analytics indicator overview in chapter 4.2 has given 45 indicators that were named in research literature and practice books. All considered researchers and authors contemplated not more than 22 indicators. A consideration of a great range of Web Analytics indicators has been missing until now. Regarding this huge amount of Web Analytics indicators could give insight into the usability and operational capability of individual indicators. Hereby, a focus should be set on the quality and feasibility of the indicators in practice. This could be viewed from the user's side in different companies inserting the indicators. Another interesting useful way could be to test the indicator usability in several Web Analytics tools. This can be done in terms of testing a general validity.

In the context of this master thesis, it was not possible to show a correlation between the website types and the selected indicators due to the small sample. But a categorization of indicators in accordance with the purpose in form of the website type could have a high impact on the simplification of the Web Analytics indicator selection. Thus, it would be beneficial to examine if there exists a correlation by interviewing a higher sampling from different focus industries and business areas within the B2B segment.

Besides the horizontal possible correlation between website types and the selected indicators, it could be useful to conduct research if a correlation exist between specific Web Analytics indicators and the management level of the user of the Web Analytics dashboard. Here, Peterson (2006: 74) conducted a categorization of 15 Web Analytics indicators into appropriate management levels. This vertical categorization could simplify the standardized Web Analytics indicator selection in order to provide suitable indicators to the future users based on their management position, purpose and business tasks. The research implicates the need of a high sample with participants from many companies and all management levels.

## 8 Conclusions and Outlook

*“The goal is to turn data into information, and information into insight.”*

Carly Fiorina, former executive and CEO of Hewlett-Packard (Fiorina, 2004)

The statement of Carly Fiorina makes clear that getting insights and deriving action from the captured Web Analytics data is the most targeted value that counts. A huge amount of data is worthless if nobody draws appropriate conclusions of it. For making this objective for stakeholders in a B2B company possible, two factors were identified in the context of this master thesis. The conducted interviews have revealed that the usage of Web Analytics data depends on the willingness of the future users to utilize the tool with its dashboard and indicators in order to analyse and interpret this information. Furthermore, it was established that the usage of the Web Analytics data depends on the quality and relevance of the data to the user and her individual business problems.

Therefore, in the context of this master thesis, process steps as a part of Web Analytics implementation process were developed with the objective of enabling a simple Web Analytics indicator selection and definition for different business units in a company for creating individual dashboards with relevant data. This development was done under the consideration of a strong involvement of the future users that only have a limited knowledge about opportunities of Web Analytics. This also included the identification of 45 Web Analytics indicators, which can be characterized by having a general manner. During the implementation of the developed Web Analytics indicator selection steps into a B2B company, it has been determined that the nine interviewed business units within one company have quite different target groups, business problems and tasks. This is reflected in the requirement description regarding Web Analytics data that is relevant for their business units. These individual demands can also be seen in the nine individual developed Google Analytics dashboards, which contain the indicators that have been chosen in the developed indicator selection steps before. In total, 25 different indicators out of 45 indicators were selected and customized in the considered company. This outcome clarifies that an individual indicator selection for the future users is indispensable regarding most valuable insights into website visitor behaviour through Web Analytics tools.

An aspect for further research could be to examine, if a relationship between the selected Web Analytics indicators and the purpose of the business unit or rather the website type exist. The outcome could lead to an optimization of proposing potentially interesting Web Analytics indicators to the future users from different business units.

In total, it should be noted that the Web Analytics indicator selection should not be seen as a self-contained process. Generating an added value lives from the fact of connecting business problems with Web Analytics indicators in order to solve these problems. Consequently, as these problems and tasks are changing constantly, Web Analytics dashboards should be



actualised and adapted to these new situations. That is why, the described indicator selection steps, which were developed in the context of this thesis, should be conducted regularly. In doing so, every indicator should be scrutinized, if it is necessary for answering business questions. This also includes questioning, what kind of business problems and issues are new in the field and how to generate added value with the existing indicators. If there are some areas that are not known but can be theoretically answered with the help of user data from the website, new indicators should be created and implemented.

To sum it up, data is the fundament for producing information, which is needed to refine business strategies. Thus, it all depends on if the Web Analytics dashboard user really exploits the data in order to translate the findings into actions.