



(Established under Galgotias University Uttar Pradesh Act No. 14 of 2011)

## **WEB ANALYTICS WITH CAP4G**

**A Report for the Evaluation 3 of Project 2**

*Submitted by*

**SARTHAK JAIN**

**(1613101629)**

*in partial fulfilment for the award of the degree  
of*

**BACHELOR OF TECHNOLOGY**

**IN**

**COMPUTER SCIENCE AND ENGINEERING**

**SCHOOL OF COMPUTING SCIENCE AND ENGINEERING**

**Under the Supervision of  
Mr. Abhay Kumar,  
Professor**

**APRIL / MAY- 2020**



**SCHOOL OF COMPUTING AND SCIENCE AND  
ENGINEERING**

**BONAFIDE CERTIFICATE**

Certified that this project report **“WEB ANALYTICS WITH CAP4G”** is the bonafide work of **“SARTHAK JAIN(1613101629)”** who carried out the project work under my supervision.

**SIGNATURE OF HEAD**

Dr. MUNISH SHABARWAL,  
PhD (Management), PhD (CS)  
**Professor & Dean,**  
**School of Computing Science &  
Engineering**

**SIGNATURE OF SUPERVISOR**

Dr. SANJEEV KUMAR PIPAL, M.Tech.,  
Ph.D.,  
**Professor**  
**School of Computing Science &  
Engineering**

# ABSTRACT

Web analytics of B to B sites is mandatory for enhancing usability and leveraging statistics for advertising and marketing. In this article we attempt web analytics by means of a few segmentations and demonstrate the effectiveness of the system. We defined a number of the segment models (7 segmentation variety) and tested web access by the means of some of these segments. One of the most important segmentations is registered as opposed to unregistered users and we confirmed user behaviour is distinct for each section. We confirmed key metrics like bounce rate, referrer, and exit page analysis are chiefly useful for B to B producer website enhancement.

This case study presents an exploratory study of Cap4G Analytics, with focus on educating users on its prominent features, literature reviews containing real life application of the software and guidelines for the first time users of cap4g Analytics. The study recommends the use of cap4g Analytics over some of its competitors in the field of web analytics, ease of use and natural integration with other renowned cap4g products. such as cap4g dashboard. The study further explains some of the distinct advantages of cap4g Analytics such as high customization as per nature of the business and wide range of reporting functions. Key objective of the case study is making businesses aware of power of cap4g Analytics and encourage blending cap4g Analytics in the sales and marketing activities. Key finding of the case study is – it is critical to have robust business goals before implementing web analytics for maximum benefits.

## TABLE OF CONTENTS

CHAPTER NO.	TITLE	PAGE NO.	ABSTRACT
			iii
1.	INTRODUCTION	01	
2.	LITERATURE SURVEY	02	
3.	UI DESIGN INTRODUCTION	02	
4.	API's AND JAVA SCRIPT	03	
5.	METHODOLOGY	03	
6.	CONCLUSION	04	
7.	REFERENCES	04	

# 1. INTRODUCTION

We postulate that there are two purposes of business to business (B to B) web analytics:

1. (1) Improvement and optimize the on-line for users via route analysis; and
2. (2) Use in advertising and marketing activities. as compared to B-to-C web analytics, B-to-B web analytics has the

following characteristics

(a) In many instances, the consumer isn't the same man or woman as the internet user. So, it's critical to

examine all from the users from same organization or enterprise as a single unit.

(b) The goal of site visitors to the web site is often no longer best to make a purchase.

(c) It's far rare for a user to fulfil their intention within a single session. In most cases, users require multiple sessions spread out over an extended time period to finish their intention.

In our previous studies we presented a web analytics scheme for B to B websites and we additionally checked effectiveness of web page dwell time as well as conventional metrics like page view, unique users, online visits per user, and conversion rate. In this take a look at we tried the use of analytics by using segmentation. firstly, we defined the scope of segmentation and next we captured analytic statistics. Thinking about B to B traits in analytics, we tried to survey the effectiveness of user behaviour by using segmentation. In this observe we utilized a two-months' time period of internet access records from one semiconductor producer on- line the usage of web beacon technology.

The user interface (UI) is everything designed into an information device with which a person may interact. This can include display screens, keyboards, a mouse and the appearance of a desktop. It is also the way through which a user interacts with an application or a website. The growing dependence of many companies on web applications and mobile applications has led many companies to place increased priority on UI in an effort to improve the user's overall experience.

## 2. LITERATURE SURVEY

What is cap4g Analytics and 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 (Nakatani & Chuang, 2011).

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 AdWords. 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.

## 3. UI DESIGN INTRODUCTION

**Firstly We must examine what is not a good UI·UX design?**

- (1) It's not about 'complex' designs. Good designs follow Ockham's principle, that simplicity is king.
- (2) It's not about spending excessive time on each design. Good design once mastered, is extremely fast and efficient. If it takes you a long time to a create good design, either you should stop being a UI·UX designer and become an artist, or you might just be lazy and lying to yourself.
- (3) It's not about simply making things look good. Design is more about math than about art. It's a type of science — a social science, to be exact.

**Then what is UI·UX design?**

Design is inherently about solving problems.

**The first step in all design is to identify what exactly the design problem is.**

Usually the problem comes in 2 steps, ‘**Understanding what Relevant Functionality & Information Is**’ and ‘**How to Effectively Execute the Relevant Functionality & Information**’.

In short, UI·UX design is ‘a scientific process through which we solve problems regarding functionality and display of information under certain constraints.

For instance, following is a UX Design Problem:

**UX Design Problem:** If the client is selling 120 different types of mattresses, each being a variant of the other, it is foreseeable that the customer will not be able to distinguish between product #119 and product #120. Thus, he may be overwhelmed by the options.

**Design Solution:** Let's artificially divide the products into different classes. If each mattress is created by mixing different layers of foams, and that foam is on the uppermost layer (the part that touches the body of the consumer) has the most impact on the mattress's overall properties among all the foam layers of the mattress.

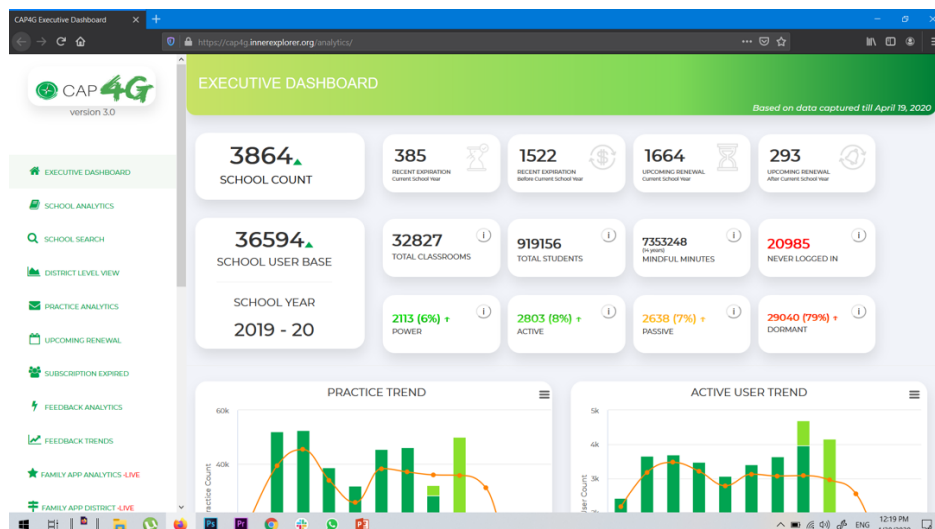
Thus, the type of foam that is on the uppermost layer will be the basis on which we will divide the 120 products into classes.

## 4. API's and JAVA Script

User Interface Developer Skills & Responsibilities Typical day-to-day activities and marketable skill sets for UI developers include the following. User interface developers Typical day-to-day activities and marketable skill sets for UI developers include the following. User interface developers: Are fluent in the essential front-end web development languages, i.e., HTML, CSS and JavaScript. Are skilled in modern application programming languages, such as Java,.Net, AJAX, PHP, XHTML and Ruby. Use Adobe Creative Suite programs, e.g., Photoshop, Illustrator, Flash & Flex to mockup UI elements. Use responsive web design to create applications that automatically conform to multiple screen sizes/devices. Conduct usability testing to identify and fix UI issues, and gather real-world intelligence from target users. Use APIs to integrate social actions.

## 5. METHODOLOGY

Link to the Project : [http://testcap4g.innerexplorer.org:8080/cap4g\\_3.0/](http://testcap4g.innerexplorer.org:8080/cap4g_3.0/)



An Analytics product the team of company 1GEN has created. As a part of the team my role was to design and develop the UI and connect the APIs and java scripts from the server.

## 6. CONCLUSION

Team at my company 1GEN Innovations has Created a Web Analytics Platform Product to analyse data on different websites as a customer product.

With Sophisticated and highly valuable data we are helping our clients develop new strategies everyday from a business to customer perspective and getting useful SDGs out in the world.

For B to B websites we have several personas (use case with the aid of segment) and web analytics need to be accomplished by way of segment. We defined some of the segment models and examined website accessibility to the use of some segments. One of the most essential segmentations is registered customers versus unregistered users. User behavior is very distinctive with each use case. bounce rate, referrer (how they reach the website), and exit page evaluation especially are useful and we can see that registered client's stickiness to the website/company is a lot more potent than that of unregistered users. This could be measured by way of a few metrics by way of segment, like period of visit.

We studied a few web analytics by way of segmentation and noticed their effectiveness. For the subsequent study we can strive targeting contents distribution (distinctive contents for one-of-a-kind users) related with web analytics via segmentation. Additionally, we are able to take a look at a personal level analytics scheme for B to B sites, not just group stage analytics.

## 7. REFERENCES

1. I. Y. Ichikawa, M Nakamura, Y. Kishimoto, T. Kobayashi, "A Proposal of Extracting Innovative users with Web Access Log of an E-commerce site"  
IPSI SIG Notes 2012-GN-eighty-three (2), 1-7, March 2012.
2. Aivalis, C.J., "Log File Analysis of E-commerce Systems in Rich Internet Web 2.0 Applications": This paper seems in: Informatics (PCI), 2011 fifteenth Panhellenic convention, pp. 222-226, 2011.
3. J. Park, K. Jung, Y. Lee, G. Cho, J. Kim, J. Koh "The Continuous Service Usage Intention in the Web Analytics Services" : System Sciences, HICSS '09. 42nd Hawaii global conference on, pp. 1-7, January 2009.
4. T. Ejiri, "Web Analytics and Web Marketing: Access Log Analytics Realized Web Marketing Kaizen Cycle" Management systems: a journal of Japan industrial control association 18(1), pp.38-43, April 2008.
5. Sampath, P., "An efficient weighted rule mining for web logs using systolic tree": Advances in Engineering, Science and Management (ICAESM), 2012 worldwide conference on, pp.432-436, March 2012.
6. S. Otsuka, M. Toyoda, M. Kitsuregawa, "A Study for Analysis of Web Access Logs with Web Community": Information Processing Society of Japan (IPSI), Database44, pp.32-44, 2003.
7. A. Phippen, L. Sheppard, S. Furnell, (2004) "A practical evaluation of Web analytics", Internet Research, Vol. 14 Iss: 4, pp.284 – 293, 2004.
8. K. Rebecca, P. Justin and P. Graeme, "Ethical considerations and guidelines in web analytics and digital marketing: a retail case study", Proceedings of the 6th Australian Institute of Computer Ethics conference 2012, Australian Institute of Computer Ethics, Melbourne, Vic., pp. 5-12, 2012.
9. X. Wang, D. Shen, H. Chen, L. Wedman, (2011) "Applying web analytics in a K-12 resource inventory", Electronic Library, The, Vol. 29 Iss: 1, pp.20 - 35, 2011.
10. W. Xiao-Gang, "Web mining based on user access patterns for web personalization": Computing, Communication, Control, and Management, 2009. CCCM 2009. ISECS International Colloquium on, pp.194-197, 2009.
11. Glass, K., Colbaugh, R., "Web Analytics for Security Informatics" : Intelligence and Security Informatics Conference (EISIC), pp.214-219, September 2011.
12. Pascual-Cid, V., "An information visualization system for the understanding of web data": Visual Analytics Science and Technology, 2008. VAST '08. IEEE Symposium on, pp.183-184, October 2008.
13. Nasraoui O., Soliman, M. ; Saka, E. ; Badiá, A.; Germain, R., "A Web Usage Mining Framework for Mining Evolving User Profiles.



