WEB MARKET ANALYSIS: STATIC, DYNAMIC AND CONTENT EVALUATION

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ABSTRACT

WEB MARKET ANALYSIS: STATIC, DYNAMIC AND CONTENT EVALUATION

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Importance of web services increases as the technology improves and the need for the challenging e-commerce strategies increases. This thesis focuses on web market analysis of web sites by evaluating from the perspectives of static, dynamic and content. Firstly, web site evaluation methods and web analytic tools are introduced. Then evaluation methodology is described from three perspectives. Finally, results obtained from the evaluation of 113 web sites are presented as well as their correlations.

Keywords: Web site evaluation, Web site measurement, Static - dynamic - content evaluation, Web market analysis.

ÖZ

WEB MARKET ANALİZİ: STATİK, DİNAMİK VE İÇERİK DEĞERLENDİRMESİ

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Teknoloji ilerledikçe ve e-ticaret stratejilerinin oluşma ihtiyacının artmasıyla, web servisleri giderek önem kazanmaktadır. Bu tez, web sitelerinin statik, dinamik ve içerik olmak üzere üç bakış açısıyla değerlendirilerek web market analizlerinin yapılmasını konu alır. Başlangıçta web sitelerinin ölçüm metotları ve web analizi yapan araçlar anlatılmıştır. Daha sonra üç bakış açısıyla ölçüm metodolojisi anlatılmıştır. Son bölümde, değerlendirmesi yapılan 113 web sitesinin sonuçları sunularak, aralarındaki korelasyon verilmiştir.

Anahtar Kelimeler: Web sitesi değerlendirme, Web sitesi ölçümü, Statik - dinamik - içerik değerlendirme, Web market analizi.

This thesis is dedicated to;

My mother Sefanur TARKAN who brought me up with unconditional love and support but couldn’t see the end of my work.

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LIST OF ABBREVIATIONS AND ACRONYMS

B2C	: Business To Customer
ECLF	: Extended Common Log Format
EFA	: Explanatory Factor Analysis
HTTP	: Hypertext Transfer Protocol
IP	: Internet Protocol
KMO	: Kaiser-Meyer-Olkin
PQM	: Portal Quality Model
ROI	: Return on Investment
TCP	: Transmission Control Protocol/ Internet Protocol
W3C	: World Wide Web Consortium
WebQEM	: Web Quality Evaluation Method
WQM	: Web Quality Model
Web SCADA	: Web Market Analysis: Static, Dynamic and Content Evaluation

CHAPTER 1

INTRODUCTION

1.1 Motivation and Problem Statement

In the 21st century, technology factors are gaining importance and play an important role in everyday life. Firms and organizations have to be ready to adapt themselves to the changing environment with the rapid advancing technologies. One of the main technological factors is the usage of Internet. Internet has become a very valuable asset and used in every area in the world. Advancements in technology and the Internet are shaping the modern business understanding. Internet usage has spread in such a way that, it has become an integral element for businesses such as e-commerce (Bauer, Němcová & Dvořák, 2010).

According to Ratnasingam (2010), there is an increased growth in usage of Internet technologies by small businesses. Business-to-customer (B2C) e-commerce for instance, is one of the major subsets of the Internet related business. Small-medium enterprises gain substantial benefits, having ability to sell their product and services online and also customers gain ability to get their product and services online. Through e-commerce, businesses can offer their services online and only need storage space for their products compared to showrooms with many store workers. In addition, online stores are not restricted with regular working hours so that they can offer services for 24 hours and 7 days. Therefore, global connectivity, high accessibility, scalability, interoperability, interactivity and information richness is achieved (Turban, Lee, King & Chang, 2006).

Internet technology has become a long way from the simple content and graphic understanding of the late 1990's and early 2000's. Today web sites have become much more interactive in their administrative and user interfaces adding more variables for researchers to test, evaluate and record. Due to the increase in components to build a web site, a new area of research has been developed to analyze content, navigation, graphics, usability and many more categories. Organizations are now taking advantage of these researches to complete missing key components and eliminate weaknesses of their online store sites.

All these improvements in technology compel firms and organizations to have better designed and more informative web pages in terms of competitiveness. For this, firms and organizations are trying to find methods to evaluate their web sites and also want to compare their results with their rivals' evaluation results.

It is nearly impossible to evaluate a web page only by routine manual controls. If this kind of methodology is used, results cannot be categorized or well produced. Also, comparing current and prior results to see a trend or comparing performance with competitors would not only be very difficult but also a time consuming process. In addition, results coming from manual controls would include high percentage of irrelevant data, especially for frequently updated web sites. Thus, these results would be useless.

Web analytics is the tool that is used for evaluating data from the internet where it is analyzed and interpreted for the firms' and organizations' use. Because of this, for collecting data, web analytic tools are used. By the help of evaluated data from those tools, firms improve their web pages and have an opportunity to compare the evaluated data with their competitors. Also, these tools are very useful for making business and market research.

Studies about web site evaluation techniques, methodologies and tools are investigated and summarized in Chapter 2 – Literature Review. It is observed that, there exists no study that evaluates web sites from three perspectives which are namely static, dynamic and content. In the thesis, in order to evaluate web sites from these three perspectives, a web site evaluation method is developed, named as Web

Market Analysis : Static, Dynamic and Content Evaluation and the acronym for it is Web SCADA.

This method analyzes web sites with a *static perspective* by examining a web site from its structural and static characteristics that do not change; with a *dynamic perspective* with the web site's dynamic data, that can be obtained by the use of web analytic tools, and finally, with *content perspective* by comparing a web site in terms of its contents with the other sites which are in the same business scope.

The study begins with analyzing sample group of web sites from three perspectives and examining the results acquired statistically. Therefore, first the methodology is discussed. After the implementation of a survey, attributes are determined. Finally, the methodology is applied to sample group of web sites and the results are examined.

1.2 Thesis Organization

The thesis is organized as follows:

Chapter 2 provides literature review on history of web analytics, most common analytical methodologies and web evaluation methods. Web evaluation methods section consists of current web analytic methods and web analytic tools used in the study. Also the comparison of the methods discussed in this section are compared with the Web SCADA method which is introduced in the thesis and given at the end of this section.

Chapter 3 includes the methodology for web site evaluation, that covers static, dynamic and content evaluation perspectives in detail. Also the algorithms for each perspective are given.

Chapter 4 provides the results of a case study, obtained from the method. In addition, the answers of the research questions stated in the Introduction Chapter are presented. Also in this section, a sample site is evaluated in detail as an example.

Chapter 5 discusses the justification for Web SCADA method.

Chapter 6 gives a conclusion including recommendations for future work and contribution.

CHAPTER 2

LITERATURE REVIEW

In this chapter, literature on web analytics is given. First, analytical methodologies, summarizing three methods (which are client based, server based and network-pipe based) for analyzing web sites are introduced. Afterwards, current web analytic methods are described. Additionally, the attributes and properties of the web analytic tools, used in this study are presented. Lastly, web sites measurement tools are compared with the method developed in the thesis.

2.1 History of Web Analytics

Before starting to define how web market analysis and web ranking is done, it is necessary to define Web analytics firstly. Web analytics is "the extensive use of quantitative and qualitative data (primarily, but not limited to online data), statistical analysis, explanatory (e.g. multivariate testing) and predictive models (e.g. behavioral targeting), business process analysis and fact-based management to drive a continuous improvement of online activities; resulting in higher ROI." (Davenport and Harris, 2007).

As this definition clearly defines, web analytics does not only include statistics and information technology but also marketing principles and management.

At the beginning of the use of the Internet, everything was very easy and there were no need to collect data about the hits made to the web sites. After realizing that some errors can be formed for some links, for fixing the errors, server error logs were discovered (Kaushik, 2007).

In the mid 1990's, since log files size got larger, some scripts were written that automatically parse log files, producing some basic metrics. Those metrics were not the only information that someone hit the site, additionally from which browser he reached, filename, type, Internet Protocol (IP) address and so forth. By this way, web analytics started in the mid 1990's by log file analysis programs (Kaushik, 2007). However, it is realized that it is inadequate for measuring web sites' success with basic metrics and this may lead to wrong results (Phippen, Sheppard & Furnell, 2004).

By the year 2000, it is seen that, customer involvement is an important factor. Additionally it is also realized that, it is hard and expensive to keep customers but easy to lose them (Inan, 2002). Customers must not only be visitors but also be followers of the web sites. Consequently, due to the improvements for analyzing web sites, not only web site information is obtained, but also some customer centric values like, audience demographics information, subscription information are also acquired (Phippen, Sheppard & Furnell, 2004).

2.2 Analytical Methodologies

Analytical methodologies are used for analyzing web sites. There exist several approaches for analyzing web sites. Most common ones are: "client based", "server based" and "network-pipe based" approaches (Sen, Dacin, & Pattichis, 2006). They are shortly explained below.

2.2.1 Client Based Approach

In this approach, web site owner embeds codes which are used for collecting needed data (such that the browser information or previous Web page information from which the visitor came from) in html tags and when a customer visits the page, the information designated to collect is send to the server log files.

2.2.2 Server Based Approach

Server logs the information of the client with a basic log application having information about the computer that is connected, name of the requested file and also

the date. According to Sen et al. (2006), most known log format is W3C's (World Wide Web Consortium) Extended Common Log Format (ECLF).

For this approach, another method can be used. Sen et al. (2006) also proposed that, by the use of server plugins, more data can be collected compared to basic server logs.

2.2.3 Network Pipe Approach

In this approach, network sniffers capture exchanging TCP/IP packages. In contrast to basic server logs, since network sniffers are usually located on web servers' network, they can perceive low level network events (like a disconnect when a user clicks to stop button before the page has completely loaded) (Sen et al., 2006).

2.3 Web Evaluation Methods

Many methods have been used for evaluation of web sites. Some experts apply questionnaires while the others use web analytic methods. This section introduces web evaluation methods and contains two subsections which are related to Current Web Analytic Methods and Web Analytic Tools.

2.3.1 Current Web Analytic Methods

Internet's ability to reach vast amount of people, made it a very appropriate medium for e-commerce. Firms are increasingly using web sites for marketing, trading and promoting for reaching customers (Ranganathan and Ganapathy, 2001).

Firms' tendency to use web more for e-commerce, made it important to measure the effectiveness of web sites using web analytic tools. Consequently, people started to work on attributes of web quality.

Wilson (1998) defined seven problematic issues of websites which are; Clarity Constriction (clear statement of business scope); Image Inflammation (web sites including complex large graphics); Monitor Myopia (developing web pages according to high resolution due to the designers' usage of big monitors); Frames Fixation (frames not suitable for each browser); Background Blemish (bad usage of

background color and image); Button Bloat (usage of image buttons instead of text buttons which hardens the navigation); Navigation Neuralgia (inappropriate usage of navigation menu which causes inaccessibility of the information needed by the users).

Additionally, Barron, Tompkins and Tai (1998) suggested 39 attributes related with graphics, links, page size and multimedia.

After the year 2000, Aladwani and Palvia (2002), analyzed web sites from three dimensions which are technical adequacy, web content and web appearance. This approach resulted in 102 representative items.

Also, Clifton (2008) has studied on web analytics success and its improving accuracy where Cooley, Mobasher and Srivastava (2007) have worked on web mining methodologies.

There are many web evaluation methods. Some of the well known ones are explained in the following subsections:

- Webometrics
- A Three Dimensional Web Quality Model
- WebQEM
- Portal Quality Model
- An Empirical Investigation Of Content And Design

2.3.1.1 Webometrics

Webometrics deals with the ranking of high education institutes. Academic content comparison with other web sites is the main goal. The perspectives of Design, Accessibility and the Popularity (number of visits and visitors) are not included in this method (Aguillo, Ortega and Fernández, 2008).

Table 2.1: Calculation of World Rank**.**

Retrieved from Aguillo, Ortega and Fernández, 2008

INDICATOR		MEANING	SOURCE	WEIGHT
IMPACT	**Visibility** Backlinks	Number of external inlinks (backlinks)	Majestic SEO	BL*RD 50%
	Visibility Referred Domains	Number of domains originating the backlinks		
ACTIVITY	**Size**	Number of webpages excluding Rich files	Google	10%
	Rich files	Number of documents (pdf, doc, docx, ppt, pptx, ps, eps)		10%
	Scholar	Number of papers Google Scholar (2007-2011)	Google Scholar	30%
		Number of papers Scimago (2003-2010)	Scimago IR	

Table 2.1 shows the four main categories of information to be collected to evaluate the web sites. They are;

- Size (S): number of webpages
- Rich Files (R): number of documents in rich files formats: pdf, doc, ps & ppt
- Scholar (Sc): number of papers in the citation database
- Visibility (V): number of site link citations (30%)

The information about those categories is collected twice a year.

2.3.1.2 A Three Dimensional Web Quality Model

Ramler, Weippl, Winterer, Schwinger and Altmann (2002), developed a three dimensional cube structure for evaluating web sites quality. Those dimensions are;

- *Quality dimension* consists of Functionality, Reliability, Usability and Efficiency.
- *Feature dimension* is related to Functions, Content, Infrastructure and Environment.
- *Phase dimension* is associated with Specification and Development, Testing and Installation and Operation and Maintenance.

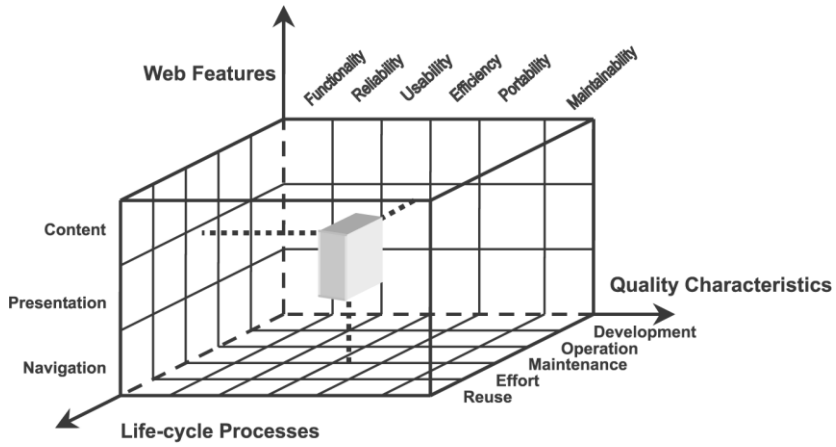

Figure 2.1: Web Quality Model.

Retrieved from "Classifying web metrics using the web quality model" by Calero et al.

Based on this approach and considering the "ISO/IEC 9126-1:2001 Software engineering -- Product quality -- Part 1: Quality model"; "A Three dimension Web Quality Model (WQM)" is developed by Calero, Ruiz and Piattini (2005). The model includes the following amendments (Figure 2.1) :

- Portability and Maintability to *Quality Characteristics dimension*
- *Feature dimension* is named as Web Features and consists of Content, Presentation and Navigation
- *Phase dimension* is named as Life-cycle Processes and consists of Development, Operation, Maintenance, Effort and Reuse (Calero *et al., 2005*).

2.3.1.3 WebQEM

Based on "ISO/IEC 9126-1:2001Software engineering -- Product quality -- Part 1: Quality model", WebQEM is a method for evaluating web application quality. The method deals with user perspective subjects such that, navigation, reliability and interface besides design or code quality (Olsina, L.and Rossi, G., 2002).

The method consists of 4 main phases:

- *Quality requirements definition and specification*: In this phase, the domain and product descriptions are clarified, goals are defined and target users are designated.
- *Elementary evaluation:* Two stages, elementary design and implementation are defined in this phase.
- *Global evaluation:* Includes two main stages which are the design and the implementation of the quality evaluation.
- *Conclusion:* Evaluation is concluded in this stage.

2.3.1.4 Portal Quality Model

Moraga, Calero, and Piattini (2004), work on clarifying the factors that affect the portal quality and examined subject from 6 dimensions having 42 questions. This model is based on SERVQUAL model having 5 dimensions and 22 attributes. The dimensions are: Tangibility, Reliability, Responsiveness, Assurance and Empathy (Parasuraman, Zeithaml, Valarie, Berry, 1988).

Adding the new dimension, which is "Data Quality" to existing ones, Moraga, Calero, and Piattini (2004) formed Portal Quality Model (PQM).

2.3.1.5 An Empirical Investigation of Content and Design

Robbins and Stylianou (2003), formed a model for differenciaiting web site content from design. This model which is applied to 90 web sites, includes 36 features.

According to the model, *Content features* of web sites include 6 subcategories:

- Corporate information
- Communication/customer support
- Currency
- Financial information
- Employment opportunities
- Social issues

Corporate information provides background information of the company. Those are: Biographical sketches, Mission statement, Press releases, History, Organizational charts, Vision statement, Message from CEO.

The communication/customer support feature includes contact information of the company. Those are: Corporate phone number, E-mail opportunity, Frequently asked questions, Headquarters address, On-line chat with an expert.

Currency includes information about content's up to datedness and Last updated indicator.

Financial information contains Annual report and Financial highlights.

Employment opportunities include general overviews of employment and lists of job opportunities.

Social issue feature includes topics such that: Cookie Disclosure, Cultural Sensitivity, Language Translation, Privacy Issues, Social Responsibility.

According to the model, *Design features* of web sites include 6 subcategories such that:

- Presentation,
- Navigation,
- Security
- Speed
- Tracking

Presentation includes information about general appearance of web site. Those are: Animation, Frames, Graphics, Sounds and Video.

Navigation includes features Hyperlinks to other sites, Protected contents, Search Engine and Site/Map/Index.

Security includes secure access availability.

The speed feature checkes the download time of the home page and sub pages of the web site.

Tracking includes the availability of the cookies that track the behavior and interests of visitors.

2.3.2 Web Analytic Tools

There exists many tools that monitors web sites' traffic and gives information such that, where the visitors come from, who they are, what information they reached, how long they viewed your pages and many more information. Those tools accomplish the evaluation by adding a toolbar to the web browser or by a code to be embedded to the web site codes by the owner of the web site.

Most of the useful web analytic tools are requiring some fee. In the thesis, the free ones which are declared to be useful and giving accurate information are chosen. 16 web analytic tools which are used for evaluating web sites are listed in Table 2.2 below.

Table 2.2: List of Web Analytics Tools Used in Thesis

Alexa	Open Site Explorer
Double Click AD Planner	Spyfu
Quantcast	Broken Link Checker
Site Analytics (Compete)	Backlink Watch
Ranking.com	Gorank
Web Site Optimization	Builtwith
Readability.info	Free Backlink Check
Website Grader	Attention Meter

2.3.2.1 Alexa

Alexa is a tool that evaluates data from the Internet users that are using Alexa Toolbar. It has an ability to compare data up to five sites. Main functionalities of Alexa are given below:

- *Traffic Rank:* Gives how popular the page is considering worldwide and the original country that the site belongs to, average load time and regional traffic ranks.
- *Reputation:* The number of sites linking in.
- *Traffic Stats:* Represents previous day's, weekly, monthly and 3 monthly statistics about Reach, Pageviews, Bounce %, Time on Site and Search % data.
- *Search Analytics:* Defines the Search Traffic on the rise and decline and top search queries information.
- *Web sites contact information*
- *Web page reviews*
- *Clickstreams:* Shows where the users have gone after visiting the site.
- *Bounce %:* Represents the percentage of single-page visits or visits in which the visitor left the site from the entrance page.

2.3.2.2 Double Click AD Planner

Double Click Ad Planner is a free web analytic tool providing information about site's traffic, audience demographics and statistics about advertisement information. The tool includes the following functionalities:

- *Reach:* The ratio of the number of visitors of the site to the global Internet users over a month.
- *Unique Visitors:* Estimated number of actual users accessing the site.
- *Total Visits:* The total number of visitors.
- *Pageviews:* The estimated number of times that the website has been accessed by users across the internet in a period of time.

- *Average Time On Site:* The average amount of time in seconds that a user spends on site.

Paid version of this tool provides statistics about advertisement methodology and present opportunity to specify the list of websites to give advertisement.

2.3.2.3 Quantcast

Quantcast is a tool that is accredited from Media Ratings Council, which makes this tool to be specified as providing reliable and accurate data information. Main functionalities of Quantcast are given below:

- *Traffic Rank:* The number of visitors of the site in a period of time.
- *Backlinks:* The number of links pointing to the site.
- *Number of Visitors:* The number of actual users accessing the site.
- *Audience Demographics:* Gives information about the user's gender, age, children per household, education status, income levels, and other demographic insights.
- *Bounce %:* Represents the percentage of single-page visits or visits in which the visitor left the site from the entrance page.

2.3.2.4 Site Analytics (Compete)

The main features of the tool are given below:

- *Traffic Rank:* The number of visitors of the site in a period of time.
- *Unique Visitors:* Estimated number of actual users accessing the site.
- *Competitive Rank:* Compares the traffic rank scores with the similar pages within the same business scope.

Professional version of this tool provides data such that comparing up to 100 web sites and gives data belonging to 2 years earlier historical data. Additionally it provides data about competitors such that giving data about where traffic comes to the competitor's web site, paid or organic (none paid) keyword statistical information, and so forth.

2.3.2.5 Ranking.com

It is a free automated tool that provides on line data from any web browser evaluating popularity of a web site. Main functionalities are:

- *Traffic Rank:* The number of visitors of the site in a period of time.
- *Ranking in its category:* Rank according to the category that the site belongs to (home, electronics, etc.)
- *Backlinks:* The number of links pointing to the site.
- *Unique visitors:* Estimated number of actual users accessing to the site.
- *Pageviews:* The estimated number of times that the website has been accessed by users across the internet in a period of time.
- *TrustGauge Score:* Score given according to the site's trustworthiness.

2.3.2.6 Web Site Optimization

It provides information about web pages size and its components (number of items contained) giving download time. For web site optimization, recommendations about analyzed data are given depending on the experiences. Main information about the web site that can be acquired from the tool is given below:

- *Total number of HTML files*
- *The total number of objects*
- *The total number of images*
- *The total size of the page*
- *The total size of the mainpage*
- *The total size of the images*

2.3.2.7 Readability.info

Readability.info tool provides information for not only web pages, but also for Microsoft web documents. It gives data about how difficult the content to be read providing statistical data about readability scores. The data contains:

- *Sentence Information*: Provides the number of long and short sentences
- *Number of words, paragraphs, sentences, questions and passive sentences.*

2.3.2.8 Website Grader

It provides data that is obtained by comparing 3 web sites for competitiveness. It is consisted of three stages:

- *First Stage:* Provides data for evaluating if it is enough to bring visitors to the website.
- *Second Stage:* Gives data about how the web site administrator is good at drawing the attention of visitors and how web site is good at marketing and social media subject.
- *Last Stage:* Determines data about the marketing attributes are working or not within the web site.

2.3.2.9 Open Site Explorer

Open Site Explorer is a tool that provides data about links, anchor text, comparing link metrics. It also provides data about social platforms. Main features are:

- *Backlinks:* The number of links pointing to the site.
- *Top Pages:* Top visited pages within the site.
- *HTTP Status Code:* Gives http status code, showing the link is broken or not.
- *Facebook Shares:* The number of facebook shares *(given in professional version).*
- *Tweet Grade:* The number of tweets *(given in professional version).*

Free version of this tool gives limited authentication to reach evaluated scores.

2.3.2.10 Spyfu

Spyfu mostly gives data about advertisement statistics. The most important information that the tool provides is given below.

- *Daily advertisement Words Budget:* Daily budget that is paid for the keywords that are searched by search engines.

- *Average Advertisement Position / # of Advertisers*.
- *Daily Organic (non paid words) Traffic Value:* The value of popularity that the site gained by none paid keywords.
- *Paid vs. Organic Clicks Per Day:* The information of the budget of paid vs. nonpaid keywords.
- *Number of Paid Advertisement words.*

This web analyzing tool aims to give tips to web site owners to increase Return On Investment (ROI).

2.3.2.11 Broken Link Checker

Broken Link Checker tool gives the whole list links in a web site. In the list, the links that are broken are given with a warning.

2.3.2.12 Backlink Watch

With use of Backlink Watch tool, not also the number of links pointing to the web site which is asked for is listed but also, the quantity and quality information of the the backlinks are given. The information acquired from the tool contains:

- *Pagerank:* Each backlink that is pointing the web site which is asked for.
- *Total External Links:* Gives the external links existing on the each backlink that is pointing the web site which is asked for (also called as outbound links).
- *Anchor Text Information:* Informs the visible and clickable text that is assigned as the name of the link found in each backlink.
- *The Flags' Information*: Warning tag used on the backlink for taking attention. As an example, "nofollow" flag is used when there exists a link that links to itself.
- *Backlinks:* The number of links pointing to the site.

2.3.2.13 Gorank

Gorank tool gives the following information:

- *Size:* Total size of the page.

- *HTTP Status Code:* Gives http status code, showing the link is broken or not.
- *Download Time:* Gives the download time of the web site.

2.3.2.14 Builtwith

Builtwith is a website optimizer report tool. Main functionalities are:

- *Meta Data Information:* Page Title, Meta Description of the web site,
- *Keywords:* The list and the frequency of the keywords found on the web site,
- *Response speed*,
- *HTTP Status Code:* Gives http status code, showing the link is broken or not.
- *Social Perspectives:* Information about the number of shares on Facebook and bookmarks on delicious.

2.3.2.15 Free Backlink Check

Free Backlink Check tool's main features are:

- *Backlinks:* The number of links pointing to the site.
- *Organic Keywords:* The number of non paid keyword.
- *Tweets:* The number of tweets.
- *Facebook Likes:* The number of facebook likes.
- *HTTP Status Code:* Gives http status code, showing the link is broken or not.
- *Link Influence Score:* Based on the quality and number of links pointing to the web site.
- *Link Popularity Rank:* The rank obtained by comparing to all other links found in the database of the tool.

2.3.2.16 Attention Meter

Attention Meter gives the information below graphically and provides an opportunity to embed the graph to a web page:

- *Traffic Rank:* The number of visitors of the site in a period of time.
- *Visits:* The number of visits to the web site.
- *Unique visitors:* Estimated number of actual users accessing to the site.

2.4 Web Site Measurement Tools Comparison

Many web evaluation methods and techniques are introduced upto this section. In the thesis, a new methodology named as Web SCADA is introduced that evaluates web pages from static, dynamic and content point of view. The following table presents the comparison of the Web SCADA method together with the other methods described in the previous sections.

Table 2.3: Comparison of Web Evaluation Models

Models	**Static Evaluation**	**Dynamic Evaluation**	**Content Evaluation**
Webometrics Model	X	X	
A Three Dimensional Web Quality Model	X		not in detail
WebQEM	X		
Portal Quality Model	X		
An Empirical Investigation Of Content And Design	X		not in detail
Web SCADA	X	X	X

In the table, the fields shown by "X" indicate that the methodology covers the specified evaluation perspectives. But "X"s in the table do not indicate that the methodology evaluating that perspective specific area covers same evaluation features. This table shows that an evaluation covering the three perspectives which are static, dynamic and content are not implemented in other methods. In Web SCADA method, web site evaluation covers all the perspectives. Details about Web SCADA is given in Chapter 3.

CHAPTER 3

OVERVIEW OF WEB SCADA MODEL

In this chapter, an overview of Web SCADA model is given. First a general overview is presented and then static, dynamic and content perspectives of the model are described in detail.

3.1 General Overview

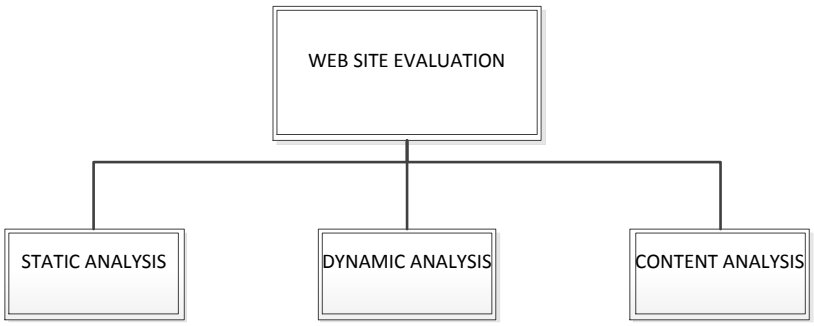

Figure 3.1: Components of Web SCADA Model

When developing or maintaining or even after the web page is published, analysis is an important factor for effectiveness and usability. In this section, a new approach, Web SCADA, for evaluating a website from three different perspectives namely Static, Dynamic and Content is explained (Figure 3.1).

Static analysis includes 8 subcategories which are Identity, Loading and Viewing, Navigation, Interactivity, Comprehensibility, Personalization and Content, Information Quality and Up-to-Datedness and Security (Genç, 2006). It is domain independent, that is, static analysis can be applied to all kind of web sites regardless of the domain they belong to.

Dynamic Analysis is accomplished by evaluating the data which is gathered by using free 16 web analysis tools. The analysis includes eight subcategories which are traffic, search, audience demographics, links, social statistics, site speed (Quantitative), site speed (size) and advertisement competition. It is also domain independent as in static analysis method.

Content Analysis is evaluated by examining web sites elaborately according to its service or product profession. For this analysis, each web site is grouped according to their profession and then the variety of the services they provide is scored. It is domain dependent and evaluated to the domain which the web site belongs to.

This approach is applied to different kind of web sites, whether service oriented or product oriented ones, regardless of being private or public.

For an outlined view, below is the main algorithm of the model explaining how the data is acquired is described.

```
Main_Algorithm_WebSCADA
Begin
       Apply StaticAnalysis_Algorithm
       Apply DynamicAnalysis_Algorithm
       Apply ContentAnalysis_Algorithm
       Final_Evaluation
End Main_Algorithm_WebSCADA
```

The details of the algorithms are given in the following sections.

3.2 Static Analysis

In this section, description, data structure and algorithm of static analysis are presented.

3.2.1 Description

The word “static” refers to the web site’s ordinarily stable characteristics containing structural features of web sites that do not change. In the thesis, under the name of “Static Analysis”, web sites are evaluated under 8 subcategories totally consisting of 94 questions. Each question, consequently, each category has weight score according to importance, from the point of visitor usability (Genç, 2006).

The categories and the weights belonging to each category are given below.

Table 3.1: The Main Categories and Weights for Static Analysis

	Static Evaluation Categories	Weight
1	Identity	120
2	Loading and Viewing	125
3	Navigation	125
4	Interactivity	150
5	Comprehensibility	100
6	Personalization and Content	150
7	Information Quality and Up-to-datedness	125
8	Security and Miscellaneous	105
	TOTAL	1000

Identity includes 11 questions that define the firm/corporation's general information such that firm/corporation logo, organization chart, communication info, site map, services and resources available and so on.

Loading and Viewing includes 15 questions such that pages are loaded quickly or not, site platform and browser independence, 24x7x365 user access, fast dynamic accessibility, standard page formats and user graphical interface, consistent visual elements, audio availability, effective multimedia and so on.

Navigation contains 12 questions such that, existence of menu structure, minimized vertical and horizontal scrolling, existence of standard navigation guidance, non broken links, fast navigation and professional design and so on.

Interactivity category includes 14 questions like, affective multimedia usage, available printer-friendly version, access in minimum click, keyword search availability, dynamic access to data, existence of user defined preferences, forum, chat room, bulletin board and FAQ availability and so on.

Comprehensibility includes 8 questions like existence of cultural, artistic and traditional issues, meaningful type and number of links, good usage of spelling and grammar, appropriate font usage and so on.

Personalization and Content category includes 14 questions about the existence of user specific services, simple registration, and customization availability and so on.

Information Quality and Up-to-datedness includes 11 questions like, availability of correct, up-to-date information, appropriate and original content and existence of updating information and so on.

Security and Miscellaneous includes 9 security questions like availability of privacy statement and authentication and authorization availability.

For Static Analysis, web sites are evaluated according to 94 questions each having maximum weight and as a result a total score of a web site is evaluated. After scoring process is finished, all of the web sites are sorted according to their total scores.

Questions belonging to each category with their weight information are given in APPENDIX A3.1.

3.2.2 Data Structure

For evaluating web sites from static analysis approach, the matrices given in the table are used in the algorithm.

Table 3.2: Matrices Used in Static Algorithm

Name	Notification	Definition	Max Values
Question Matrix	Q(I,J)	I:Category Number J:Question Number	I:8 J:15
Static Evaluation Matrix	seval(K,I,J)	K:Web Site Number I:Category Number J:Question Number	K:113 I:8 J:15
Static Overall Scores Array	W(K)	K:Web Site Number	K:113
Static Categorical Evaluation Matrix	W(K,I)	K:Web Site Number I:Category Number	K:113 I:8

For evaluation, first the Question Matrix *Q(I,J)* is constructed for the entrance of questions grouped by categories where J indicates the question number and I indicates the category number. The dimension of the matrix is the number of categories by the maximum number of questions found among all categories.

After evaluating web pages, one by one, another matrix, namely Static Evaluation Matrix (*seval (K,I,J)*) is formed for each web site, containing, the evaluated scores for questions belonging to each category.

Consequently, for each web site, total scores are acquired using matrix seval(K,I,J) and summing the evaluated scores (Static Overall Scores Array, *W(K)* is generated). This results the overall scores of web sites evaluated statically.

Finally, web sites are ranked not only according to their general scores, but also according to each category and Static Categorical Evaluation Matrix *W(K,I)* is generated.

3.2.3 Algorithm

In this section, static algorithm of the model, explaining how the data is acquired is described. Details of the algorithm is given in APPENDIX A3.2.

```
StaticAnalysis_MainAlgorithm;
Q(I,J): questions matrix where                I:category number
                                              J:question number
seval(K,I,J): static evaluation matrix where  K:website number
                                              I:category number
                                              J:question number
Begin
      update_questions_matrix Q(I,J);         *for updating the questions
                                               belonging to each category*

      update_seval_matrix seval(K,I,J);       *for updating the
                                              evaluated grades for
                                              questions belonging to each
                                              category*

      overall_score_evaluation;               *for evaluating the total
                                              score for each web site*

      score_by_categories_evaluation          *for evaluating the scores
                                              corresponding to each
                                              category and sorting web
                                              sites for each category for
                                              each web site*

End StaticAnalysis_MainAlgorithm
```

3.3 Dynamic Analysis

In this section, first a brief description methodology of dynamic analysis is introduced containing the implementation process of the survey. Then, data structure of dynamic analysis is described. Finally, algorithm of the analysis is given.

3.3.1 Description

Dynamic analysis is done for the understanding and optimizing web site usage from user perspective by collecting, measuring and evaluating internet data such as traffic data, search data, social statistics and audience demographics. Analysis provides not only valuable information for market research, but also provides data for improving web sites. In this section, the approach for the dynamic analysis is shortly presented.

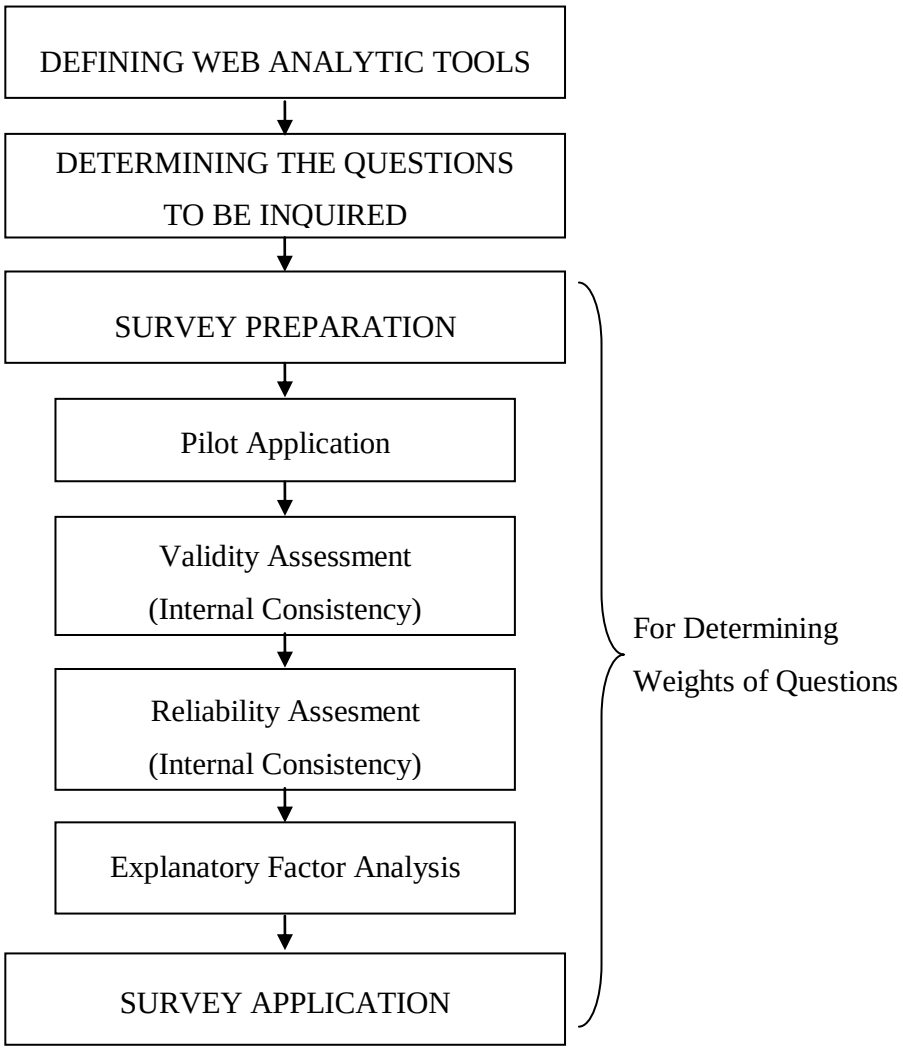

Figure 3.2: Methods used in Dynamic Analysis

Figure 3.2 represents the steps followed for dynamic analysis and details are given in the following sections.

3.3.1.1 Defining Web Analytic Tools

For evaluating the dynamic analysis of web sites, 16 web analytic tools described in section 2.3.2 are used. Those tools are the free tools which can be reached online from web, giving an opportunity to get analytic reports about web sites. Some tools are embedded to the web site code and analytics can be achieved only if you are the owner of the web site. The tools used in the thesis are the free tools by which one can look analytic information of any web site from the visitor point of view and can be reached online. The list of 16 web analytic tools is given in Table 2.2 in Chapter 2.

Considering the improvements in web site infrastructure, web analytic tools' variety and their abilities are increasing. Due to this progress, as time passes, analytic tools are providing more information. Additionally some of them may disappear. For this reason, it is advisable to update web analytic tools used in dynamic analysis methodology in the future.

3.3.1.2 Determining The Questions To Be Inquired

For analyzing web sites from dynamic approach, first 16 analytic tools' features that can be used for evaluating online data from web sites are listed. At the end, by the use of analytic tools, 96 features (called as data items) are obtained for evaluating web sites (data items are listed in APPENDIX A4.1).

Afterwards, 96 data items are examined and we tried to understand that all those questions can be applied to all sites or not. Those questions which cannot be applied to all web sites and/or do not have any effect on ranking of the web sites, are eliminated from 96 questions. After this procedure 74 questions are left. The list of eliminated questions is given in APPENDIX A4.2.

3.3.1.3 Determining The Weights of Each Question: Survey Application

As any web site developer expert can observe at the first sight, the data items do not have the same importance level while evaluating web sites. Therefore a questionnaire have been prepared and applied to more than 100 web site experts aiming to achieve importance weights for data items.

3.3.1.3.1 Preparing Survey

For the application of survey, 89 questions are prepared by using LimeSurvey, an open source survey software which can be used for developing, publishing and collecting results of surveys (Jayasundara, Wickramasuriya & Shakila, 2010). Survey was published online and could be reached by any web browser.

Before the application of the survey, the Research Center For Applied Ethics' permission is asked. Written permission, given by the center can be found in APPENDIX A6.5: Ethics Clearence.

Survey composed of 3 parts: Demographic information part, questions about the data items designated while developing the structure of the dynamic analysis part and questions about the importance of category titles part. Demographic information part consisted of 6 questions, second part consisted of 74 likert-type scale questions and the third part consisted of the 9 questions each corresponding to category titles.

3.3.1.3.2 Pilot Application of Survey

In order to eliminate problems of survey if exits, survey is adapted to 100 sample participants which is the minimum number of applications accepted for a sample work (Cohen, Manion & Morrison, 2003). This survey was active from December 26, 2011 to January 4, 2012. After collecting the results, validity, reliability and usability of the survey is checked. Questionnaire can be reached from APPENDIX A6.1.

Survey is announced from many communications channel and applied to web experts who are mostly working in the METU Computer Center, METU Teknopark and Informatics Association of Turkey (TBD).

For checking the reliability and validity of the survey, the following steps are followed:

Step 1: Content Validation
Step 2: Reliability Analysis
Step 3: Explanatory Factor Analysis

3.3.1.3.2.1 Content Validation

While the questionnaire was active as a pilot study, simultaneously, the work for achieving statistics from web sites is done and then realized that 14 additional questions had to be eliminated for having comparable and meaningful data. Before the elimination, some experts' (working in the area of web site infrastructure specialist) opinions are collected. Information about eliminated questions are given in APPENDIX A6.2.

At the end, 60 questions are left to be applied to all web sites. 9 subcategories having totally 60 data items are achieved for evaluating each web site. Those data items are given in APPENDIX A6.3.

Then for checking internal consistency of the questionnaire reliability analysis is done.

3.3.1.3.2.2 Reliability Analysis

For determining the internal consistency reliability, Cronbach's Alpha[1] (Gliem and Gliem, 2003; Hair, Black, Babin, Anderson & Tatham 2006) value is checked. In our analysis, at the end of the pilot application, Cronbach's Alpha value was found to be 0,970 which is greater than 0,7 and accepted as an excellent result according to George and Mallery (2003).

3.3.1.3.2.3 Explanatory Factor Analysis

Before starting to work on factor analysis, for checking the data size appropriateness, Kaiser-Meyer-Olkin (KMO)[2] and Bartlett's Test of Sphericity[3] is used. In our analysis KMO Value is 0,838 and Bartlett's Test of Sphericity is 0.

[1] Cronbach's Alpha is a number between 0 and 1 and reliability increases as it gets closer to 1.

[2] According to Tabachnick & Fidell (2007) Kaiser-Meyer-Olkin measures whether the partial correlations among variables are big or not, showing the measures the sampling adequacy. KMO value must be greater than 0,5.

[3] According to Tabachnick & Fidell (2007) Bartlett's Test of Sphericity tests the strength of the relationship among variables and it should be smaller than 0,05.

Table 3.3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,838
Bartlett's Test of Sphericity	Approx. Chi-Square	5408,850
	df	1378
	Sig.	0,000

As a result my analysis passed data size appropriateness and it is concluded that the collected data is suitable for Explanatory Factor Analysis (EFA).

EFA is carried out by the software IBM SPSS Statistics 20. Acquired rotation matrix is given in the Table 3.4 below showed that:

- The 13th question must be eliminated from Traffic Data category.
- The 1st, 2nd, and 4th questions in links category must be put into the Search Data category.
- Site Speed Analysis category must be divided into 2. First part which contained 1st, 2nd, 3rd, 4th and 6th questions, is named as Site Speed Analysis (Quantitative Information) and second part is named as Site Speed Analysis (Size Information).
- Readability Data questions (two questions) are added to the Site Speed Analysis (Quantitative Information) category.
- Web Site Quality Grade category must be eliminated.

Table 3.4: The Results of Explanatory Analysis

Rotated Component Matrix[a]

	Component							
	1	2	3	4	5	6	7	8
tv1	,717							
tv2	,661							
tv3	,499			,417				
tv4	,756							
tv5	,730							
tv7	,739							
tv8	,695					,442		
tv9	,616							
tv10	,621							
tv11	,443							
tv12	,409							
tv13	,648					,326		
av1	,411					,502		
av2	,368		,315			,596		
av4						,751		
av5						,718		
zp1		,420			,340	,338		,504
zp3								,607
zp5						,362		,613
zp6				,308				,707
bv1						,623		
bv2	,362					,611		
bv4	,350					,725		
bv6							,695	
bv7							,712	
bv8					,444		,431	,409
bv9							,791	
spv1					,830			
spv2					,813			
spv3					,844			
spv4					,781			
spv5					,763			
sha1				,768				
sha2		,316		,794				
sha3		,356		,805				
sha4		,410		,779				
sha5		,758			,314			
sha6		,536		,605				
sha7		,821						
sha8		,873						
sha9		,793		,337				
sha10		,751		,418				
sha11		,822						
ov3				,823				
ov4				,777				
rkv1	,301		,591		,311			
rkv2		,320	,513		,307	,319		
rkv3			,818					
rkv4			,820					
rkv5			,776					
rkv6			,793					
rkv10			,714					
rkv12			,753					

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 8 iterations.

At the end EFA resulted that dynamic analysis should consist of *8 categories* having totally *53 questions.*

After that, for reliability, all categories' Cronbach's Alpha values were checked. Cronbach's Alpha values for all categories are given in Table 3.5 given below.

Table 3.5: Cronbach's Alpha Values of Categories

Reliability Statistics		
Category Name	**Cronbach's Alpha**	**N of Items**
Traffic Data	0,906	12
Search Data	0,928	7
Audience Demographics	0,785	4
Links	0,832	4
Social Statistics	0,949	5
Site Speed (Quantitative Data)	0,946	7
Site Speed (Size Data)	0,952	6
Advertisement Competition Data	0,934	8

3.3.1.3.3 Application of Survey

After the successful implementation of pilot study, from January 4, 2012 to May 17, 2012 survey is activated for the main study. 102 participants attended to the survey. As in the pilot study, survey is applied to web experts who are mostly working in the METU Computer Center, METU Teknopark and Informatics Association of Turkey (TBD).

From the Likert-type questions; the importance of each data item, designated while developing general structure of dynamic analysis, from participants view is collected. It is expected from the participants to give scores from 1 to 5 where 1 is the minimum, 5 is the maximum score. Questionnaire can be reached from APPENDIX A6.4.

For checking the data if it contains error or not, the following are done:

- Overall data check
- Minimum and maximum values of each value check
- Missing data check
- Reliability and validity check

After the pilot study, 8 subcategories having totally 53 data items are achieved for

evaluating each web site. Those data items are shown in the following table.

Table 3.6: Final Question Data Items

DATA ITEMS			
	Traffic Data		**Social Statistics**
1	Traffic Rank	28	Facebook Shares
2	Competitive Rank	29	Facebook Likes
3	Reach	30	Tweets
4	Visits	31	Google+1
5	Unique Visitors	32	Delicious
6	Pageviews		**Site Speed Analysis (Quantitative Information)**
7	Pageviews/User	33	Total numbers of HTML files
8	Bounce %	34	The total number of objects
9	Time on site	35	The total number of images
10	Average Load Time	36	The total number of external CSS files
11	Regional Traffic Ranks	37	The total number of external script files
12	Subdomains	38	Word Usage
	Search Data	39	Sentence beginnings
13	Search Traffic		**Site Speed Analysis (Size Information)**
14	Top Queries from Search Traffic	40	The total size of the page
15	High Impact Search Queries	41	The total size of the mainpage
16	Page Keywords	42	The total size of the images
17	Backlinks	43	The total size of external scripts
18	Pages Indexed	44	The total size of external CSS
19	Anchor Text	45	The total size of all external multimedia files
	Audience Demographics		**Advertisement Competition Data**
20	Age	46	PPC Rank
21	Education	47	SEO Rank
22	Browsing Location	48	Daily Adwords (PPC) Ad Budget
23	Ethnicity	49	Avg. Ad Position / # Advertisers
	Links	50	Daily Organic (SEO) Traffic Value
24	HTTP Status	51	Paid vs. Organic Clicks Per Day
25	Link Influence Score	52	Organic keywords
26	Link Popularity Ranking	53	Number of Paid Adds
27	Broken Links Check		

For collecting each data item, initially, for each web site, 16 analytic tools are opened and 53 data for each web site are collected one by one.

The automated tools used for each data item are given in table found in APPENDIX A4.3.

Then the common data items, collected from different web analytic tools are converted to the same unit for normalization of each data and the average of each data item is calculated.

Afterwards, the weights of each data item, obtained from the survey are multiplied with the average of each data item and a weighted score is acquired. This procedure is done for all 53 data items. Weights achieved from the questionnaire can be seen in the Table 3.7 below.

Table 3.7: Weights of Data Items Retrieved from Questionnaire

TRAFFIC DATA	**Weights**
Traffic Rank	69,6
Competitive Rank	76,4
Reach	58,0
Visits	74,6
Unique Visitors	75,4
Pageviews	70,4
Pageviews/User	70,8
Bounce %	65,2
Time on site	73,4
Average Load Time	73,6
Regional Traffic Ranks	59,4
Subdomains	68,6
SEARCH DATA	
Search Traffic	71,0
Top Queries from Search Traffic	75,8
High Impact Search Queries	73,6
Page Keywords	74,2
Backlinks	75,2
Pages Indexed	72,2
Anchor Text	72,4
AUDIENCE DEMOGRAPHICS	
Age	65,8
Education	66,8
Browsing Location	59,2
Ethnicity	39,8
LINKS	
HTTP Status	65,0
Link Influence Score	71,8
Link Popularity Ranking	74,6
Broken Links Check	76,0

SOCIAL STATISTICS	**Weights**
Facebook Shares	68,0
Facebook Likes	65,8
Tweets	65,0
Google+1	64,2
Delicious	55,8
SITE SPEED ANALYSIS (Quantitative Information)	
The total number of HTML files	51,2
The total number of objects	53,0
The total number of images	53,2
The total number of external CSS files	53,0
The total number of external script files	56,4
Word Usage	46,2
Sentence beginnings	49,0
SITE SPEED ANALYSIS (Size Information)	
The total size of the page	66,0
The total size of the mainpage	67,4
The total size of the images	66,8
The total size of external scripts	60,8
The total size of external CSS	58,6
The total size of all ext.multimedia files	66,0
ADVERTISEMENT COMPETITION DATA	
PPC Rank	65,0
SEO Rank	75,0
Daily Adwords (PPC) Ad Budget	63,8
Avg. Ad Position / # Advertisers	69,4
Daily Organic (SEO) Traffic Value	70,0
Paid vs. Organic Clicks Per Day	71,0
Organic keywords	68,8
Number of Paid Adds	66,0

Then, when the weighted scores for 53 data items for a web site is summed, final score of the web site is achieved.

As a result, when final scores of each site are sorted, and at the end, ranking of the

web sites are acquired.

3.3.2 Data Structure

For evaluating web sites from dynamic analysis approach, the matrices given in the Table 3.8 below are used in the algorithm.

Table 3.8: Matrices Used in Dynamic Algorithm

Name	Notification	Definition	Max Values
Data Items Matrix	DI(C,Q)	C:Category Number Q:Data Item Number	C:8 Q:12
Dynamic Raw Evaluation Matrix	reval(W,T,C,Q)	W:Web Site Number T:Tool Number C:Category Number Q:Data Item Number	W:113 T:16 C:8 Q:12
Dynamic Evaluation Matrix	deval(W,C,Q)	W:Web Site Number C:Category Number Q:Data Item Number	W:113 C:8 Q:12
Dynamic Overall Scores Array	W(K)	K:Web Site Number	K:113
Dynamic Categorical Evaluation Matrix	W(K,C)	K:Web Site Number C:Category Number	K:113 C:8

For evaluation, first the Data Items matrix *DI(C,Q)* is constructed for the data items grouped by categories where C indicates the category number and Q indicates the data item number. The dimension of the matrix is the number of categories by the maximum number of data items found among all categories.

Dynamic Raw Evaluation Matrix *reval(W,T,C,Q)* is formed to keep the data of each web site that is evaluated from 16 web analytic tools. For matrix reval(W,T,C,Q), W indicates the web site number, T indicates the analytic tool number, C indicates the category number and Q indicates the data item number.

While evaluating web pages one by one, Dynamic Evaluation Matrix *deval(W,C,Q)* is formed for each web site, containing, the evaluated scores for data items belonging to each category. For matrix deval(W,C,Q), W indicates the web site number, C indicates the category number and Q indicates the data item number. In this step for each data item, if scores for that item comes from more than one tool, each score is

converted to same unit and average of each score belonging to different tools is calculated.

Consequently, for each web site, total scores are acquired using matrix (deval(W,C,Q)) and summing the evaluated scores. This results the overall scores of web sites evaluated statically.

Finally, web sites are ranked not only according to their general scores, but also according to each category.

3.3.3 Algorithm

The dynamic algorithm of the model, explaining how the data is acquired is described below. Details of the algorithm is given in APPENDIX A4.4.

```
DynamicAnalysis_MainAlgorithm;
DI(C,Q): data items matrix where              C:category number
                                              Q:dataitem number
reval(W,T,C,Q): dynamic raw evaluation matrix
                                       where  W:website number
                                              T:tool number
                                              C:category number
                                              Q:dataitem number
deval(W,C,Q): dynamic evaluation matrix
                                       where  W:website number
                                              C:category number
                                              Q:dataitem number
Begin
     update_dataitems_matrix DI(C,Q);        *for updating the data items
                                             belonging to each category*
     update_reval_matrix reval(W,T,C,Q);     *for updating the evaluated
                                             scores for each data item
                                             belonging to a category for
                                             existing tools*
     update_deval_matrix deval(W,C,Q);       *for evaluating the
                                             normalized scores for each
                                             data item corresponding to a
                                             category. For each data
                                             item, if scores for that
                                             item comes from more than
                                             one tool, each score is
                                             converted to same unit and
                                             averages of each score
                                             belonging to different tools
                                             is calculated*
     evaluate_overall_score;                 *for evaluating the total
                                             score for each web site*
     evaluate_score_by_categories;           *for evaluating the scores
                                             corresponding to each
                                             category and sorting web
                                             sites for each category for
                                             each web site*
End DynamicAnalysis_Algorithm
```

3.4 Content Analysis

In this section, description, data structure and algorithm of content analysis are presented.

3.4.1 Description

Content evaluation needs elaborate inspection of web sites. Content of web sites are domain dependent and each domain has specific content, so for determining contents of web sites, *a specific business scope should be selected.* Analysis is done by using a simple method for comparing content of the web sites in the same scope of business. After the analysis of each web site, new categories and the content belonging to those categories are added to a repository. At the end of the analysis, each web site is compared with the number of data within the repository data and finally web sites are scored accordingly.

For content evaluation, after selecting the business scope, the following major functions are accomplished:

F1: Repository and ontology creation/update

F2: Web site data store creation/update

F3: Evaluation *(web site and overall evaluation)*

Details of the functions are given in APPENDIX A5: Content Analysis Algorithm.

In the thesis, since content needs to be deep dived for each business scope, a deep content determination work is made for *sport shoe* online shopping web sites.

3.4.2 Data Structure

For evaluating web sites from content analysis approach, the matrices given in the Table 3.9 below are used in the algorithm.

Table 3.9: Matrices Used in Content Algorithm

Name	Notification	Definition	Max Values
Repository	R	-	-
Content Evaluation Matrix	ceval(W,C,T)	W:Web Site Number C:Category Number T:Content Title Number	W:113 C:4 T:11
Content Overall Scores Array	W(K)	K:Web Site Number	
Content Categorical Evaluation Matrix	W(K,C)	K:Web Site Number C:Category Number	K:113 C:4

For defining main categories and content titles of web sites, at the beginning, each web site from a specific business scope is inspected very deeply and as well as main categories, *general content titles* (such as Model, Size, Technology) are determined and the Content Evaluation Matrix *ceval(W,C,T)* is formed.

For each web site, if the categories or content titles have the same meaning with the previously evaluated web pages, they are classified under the same category or content title and an *ontology* (For example, regular and standard words are grouped under the same title as standard) is formed.

Additionally, all the content titles and categories are collected at a repository *R.* After evaluating all web sites within the same business scope, a repository containing all categories and content titles is formed.

At the end, web sites belonging to the same business scope are ranked according to the determined categories and titles existing in repository and the Content Categorical Evaluation Matrix *W(K,C)* are generated. For each web site, all the content titles and the number of items according to each content are compared with the number of items within the repository belonging to the same content title and ranked according to this comparison. All content titles are considered as weighted equal.

3.4.3 Algorithm

The content algorithm of the model, explaining how the data is acquired is described below. Details of the algorithm is given in APPENDIX A5.

```
ContentAnalysis_MainAlgorithm;
ceval(W,C,T): content evaluation matrix
                                  where  W:website number
                                         C:category number
                                         T:content title number
Begin
       update_repository;                    *for updating all categories,
                                             content titles and content
                                             items evaluated from all web
                                             sites*

       update_ceval_matrix   ceval(W,C,T);*for updating the evaluated
                                             scores for each data item
                                             belonging to a content title
                                             and each category for web site
                                             W*

       overall_score_evaluation;             *for evaluating the total score
                                             for each web site*

       score_by_categories_evaluation;       *for evaluating the scores
                                             corresponding to each category
                                             and sorting web sites for each
                                             category for each web site*

End ContentAnalysis_MainAlgorithm
```

CHAPTER 4

CASE STUDY

In this chapter, the results of static, dynamic and content perspectives are presented. Also the relation between them are discussed finally.

4.1 Sample Data

In the study, 113 web sites are decided to be evaluated. For the evaluation, 50 web sites are chosen to be service oriented and the other 50 are chosen to be product oriented. Additionally, 13 sport shoe web sites are evaluated for content analysis.

The table below shows the distribution of the evaluated web sites' business scope.

Table 4.1: Evaluated Web Sites

Web Site Business Scope	**# of Web Sites**	**Service/Product Oriented**
Shopping Online Web Sites	50	Product Oriented
Airline Web Sites	30	Service Oriented
Newspaper Web Sites	20	Service Oriented
Sport Shoe Selling Web Sites	13	Product Oriented

The list of evaluated web sites is given in APPENDIX A1.

In the thesis, web sites to be evaluated are chosen according to some criteria. Choosing criterias according to each business scope web sites, given in the above table are described below.

Internet shopping is a popular subject and there exists many web sites for shopping online. For choosing shopping online web sites for the evaluation, top 100 product selling web sites are searched from different resources from the Internet and 50 common are selected as product oriented web sites.

Airline companies' web sites for the evaluation are chosen from the International ones which carry more than one million passengers in a year. While choosing, the largest companies (20%) from different regions of world are selected. Regions are: Africa, Asia, Europe, Ocean, North America and South America. At the end, 30 international airline companies are chosen to be analyzed.

Newspaper web sites'choosing criteria is firstly, each should be online, national and daily newspaper. For the second criteria, each should contain at least 6 contents such as Politics, Economy, News, World, Business, Sport, Community/Life, Culture/Art, Health, Science/Technology, Education, Media, Cinema-TV etc. At the end 20 newspapers are chosen to be analyzed.

Compared to the static and dynamic analysis, content analysis needs more elaborate work. In addition to shopping, airline company and newspaper web sites, 13 web sites are chosen specifically related to selling sport shoes for content analysis since it is highly domain dependent. Selection criteria is based on the popularity of them and all popular sport shoe online selling web sites are selected as to be evaluated.

At the end, total of *24,431* components (details are given in the below table) are acquired from web sites and are examined. The calculations made for taking averages, for calculating ranks and for making normalizations are not included in this total. Considering 113 web pages, these calculations formed a huge size of document repository.

Table 4.2: Total Data Examined

Total Data Examined			
Static			
Categories	**# of Web Sites**	**# of Data Items**	**Total**
Identity	113	11	1243
Loading and Viewing	113	15	1695
Navigation	113	12	1356
Interactivity	113	14	1582
Comprehensibility	113	8	904
Personalization&Content	113	14	1582
Information Quality&Up-to-datedness	113	11	1243
Security&Miscellaneous	113	9	1017
TOTAL (Static)			**10622**
Dynamic			
Categories	**# of Web Sites**	**# of Data Items**	**Total**
Traffic Data	113	33	3729
Search Data	113	13	1469
Audience Demographics	113	9	1017
Links	113	6	678
Social Statistics	113	8	904
Site Speed Analysis (Quantitative Information)	113	7	791
Site Speed Analysis (Size Information)	113	6	678
Advertisement Competition Data	113	9	1017
TOTAL (Dynamic)			**10283**
Content			
Categories	**# of Web Sites**	**# of Data Items**	**Total**
Gender	13	51	51
Age	13	66	66
Shoes' Type	13	382	382
Model	13	391	391
Size	13	1131	1131
Width	13	72	72
Color	13	538	538
Collections	13	409	409
Technology	13	334	334
Special Selection	13	86	86
Fit Type	13	28	28
Material	13	38	38
TOTAL (Content)			**3526**
OVERALL DATA TOTAL			**24431**

4.2 Implementation and Findings

In this section 113 web sites' static, dynamic and content analysis results are presented respectively. While representing the overall ranks, ranks according to subcategories are given. Additionally in the last section, the answers for the problem statements given in Chapter 1 are presented.

One of the main goals of the study is to evaluate a web site from three perspectives. For better understanding of the methodology introduced, *Nike* web site is selected as sample site for the presentation of the results of the methodology. Evaluation results of this site from three perspectives are interpreted in detail in APPENDIX A2 containing the following information:

Overall Information

- Overall rank
- Overall group distribution information (high, middle high, middle, low)

Static Information

- Static rank information according to each category in static analysis
- Weaknesses and strengths from static analysis perspective

Dynamic Information

- Dynamic rank information according to each category in dynamic analysis
- Weaknesses and strengths from dynamic analysis perspective

Content Information

- Content rank information according to each category in content analysis
- Weaknesses and strengths from content analysis perspective

Due to the information acquired, not only the strengths, but also the missing components and weaknesses in the web site are obtained. This gives web site owner an opportunity to compare the evaluated data with their competitive and improve the web site in the market by considering the missing components and weaknesses.

4.2.1 Static Analysis

113 web sites are evaluated according to 8 subcategories having fixed weighted scores (APPENDIX A3.1: Categories, Questions and Weights for Static Analysis). The overall scores for the web sites are given in Table 4.3 below in decending order.

Table 4.3: Ranked Static Analysis Results of Overall Web Sites

Web Sites	Over Total Score- 1000	Rank
LA Times	886	1
NY Times	850	2
ABT	850	2
American Airlines	849	4
Beach Camera	816	5
Guardian	811	6
Newegg	810	7
KLM	801	8
Globe and Mail	796	9
British Airways	794	10
St Louis Today	793	11
Air France	788	12
Nike	784	13
Keds	784	13
Dell	782	15
Amazon	782	15
Bestbuy	781	17
Dallas Morning News	779	18
Deal Extreme	779	18
Montreal Gazette	777	20
Overstock	776	21
The Star	772	22
Zappos	770	23
Tımes	758	24
Australian	755	25
Ebay	754	26
Skechers	752	27
Vatan Bilgisayar	751	28
Korean Air	750	29
Sahibinden	749	30
K-Swiss	747	31
Adidas	744	32
Altrec	743	33
Courier Mail	741	34
Puma	731	35
Sdyney Morning	730	36
Hizlial	727	37
Air Canada	724	38
Cathay Pasific	723	39
Egypt Air	723	39
Iberia	723	39
Scandinavian	723	39
Turkish Airlines	723	39
Japon Airlines	719	44
Qantas	717	45
Swiss Air	715	46
Biletix	715	46
Alitalia	707	48
Singapore Air	707	48
Lufthansa	705	50
South Africa Air	702	51
Anadolu Jet	702	51
Crutchfield	702	51
Hi-tech	699	54
The Age	699	54
The Chronicle Herald	698	56
Pegasus Air	697	57
Independent	694	58
New Balance	692	59
Argos	689	60

Web Sites	Over Total Score- 1000	Rank
Trendyol	686	61
Ali Express	679	62
Washington Post	677	63
GittiGidiyor	675	64
Delta Air	674	65
Atlas Jet	673	66
Aeroflot	672	67
Ritz Camera	670	68
Daily Mail	669	69
Emirates	668	70
Teknosa	667	71
Buy	666	72
Daily News	662	73
Tam Airlines	657	74
Sonic Electronix	653	75
Idefix	647	76
Fila	646	77
USA Today	641	78
Tiger Direct	637	79
HepsiBurada	632	80
BuyDig	632	80
Newyork Post	627	82
Air China	625	83
Ryan Air	621	84
Comet	620	85
Bhphotovideo	618	86
Sun Express	616	87
Morhipo	610	88
Onur Air	608	89
Nordstrom	606	90
Asics	603	91
Ioffer	603	91
Jr	598	93
42photo	594	94
Next	591	95
Converse	590	96
Reebok	583	97
Markafoni	574	98
JC Penney	571	99
Pabbuc	564	100
Under Armour	561	101
Sky Airlines	553	102
Bellacor	548	103
PcNation	547	104
Sears	535	105
Efurniture Showroom	534	106
Shoes	531	107
Play	519	108
Wallgreens	516	109
İkea	513	110
Tesco	493	111
Walmart	482	112
220-electronics	316	113

Also, the results obtained from static analysis are gathered under 4 groups which are high, middle- high, medium and low. The groups' distribution can be seen in Figure 4.1 below.

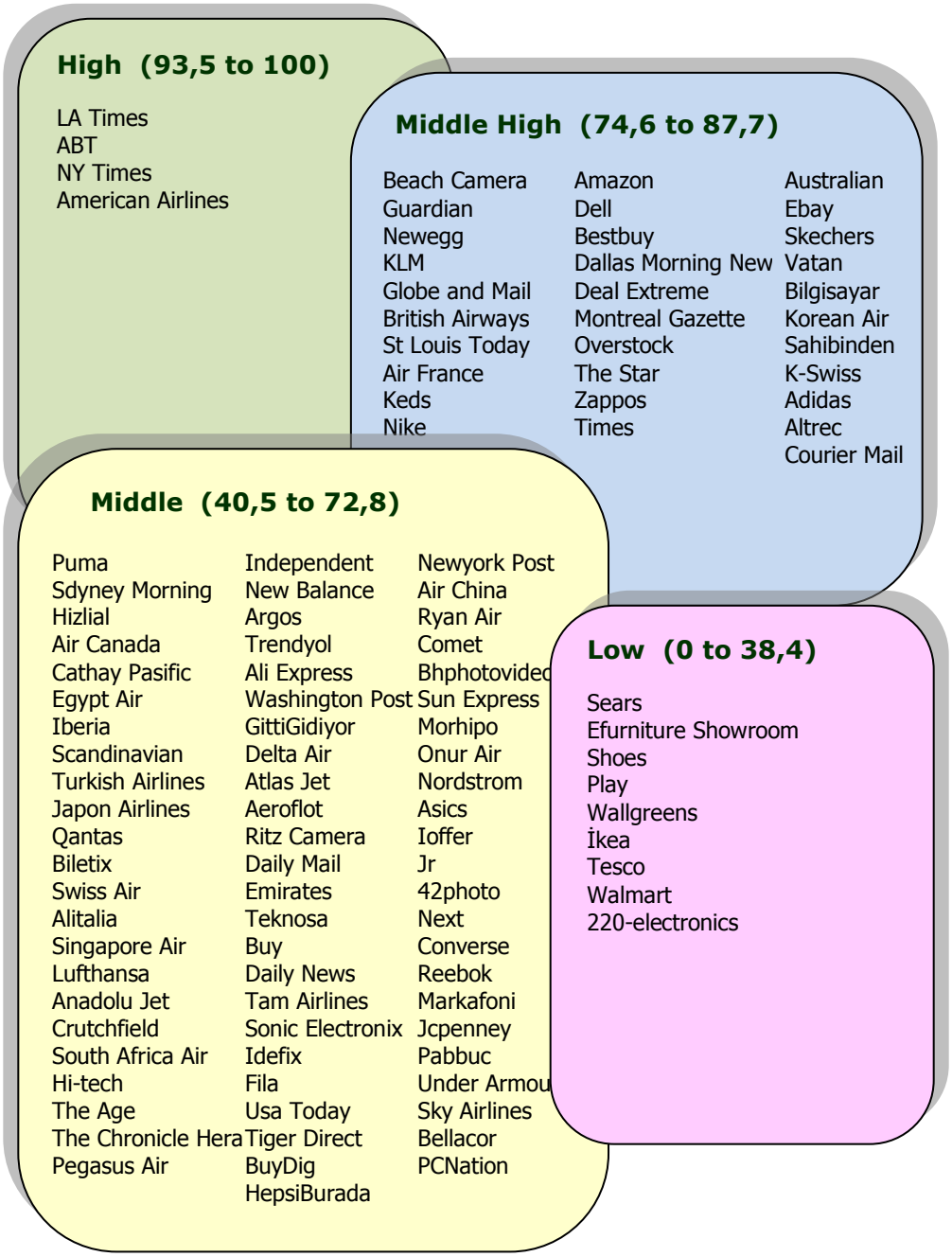

Figure 4.1: Static Analysis - Evaluated Web Sites' Distribution

According to the results evaluated, LA Times ranked first whereas 220-electronics ranked last for the static approach. Considering the static approach scores, LA Times found to be satisfactory for almost all categories and has the highest scores for

Personalization&Content and Information Quality&Up-to-Datedness. In contrast to LA Times, 220-electronics has the lowest scores for 4 different categories out of 8 categories which are Loading and Viewing, Interactivity, Comprehensibility, Information Quality & Up-to-datedness.

The grouping is done using z score, also known as z value where it is used for normalizing the data distribution for making meaningful comparison. In the evaluations, z score values are normalized over 100 and scores are presented according to the normalized scores. Scores of all web sites are given in Table 4.4 below.

Table 4.4: Static Analysis - Evaluated Web Sites' Distribution

High (93,5 to 100)		Middle High (74,6 to 87,7)		Middle (40,5 to 72,8)				Low (0 to 38,4)	
LA Times	100,0	Beach Camera	87,	Puma	72,8	Emirates	61,8	Sears	38,4
ABT	93,7	Guardian	86,	Sdyney Morning	72,6	Teknosa	61,6	Efurniture Showr	38,2
NY Times	93,7	Newegg	86,	Hizlial	72,1	Buy	61,4	Shoes	37,7
American Ai	93,5	KLM	85,	Air Canada	71,6	Daily News	60,7	Play	35,6
		Globe and Mail	84,	Cathay Pasific	71,4	Tam Airlines	59,8	Wallgreens	35,1
		British Airways	83,	Egypt Air	71,4	Sonic Electronix	59,1	İkea	34,6
		St Louis Today	83,	Iberia	71,4	Idefix	58,1	Tesco	31,1
		Air France	82,	Scandinavian	71,4	Fila	57,9	Walmart	29,1
		Keds	82,	Turkish Airlines	71,4	Usa Today	57,0	220-electronics	0,0
		Nike	82,	Japon Airlines	70,7	Tiger Direct	56,3		
		Amazon	81,	Qantas	70,4	BuyDig	55,4		
		Dell	81,	Biletix	70,0	HepsiBurada	55,4		
		Bestbuy	81,	Swiss Air	70,0	Newyork Post	54,6		
		Dallas Morning	81,	Alitalia	68,6	Air China	54,2		
		Deal Extreme	81,	Singapore Air	68,6	Ryan Air	53,5		
		Montreal Gazett	80,	Lufthansa	68,2	Comet	53,3		
		Overstock	80,	Anadolu Jet	67,7	Bhphotovideo	53,0		
		The Star	80,	Crutchfield	67,7	Sun Express	52,6		
		Zappos	79,	South Africa Air	67,7	Morhipo	51,6		
		Tımes	77,	Hi-tech	67,2	Onur Air	51,2		
		Australian	77,	The Age	67,2	Nordstrom	50,9		
		Ebay	76,	The Chronicle He	67,0	Asics	50,4		
		Skechers	76,	Pegasus Air	66,8	Ioffer	50,4		
		Vatan Bilgisayaı	76,	Independent	66,3	Jr	49,5		
		Korean Air	76,	New Balance	66,0	42photo	48,8		
		Sahibinden	76,	Argos	65,4	Next	48,2		
		K-Swiss	75,	Trendyol	64,9	Converse	48,1		
		Adidas	75,	Ali Express	63,7	Reebok	46,8		
		Altrec	74,	Washington Post	63,3	Markafoni	45,3		
		Courier Mail	74,	GittiGidiyor	63,0	Jcpenney	44,7		
				Delta Air	62,8	Pabbuc	43,5		
				Atlas Jet	62,6	Under Armour	43,0		
				Aeroflot	62,5	Sky Airlines	41,6		
				Ritz Camera	62,1	Bellacor	40,7		
				Daily Mail	61,9	PCNation	40,5		

Z score measures the divergence of the results obtained and transforms the distribution to a standard normal distribution. It is the *"number of standard deviations from the mean value"*and formulated as below (Field, 2005; Eymen, 2007):

$$\mathbf{Z} = \frac{\mathbf{X} - \boldsymbol{\mu}}{\boldsymbol{\sigma}} \quad (1)$$

where X = ExperimentalValue
μ = Mean
σ = Standard Deviation

The rankings for all web sites, shopping web sites, airline web sites, newspaper web sites and sport shoe web sites are given in APPENDICES A3.3, A3.4, A3.5, A3.6 and A3.7 respectively.

Additionally, the best and worst scored web sites according to static analysis are given in Table 4.5 below.

Table 4.5: Best and Worst Evaluated Web Pages

Best:

Web Sites	**Static**	
	Over 1000	**Rank**
LA Times	886	1
NY Times	850	2
ABT	850	2

Worst:

Web Sites	**Static**	
	Over 1000	**Rank**
Tesco	493	111
Walmart	482	112
220-electronics	316	113

4.2.2 Dynamic Analysis

113 web sites are evaluated according to 8 subcategories. The subcategories are; traffic, search, audience demographics, links, social statistics, site speed analysis (quantitative information), site speed analysis (size information), and advertisement.

The evaluation results are given in APPENDIX A4.5. The weights obtained from the survey are used in calculation of the dynamic analysis scores (Table 3.7).

Also, the results obtained from dynamic analysis are gathered under 4 groups which are high, middle- high, medium and low. The groups' distribution can be seen in the Figure 4.2 below.

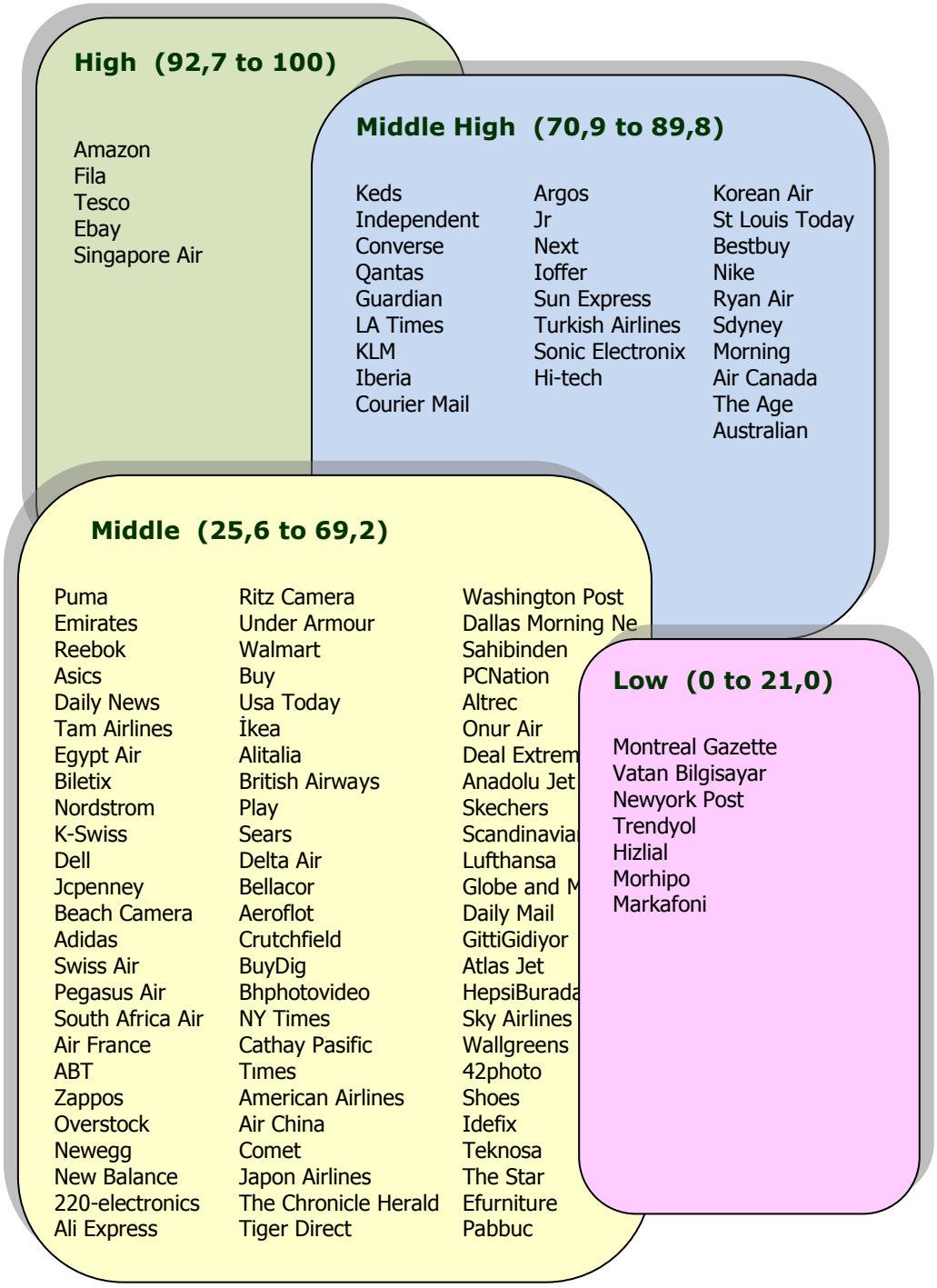

Figure 4.2: Dynamic Analysis - Evaluated Web Sites' Distribution

According to the results evaluated, Amazon ranked first whereas Markafoni ranked last for the dynamic approach. Amazon found to be satisfactory for almost all categories except Social Statistics and Site Speed Analysis (below average) but has the highest scores for Search Data and Advertisement. Markafoni ranked last since the scores for all categories are low and has the lowest scores for Links and Site Speed Analysis categories.

As described in section 4.2.1, the grouping is done using z score evaluation. In the evaluations, z score values are normalized over 100 and scores are presented according to the normalized scores. Scores of all web sites are given in Table 4.6 below.

Table 4.6: Dynamic Analysis - Evaluated Web Sites' Distribution

High (92,7 to 100)		Middle High (70,9 to 89,8)		Middle (25,6 to 69,2)				Low (0 to 21,0)	
Amazon	100,0	Keds	89,8	Puma	69,2	Crutchfield	49,1	Montreal Gazette	21,0
Fila	95,0	Independent	89,6	Emirates	68,8	BuyDig	49,0	Vatan Bilgisayar	18,6
Tesco	93,9	Converse	88,3	Reebok	68,0	Bhphotovideo	48,2	Newyork Post	15,8
Ebay	93,2	Qantas	86,8	Asics	67,1	NY Times	47,6	Trendyol	14,6
Singapore A	92,7	Guardian	84,2	Daily News	66,8	Cathay Pasific	47,2	Hizlial	6,3
		LA Times	83,8	Tam Airlines	66,5	Tımes	45,0	Morhipo	1,9
		KLM	82,2	Egypt Air	64,5	American Airlines	44,8	Markafoni	0,0
		Iberia	82,0	Biletix	64,1	Air China	44,6		
		Courier Mail	79,6	Nordstrom	62,9	Comet	43,8		
		Argos	77,5	K-Swiss	62,8	Japon Airlines	42,9		
		Jr	77,5	Dell	62,4	The Chronicle Herald	42,9		
		Next	76,7	Jcpenney	61,8	Tiger Direct	41,9		
		Ioffer	75,5	Beach Camera	61,4	Washington Post	41,9		
		Sun Express	75,4	Adidas	60,9	Dallas Morning New	41,8		
		Turkish Airlines	75,2	Swiss Air	60,5	Sahibinden	41,3		
		Sonic Electronix	74,7	Pegasus Air	60,4	PCNation	40,7		
		Hi-tech	74,5	South Africa A	60,4	Altrec	40,7		
		Korean Air	74,2	Air France	59,8	Onur Air	40,0		
		St Louis Today	73,2	ABT	59,5	Deal Extreme	39,2		
		Bestbuy	72,7	Zappos	59,2	Anadolu Jet	38,6		
		Nike	72,6	Overstock	58,6	Skechers	38,1		
		Ryan Air	72,4	Newegg	57,9	Scandinavian	36,1		
		Sdyney Morning	72,2	New Balance	57,1	Lufthansa	34,9		
		Air Canada	71,5	220-electronics	56,7	Globe and Mail	34,5		
		The Age	71,5	Ali Express	56,4	Daily Mail	34,4		
		Australian	70,9	Ritz Camera	56,4	GittiGidiyor	33,0		
				Under Armour	56,1	Atlas Jet	31,7		
				Walmart	55,9	HepsiBurada	30,9		
				Buy	55,2	Sky Airlines	30,0		
				Usa Today	53,5	Wallgreens	30,0		
				İkea	53,4	42photo	29,3		
				Alitalia	52,7	Shoes	28,9		
				British Airways	51,4	Idefix	28,4		
				Play	51,4	Teknosa	26,5		
				Sears	50,8	The Star	26,4		
				Delta Air	50,5	Efurniture Showroon	25,7		
				Bellacor	50,4	Pabbuc	25,6		
				Aeroflot	50,1				

The rankings for all web sites, shopping web sites, airline web sites, newspaper web sites and sport shoe web sites are given in APPENDICES A4.5, A4.6, A4.7, A4.8 and A4.9 respectively.

Additionally, the best and worst scored web sites according to dynamic analysis are given in Table 4.7 below.

Table 4.7: Best and Worst Evaluated Web Pages

Best:

Web Sites	**Dynamic**		
	Over 1000	**Rank**	
Amazon	579	1	
FILA	564	2	
Tesco	561	3	

Worst:

Web Sites	**Dynamic**		
	Over 1000	**Rank**	
Hizlial	301	111	
Morhipo	288	112	
Markafoni	282	113	

4.2.3 Content Analysis

Content evaluation needs deep inspection of web sites. Content of web sites are domain dependent and each domain has specific content, so for evaluation of web sites, a specific business scope should be selected. For the thesis, online sport shoe selling web sites listed in Table 4.8 below, are chosen for analysis.

Table 4.8: List of Evaluated Sport Shoe Web Sites

Evaluated Sport Shoe Web Sites	
Adidas	NewBalance
Asics	Nike
Converse	Puma
FILA	Reebok
HiTech	Skechers
Keds	UnderArmour
KSwiss	

The overall ranked weighted scores are given in Table 4.9 below including static and dynamic results.

Table 4.9: Content Analysis Results Including Static and Dynamic Results

Static			Dynamic			Content by Deep Dive		
Web Sites	**Over 1000**	**Rank**	**Web Sites**	**Over 1000**	**Rank**	**Web Sites**	**Over 1000**	**Rank**
Nike	784	1	FILA	564	2	**Adidas**	**365**	**1**
Keds	784	1	Keds	549	5	**Nike**	**321**	**2**
Skechers	752	3	Converse	544	7	**New Balance**	**277**	**3**
K-Swiss	747	4	Hi-Tech	504	21	**Converse**	**247**	**3**
Adidas	744	5	Nike	498	25	**Reebok**	**245**	**5**
Puma	731	6	Puma	488	31	**Keds**	**212**	**6**
Hi-Tech	699	7	Reebok	484	33	**Puma**	**208**	**6**
New Balance	692	8	Asics	481	34	**Skechers**	**190**	**6**
FILA	646	9	K-Swiss	469	40	**Under Armour**	**160**	**9**
Asics	603	10	Adidas	463	44	**K-Swiss**	**136**	**10**
Converse	590	11	New Balance	452	53	**Hi-Tech**	**118**	**10**
Reebok	583	12	Under Armour	449	57	**Fila**	**117**	**12**
Under Armour	561	13	Skechers	395	89	**Asics**	**82**	**13**

13 web sites listed above are evaluated according to 15 subcategories, which are:

- Woman
- Man
- Boys
- Girls
- Age
- Shoes'Type
- Model
- Size
- Width
- Color
- Collections
- Technology
- Special Selection
- Fit Type
- Material

The rankings obtained from content analysis according to 15 categories are given in Table 4.10 below.

Table 4.10 Content Analysis Results

Web Sites	Overall		Woman		Man		Boys		Girls	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank
Nike	**321**	**2**	80	3	93	2	72	2	72	2
Adidas	**365**	**1**	98	1	95	1	84	1	84	1
Puma	**208**	**7**	45	8	53	7	53	5	52	5
Reebok	**245**	**5**	56	6	63	4	58	3	64	3
Fila	**117**	**12**	20	13	31	13	31	10	31	11
Under Armour	**160**	**9**	31	11	59	6	28	11	36	9
New Balance	**277**	**3**	81	2	90	3	52	6	50	7
K-Swiss	**136**	**10**	30	12	34	12	33	9	33	10
Hi-Tech	**118**	**11**	39	9	49	8	14	12	14	12
Keds	**212**	**6**	68	4	35	10	52	6	52	5
Skechers	**190**	**8**	48	7	39	9	51	8	48	8
Asics	**82**	**13**	33	10	35	10	5	13	5	13
Converse	**247**	**4**	67	5	63	4	57	4	57	4

Web Sites	Categories		Age		Shoes'Type		Model		Size		Width	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank
Nike	4	2	6	4	51	2	30	3	109	1	11	2
Adidas	3	1	6	4	52	1	6	12	89	5	0	7
Puma	4	5	4	9	42	3	0	13	95	4	0	7
Reebok	4	3	6	4	22	5	17	8	86	7	0	7
Fila	3	10	0	10	0	10	26	5	88	6	0	7
Under Armour	4	11	0	10	21	6	20	6	78	11	0	7
New Balance	4	6	8	1	11	8	33	2	96	3	20	1
K-Swiss	4	9	8	1	16	7	8	11	84	9	8	4
Hi-Tech	3	12	0	10	0	10	10	10	60	12	1	6
Keds	4	6	6	4	9	9	20	6	86	7	11	2
Skechers	4	8	6	4	0	10	27	4	79	10	2	5
Asics	3	13	0	10	33	4	44	1	0	13	0	7
Converse	3	4	8	1	0	10	16	9	108	2	0	7

Web Sites	Color		Collections		Technology		Special Selection		Fit Type		Material	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank
Nike	63	1	38	2	0	5	8	2	0	2	0	1
Adidas	54	3	67	1	88	1	0	4	0	2	0	3
Puma	34	8	28	4	0	5	0	4	0	2	0	3
Reebok	50	5	0	10	60	2	0	4	0	2	0	3
Fila	0	12	0	10	0	5	0	4	0	2	0	3
Under Armour	30	9	1	9	0	5	5	3	0	2	0	3
New Balance	48	7	29	3	13	4	0	4	15	1	0	3
K-Swiss	6	11	0	10	0	5	0	4	0	2	0	3
Hi-Tech	29	10	0	10	14	3	0	4	0	2	0	3
Keds	50	5	5	7	0	5	0	4	0	2	20	2
Skechers	51	4	20	6	0	5	0	4	0	2	0	3
Asics	0	12	2	8	0	5	0	4	0	2	0	3
Converse	58	2	22	5	0	5	31	1	0	2	0	3

Also, the results obtained from content analysis are gathered under 4 groups which are high, middle-high, medium and low. The groups' distribution can be seen in the Figure 4.3 below.

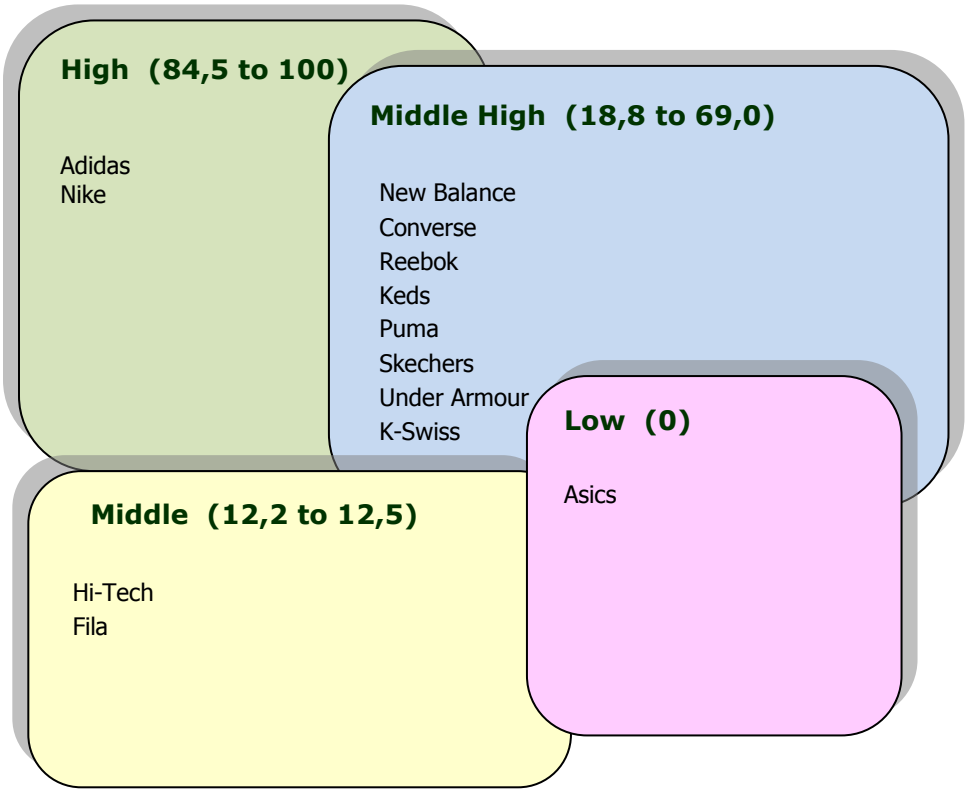

Figure 4.3: Content Analysis - Evaluated Web Sites' Distribution

According to the results evaluated, Adidas ranked first whereas Asics ranked last for the content approach. Considering all 15 categories, Adidas got the highest scores for 7 categories whereas Asics got the lowest scores for 9 categories.

As described in section 4.2.1, the grouping is done using z score evaluation. In the evaluations, z score values are normalized over 100 and scores are presented according to the normalized scores. Scores of all web sites are given in Table 4.11 below.

Table 4.11: Content Analysis - Evaluated Web Sites' Distribution

High (84,5 to 100)		Middle High (18,8 to 69,0)		Middle (12,2 to 12,5)		Low (0 to 38,4)	
Adidas	100,0	New Balance	69,0	Hi-Tech	**12,5**	Asics	0,0
Nike	84,5	Converse	58,3	Fila	**12,2**		
		Reebok	57,6				
		Keds	45,8				
		Puma	44,3				
		Skechers	38,0				
		Under Armour	27,3				
		K-Swiss	18,8				

CHAPTER 5

EVALUATION

The results of the Web SCADA model which is applied to 113 web sites are presented in Chapter 4. In this chapter, the *internal correlation* which is the relation between three perspectives and the categories within the method is explained. Internal relation is among

static, dynamic and content analysis and
the subcategories of dynamic analysis.

Moreover, *external correlation* which is among Web SCADA, another web analysis tools are also presented.

For analyzing the correlations SPSS is used.

5.1 Internal Correlation

In this section, the following questions are going to be examined statistically for showing whether there exist a relation between static, dynamic and content analysis as well as between the subcategories of dynamic analysis.

a) *Is there a relation between static, dynamic and content analysis?*
b) *Is there a relation between the subcategories of dynamic analysis?*

a) Is there a relation between static, dynamic and content analysis?

For finding the answer of this question, the overall totals acquired from 113 web pages by using static and dynamic analysis methodologies are used for correlation.

Aiming to answer those questions, Pearson's Correlation is used. According to Tabachnick & Fidell (2007),

"*The Pearson's correlation is used to find a correlation between at least two continuous variables.*"

Pearson correlation value ranges from -1 to 1.

If it is -1, it indicates a perfect negative linear relationship between variables,

if it is 0, it indicates no linear relationship between variables,

if it is 1, it indicates that there exists a perfect positive relationship between variables.

In the study, the Pearson Correlation between static and dynamic results are obtained as 0,176; showing that there exists no relation between them. The table below shows the correlation values.

Table 5.1: Correlation Between Static and Dynamic Results

		Static	Dynamic
Static	Pearson Correlation	1	0,176
	Sig. (2-tailed)		0,062
	N	113	113
Dynamic	Pearson Correlation	0,176	1
	Sig. (2-tailed)	0,062	
	N	113	113

This is an expected result since it does not mean that, if a web site has good static information in it; it is also good from dynamic perspective and vice versa.

Since, content analysis is done for 13 web sites, correlation between static, dynamic and content perspectives are evaluated through the 13 web sites' values.

As the table below summarizes; although there exists a *medium* level correlation between *static and content* perspectives; there exits again no correlation between *static and dynamic* and *dynamic and content* perspectives.

Table 5.2: Correlation Between Static, Dynamic and Content Results

		Static	Dynamic	Content
Static	Pearson Correlation	1	-0,098	0,331
	Sig. (2-tailed)		0,750	0,269
	N	13	13	13
Dynamic	Pearson Correlation	-0,098	1	-0,119
	Sig. (2-tailed)	0,750		0,697
	N	13	13	13
Content	Pearson Correlation	0,331	-0,119	1
	Sig. (2-tailed)	0,269	0,697	
	N	13	13	13

b) Is there a relation between the subcategories of dynamic analysis?

For finding the answer of this question, the overall totals acquired from 113 web pages by using dynamic analysis scores are used for correlation.

All of the categories (eight categories are examined) are analyzed by 2 pairs. That is; the correlation between 28 pairs are evaluated. Results are given in APPENDIX A4.10.

After the evaluation by the usage of Pearson's Correlation, the results showed that,

- There is a low level correlation between Links and Advertisement Competition Data (since Pearson Correlation is 0,230).
  Also this correlation is significant at the 0.05 level (2-tailed).
- There is a medium level correlation between Traffic Data and Advertisement Competition Data (since Pearson Correlation is 0,430).
  Also this correlation is significant at the 0.01 level (2-tailed).

- There is a medium level correlation between Audience and Advertisement Competition Data (since Pearson Correlation is 0,386).

  Also this correlation is significant at the 0.01 level (2-tailed).

- There is a high level correlation between Site Speed Analysis _Quantitative_Information and Site Speed Analysis_Size_Information (since Pearson Correlation is 0,812).

  Also this correlation is significant at the 0.01 level (2-tailed).

5.2 External Correlation

Model's static perspective was a previously approved methodology. Additionally, in section 5.1, internal correlation, which is the relation with in the method is examined. Although content analysis perspective is domain dependent, it is showed that, there exists a *medium* level correlation between *static and content* perspectives.

Moreover, as mentioned previously, there exists no relation between

static and dynamic

dynamic and content

perspectives. In this section, *external correlation* of dynamic perspective, which is among other web analysis tools is going to be examined.

Aiming to compare the results obtained from the generated method with other analytic tools, the overall scores of 113 web sites obtained by the dynamic analysis are compared with the scores generated by one of the most popular analysis tool, *DoubleClick Ad Planner,* which is developed by Google.

A table which shows the overall score that is acquired from dynamic approach and the score acquired from the *DoubleClick Ad Planner* can be found in APPENDIX A4.12.

In order to determine the strength of the relationship between them, by using SPSS, Pearson Correlation is used and it is found that, there exists a medium level relation between them (Table 5.3).

Table 5.3: Pearson Correlation Between Overall Dynamic Score and DoubleClick Ad Planner Score

		VAR00004	VAR00005
VARDoubleClick	Pearson Correlation	1	,426**
	Sig. (2-tailed)		,000
	N	113	113
VAROverall	Pearson Correlation	,426**	1
	Sig. (2-tailed)	,000	
	N	113	113

**. Correlation is significant at the 0.01 level (2-tailed).

Additionally the scattered graph given below shows the strength of the connection or the correlation between the two compared variables.

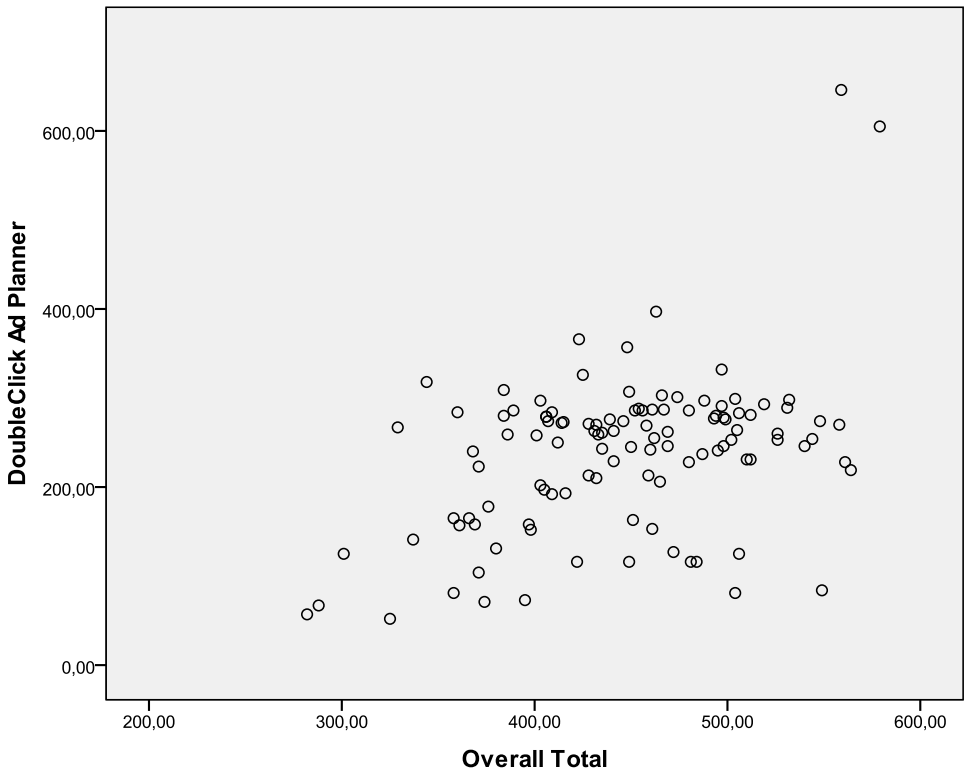

Figure 5.1: Scattered Graph Between Overall Dynamic Score and DoubleClick Ad Planner Score

As the result shows, there exits a medium level relation between them.

Additionally, another but a strong justification source is obtained by looking to the web site's performance. Aiming to compare the results obtained from the generated method with other analytic tools, the overall scores of 113 web sites obtained by the dynamic analysis are compared with the scores generated by one of the most popular analysis tool, *WebSite Optimization.*

For businesses, web site's performance is a very important factor that affect the quality and prestige of the firm. Page size, composition and download time are the important components for performance. WebSite Optimization tool measures a web site's performance based on the following characteristics:

Total numbers of HTML files
The total number of objects
The total number of images
The total number of external CSS files
The total number of external script files
The total size of the page
The total size of the mainpage
The total size of the images
The total size of external scripts
The total size of external CSS
The total size of all external multimedia files

113 web sites' performances taken into consideration as a case study in the thesis are measured according to the above characteristics and web sites are ranked accordingly. A table which shows the overall ranking that is acquired from dynamic approach and the ranking acquired from the above perspectives can be found in APPENDIX A4.11.

By using SPSS, for determining the strength of the relationship between them, Spearman Rank Correlation is used and it is found that, there exists a high relation between them.

Different from Pearson Correlation, Spearman Rank Correlation is used to determine the relation between at least two *ranked variables.* Same as Pearson correlation, Spearman Rank Correlation's value also ranges from -1 to 1.

> If it is -1, it indicates a perfect negative linear relationship between variables,
>
> if it is 0, it indicates no linear relationship between variables,

if it is 1 indicates a perfect positive relationship between variables.

As it is seen from the following table, Spearman rank correlation value between Overall dynamic rank and performance rank is *0,844* (correlation is significant at the 0.01 level (2-tailed)) which means there exists a *high relationship* between them. This result justifies the dynamic approach methodology.

Table 5.4: Spearman Rank Correlation Between Overall Dynamic Rank and Performance Rank

Correlations

			Overall_rank	Performance_rank
Spearman's rho	Overall_rank	Correlation Coefficient	1,000	0,844**
		Sig. (2-tailed)	.	,000
		N	113	113
	Site_speed_summed	Correlation Coefficient	-0,844**	1,000
		Sig. (2-tailed)	,000	.
		N	113	113

**. Correlation is significant at the 0.01 level (2-tailed).

Additionally the scattered graph given below shows the strength of the connection or the correlation between the two ranked variables.

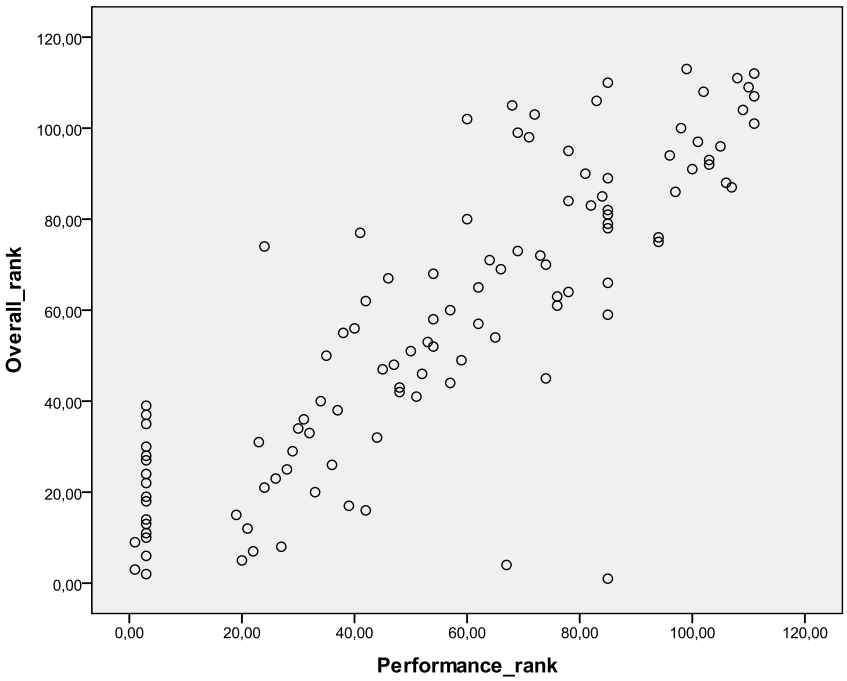

Figure 5.2: Scattered Graph of Overall Dynamic Rank and Performance Rank

CHAPTER 6

SUMMARY AND CONCLUSION

In this section, summary of the study, conclusion, future work and limitations of the study are presented.

6.1 Summary

A general look to the previous studies about web site evaluation techniques, methodologies and tools showed that, there exists no study that evaluates web sites from three perspectives which are namely static, dynamic and content. In the thesis, in order to evaluate web sites from different three perspectives, a web site evaluation method is developed, named as Web SCADA.

For the static perspective, evaluation methodology was previously generated and taken as same as it is stated. Under the name of "Static Analysis", web sites are evaluated under 8 subcategories totally consisting of 94 questions.

On the other hand, it is observed that, most studies on evaluation of the web sites are missing the dynamic perspective. For the dynamic evaluation, a new methodology is generated and the steps below are followed.

Step 1: 16 web analytic tools are used.

Step 2: Questions that can be answered from analytic tools are defined.

Step 3: A survey is applied for defining the weights of each question for evaluation.

Step 4: The weight of each question in survey is determined.

Compared to the static and dynamic perspective, content perspective needs elaborate inspection of web sites. Content of web sites are domain dependent and each domain has specific content, so for determining contents of web sites, *a specific business scope should be selected.*

For content evaluation, after selecting the business scope, the following steps are followed:

Step 1: Web site domain that to be evaluated is defined.

Step 2: Main categories and content titles of the web sites are defined and a repository is generated.

In the study, 113 web sites are evaluated from static and dynamic perspective. But since, content needs to be deep dived for each business scope and is highly domain dependent, a deep content determination work is made for sport shoe online shopping web sites. For the content evaluation 13 web sites are chosen specifically.

Results obtained from three analysis are presented in the thesis.

The major contributions of the thesis can be summarized as:

- An integrated three perspective method/approach for web site evaluation
- A comprehensive survey for determining the attributes of dynamic evaluation of web sites
- An experiment related to measurements of more than 100 web sites in three perspective.

6.2 Conclusion

In the context of the study, a new methodology is developed for evaluating web sites named as Web SCADA. This method not only provides information to web site owners about their web site but also, gives information about rivals' web pages. Comparing strengths and weaknesses acquired regularly in a timeline, the method

provides a valuable information for improving web site's visual, content and infrastructural features generating an opportunity to watch the improvements.

After the application of the developed methodology, our evaluations showed that, although there exists a medium level relation between static and content perspectives, there exists no relation between other perspectives,

In addition to the relation evaluation between static, dynamic and content perspectives; our evaluations showed that subcategories of the dynamic analysis are not generally in relation. But it is found out that there are,

- A low level correlation between Links and Advertisement Competition Data;
- A medium level correlation between Traffic Data and Advertisement Competition Data; and Audience and Advertisement Competition Data
- A high level correlation between Site Speed Analysis _Quantitative_Information and Site Speed Analysis_Size_Information.

6.3 Future Work

Web site infrastructure is changing and becoming stronger day by day and web sites are gaining new abilities every day.

Accordingly, for static analysis approach, the categories and the questions of each category may be redesigned by adding new questions or removing some questions. According to the correlation between categories and questions belonging to categories a new structure may be formed.

With the improvements in web site infrastructure, web analytic tools' variety and their abilities are increasing. Due to this progress, as time passes, analytic tools are providing more information. For this reason, it is advisable to update web analytic tools used in dynamic analysis methodology.

Additionally, since weights evaluated in dynamic analysis is an important factor, new questionnaire can be made to get experts vision which may be changed according to the improved technology and services.

Considering the increasing popularity of the usage of mobile devices, the study may be extended for evaluating mobile web evaluation.

6.4 Limitations

At the beginning of the study, the evaluation of web sites from three approaches which are static, dynamic and content; took very long time to evaluate. But after the formation of the template for evaluations, one web site has taken approximately 4-5 hours to evaluate.

Consequently, it is important to make automatic grabbing for getting data from each web site from three approaches. Automatic grabbing may be hard to apply for all questions but it is considerably be executed to some of the questions for making the evaluation period shorter and eliminating the hard work.

Additionally in this work, open source free analytic tools were used. Since they are free, some of them had a limitation for evaluating more than 5 web sites in a day and some of them provided limited data although they have ability to provide more. This work also may be done with tools which can be provided by charge.

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APPENDICES

APPENDIX A1: Evaluated Web Sites

Shopping Web Sites	Airlines Web Sites	Newspapers Web Sites	Sport Shoes Web Sites
Comet	Aeroflot	Dallas Morning News	Nike
Shoes	Air Canada	LA Times	Adidas
Bellacor	Air China	NY Times	Puma
Sonicelectronix	Air France	St Louis Today	Reebok
Play	Alitalia	Daily Mail	FILA
Sears	American Airlines	Guardian	Under Armour
Wallgreens	British Airways	Independent	New Balance
Next	Cathaypasific	Times	K-Swiss
Ikea	Delta Air	Globe and Mail	Hi-Tech
Tesco	Egypt Air	The Chronicle Herald	Keds
Argos	Emirates	Montreal Gazette	Skechers
Ioffer	Iberia	The Star	Asics
Vatan Bilgisayar	Japon Airlines	Australian	Converse
Hizli Al	KLM	Courier Mail	
Biletix	Korean Air	Sdyney Morning	
Idefix	Lufthansa	The Age	
Teknosa	Qantas	Daily News	
Sahibinden	Ryan Air	Washington Post	
Jcpenney	Scandinavian	Newyork Post	
Nordstrom	Singapore Air	USA Today	
Altrec	South Africa Air		
Aliexpress	Swiss Air		
Dell	Tam Airlines		
Crutchfield	Anadolu Jet		
Zappos	Atlas Jet		
Buy	Onur Air		
42photo	Pegasus Air		

Shopping Web Sites	Airlines Web Sites	Newspapers Web Sites	Sport Shoes Web Sites
Pabbuc	Sky Airlines		
Markafoni	Sun Express		
Morhipo	Turkish Airlines		
Trendyol			
Gittigidiyor			
Hepsiburada			
efurnitureshowroom			
220-electronics			
PC Nation			
Beachcamera			
Ritzcamera			
ABT			
Dealextreme			
Tigerdirect			
Buydig			
JR			
bhphotovideo			
Walmart			
Bestbuy			
Newegg			
Overstock			
Amazon			
Ebay			

APPENDIX A2: A Sample Site Evaluation

Nike web site from Sport Shoe web sites group is selected as an example.

Ranks and Group Distributions From Static, Dynamic and Content Approach:

	Static		Dynamic		Content	
	Rank	**Group**	**Rank**	**Group**	**Rank**	**Group**
Nike	13/113	Middle High	26/113	Middle High	2/13	High

Static Analysis Results

Ranks For Nike According To Categories:

	OVERALL Rank	**Identity Rank**	**Loading and Viewing Rank**	**Navigation Rank**	**Interactivity Rank**	**Comprehensibility Rank**	**Personalization & Content Rank**	**Information Quality & Up-to-Dateness Rank**	**Security & Miscellaneous Rank**
Nike	13/113	12/113	7/113	70/113	23/113	65/113	13/113	34/113	37/113

Weaknesses and Strengths Of Nike Web Site:

Category	Weaknesses	Strengths
Identitiy	Includes Web Master address	Existance of : Corporate / brand logo Organization chart E-mail addresses of the staff Mailing addresses of the staff Telephone/fax numbers for the staff Site map Terms of service Aids, tools and help resources
Loading and viewing	Audio availability	Loading speed of pages Platform and browser independency 24x7x365 user access Fast dynamic accessibility Usage of Graphical user interface standards Consistency, clarity and relevancy of colors, pictures and images Easy to read Consistent visual elements Effective multimedia download Attractive graphics and animations existance Availability of screen resolution sensitivity information

Category	Weaknesses	Strengths
Navigation	Inconsistent and not standardized Navigation options Slow navigation	Existance of menu structure Minimized vertical scrolling Minimized horizontal scrolling Existance of standard navigation options Meaningful and relevant links Availability of explanations for link titles Links are not broken Icons clearly represent what is intended
Interactivity	Printer-friendly version Advanced search availability User defined preferences	Effective multimedia usage Access to required information with minimum clicking E-mail communication is present Forum Chat room Questions bulletin board
Comprehensibility	Turkish language option	Website is worth spending time

Category	Weaknesses	Strengths
Personalization and Content	Customization Existence of personalized user interface	Options for new and registered users Subscription to a particular content Helpful information Received information guides the user to other helpful sources Users can easily reach the experts The system alerts for updates Do not include pages under construction
Information Quality and Up-to-datedness	Information about any planned updates or revisions	Accurate information availability Up-to-date Information Appropriate content for the intended audience Links to other related sources Links revised regularly
Security and Miscellaneous	Digital signature Small segment printing	Privacy statement Authentication ability Authorization ability SSL existence Easy printing More than one language choice

Dynamic Analysis Results

Ranks For Nike According To Categories:

	OVERALL Rank	TRAFFIC Rank	SEARCH DATA Rank	AUDIENCE DEMOGRAPHICS Rank	LINKS Rank	SOCIAL STATISTICS Rank	SITE SPEED (Quantative Inf.) Rank	SITE SPEED (Size Inf.) Rank	ADV. COMPETITION Rank
Nike	26/113	20/113	66/113	12/113	10/113	7/113	45/113	31/113	19/113

Weaknesses and Strengths Of Nike Web Site:

Category	Weaknesses	Strengths
Traffic Data	*Reach:* The ratio of the number of visitors of the site to the global Internet users over a month. *Visits:*The total number of visitors. *Unique Visitors:* Estimated number of actual users accessing a the site. *Pageviews:* The estimated number of times that the website have been accessed by users	*Competitive Rank:* Compares the traffic rank scores with the similar pages within the same business scope. *Average Load Time.*

Category	Weaknesses	Strengths
	across the internet in a period of time. *Bounce %:* Represents the percentage of single-page visits or visits in which the visitor left the site from the entrance page.	
Search Data	*Backlinks:* The number of links pointing to the site. *Pages Indexed:* The number of *pages* that have actually been identified by search engines.	*Chosen keywords relevancy* when searched by search engines. *Anchor Text Information:* Informs the visible and clickable text that is assigned as the name of the link found in each backlink.
Audience Demographics	-	-
Links	*Link Influence Score:* Based on the quality and number of links pointing to the web site.	*Link Popularity Ranking:* The rank obtained by comparing to all other links found in the database of the tool. *Nonexistence of broken links*
Social Statistics	*The number of facebook likes.* *The number of tweets.*	-
Site Speed Analysis (Quantitative Information)	-	-
Site Speed Analysis (Size Information)	-	*The total size of the main page is on average.* *The total size of all external multimedia files are on average.*

Category	Weaknesses	Strengths
Advertisement Competition Data	*Daily Adwords Ad Budget Score:* Daily budget that is paid for the keywords that are searched by search engines. *Daily Organic Traffic Value:* The value of popularity that the site gained by non paid keywords. *Organic Keywords:* The value that is gained by non paid keywords.	*Paid vs. Organic Clicks Per Day:* The information of the budget of paid vs. nonpaid keywords.

Content Analysis Results

Ranks For Nike According To 16 Categories:

PART 1 (Overall, Woman, Man, Boys and Girls Categories)

	Overall		Woman		Man		Boys		Girls	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank
Nike	**321**	**2/13**	80	3/13	93	2/13	72	2/13	72	2/13

PART 2 (Age, Shoe's Type, Model, Size, Width and Color Categories)

	Age		Shoes'Type		Model		Size		Width		Color	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank
Nike	6	4/13	51	2/13	30	3/13	109	1/13	11	2/13	63	1/13

PART 3 (Collections, Technology, Special Selection, Fit Type and Material Categories)

	Collections		Technology		Special Selection		Fit Type		Material	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank
Nike	38	2/13	0	5/13	8	2/13	0	2/13	0	1/13

Weaknesses and Strengths Of Nike Web Site:

Weaknesses (by category)	Strengths (by category)
Collections	Shoe Type
Technology	Model
Special Selection	Size
Fit Type	Color
Material	

APPENDIX A3.1: Categories, Questions and Weights for Static Analysis

Identity	**120**
Includes a corporate / brand logo	10
Includes an organization chart	10
Includes e-mail addresses of the staff	10
Includes mailing addresses of the staff	15
Includes telephone/fax numbers for the staff	15
Includes Web Master address	15
Includes a site map	10
The site has been reviewed by an agency	10
Terms of service available	10
Includes aids, tools and help resources	10
Domain's (e.g. edu, com, gov) influence on the evaluation	5
Loading and Viewing	**125**
Pages load quickly	15
Site is platform and browser independent	10
Has 24x7x365 user access	5
Dynamic accessibility is fast	10
Page formats are standard	10
Usage of Graphical user interface standards	10
Consistency, clarity and relevancy of Colors, pictures and images	5
Easy to read	10
Visual elements are used consistently	10
Audio available	5
Multimedia is downloaded effectively	10
Includes animations	10
Graphics and animations attract attention	5
Screen resolution sensitivity information available	5
Text is downloadable	5
Navigation	**125**
Menu structure is present	10
Vertical scrolling is minimized	10
Horizontal scrolling is minimized	15
All pages include standard navigation options (back, forward, main page)	15
Navigation options are consistent and standardized on all pages	10
Links are meaningful and relevant to the subject	10
Explanations available for link titles	10
Links are not broken	10
On main page, it is possible to judge how the web site is organized and what options are available	10
Icons clearly represent what is intended	10

Navigation is fast	10
Navigation options give an impression of a professional design	5
Interactivity	**150**
Multimedia usage is effective	10
Printer-friendly version available	10
Access to required information requires minimum clicking	15
Keyword searching is available	15
Well programmed advanced search options are available	10
Dynamic information is available	10
Dynamic access to data is possible	10
User defined preferences are available	10
E-mail communication is present	5
Comments forum is available	10
Chat room is present	10
Questions bulletin board is present	10
Queries or complaints are resolved within 24 hours	10
FAQ pages are available	15
Comprehensibility	**100**
Cultural, artistic and traditional issues are covered	15
Number and type of links are meaningful	15
Forms to enter personal details are self explanatory	15
Turkish language is well used, spelling and grammar is correct	10
Font sizes are appropriate / Lets user control font size	10
Website is worth spending time	15
Website presentation is eye-catching	10
Website occupies the user and attracts attention/interest	10
Personalization&Content	**150**
Website offers user specific services	10
Registration is simple	10
Main page contains options for new and registered users	10
Customization is possible	10
User interface can be personalized	10
Subscription to a particular content is possible	15
Offers one-entry-one-exit option	10
Received information is helpful	10
Received information guides the user to other helpful sources	10
Users can easily reach the experts within the organization	15
The system alerts the users for updates	10
Do not Include pages under construction	10
On-line information is available	10
Includes an e-library	10
Information Quality&Up-to-datedness	**125**
No incorrect information available	10
Information is up-to-date and date of recent revision is	10

given	
Content is appropriate for the intended audience	15
Original information is supplied	15
Links to other related sources are present	10
Links are given in a logical order	15
Links are up-to-date	10
Links are revised regularly	10
Date of information is given	10
Date of current version/last revision is given	10
Information about any planned updates or revisions is given	10
Security&Miscellaneous	**105**
Includes privacy statement	10
Authentication ability available	10
Authorization ability available	10
SSL (Secure Sockets Layer) is used	20
Digital signature is used	10
Website has received an award	15
Information can be printed without the need to change the original system configuration of the user	10
Page layout is suitable for printing in small segments	10
Website is available in more than one language	10
Overall Static Evaluation Total	**1000**

APPENDIX A3.2: Static Analysis Algorithm

```
StaticAnalysis_MainAlgorithm;
Q(I,J): questions matrix where I:category number
                               J:question number
seval(K,I,J): static evaluation matrix where K:website number
                                             I:category number
                                             J:question number
Begin
      update_questions_matrix Q(I,J);*for updating the
                                     questions belonging to
                                     each category*
      update_seval_matrix seval(K,I,J);*for updating the
                                     evaluated grades for
                                     questions belonging to
                                     each category*
      overall_score_evaluation;      *for evaluating the total
                                     score for each web site*
      score_by_categories_evaluation *for evaluating the
                                     scores corresponding to
                                     each category and sorting
                                     web sites for each
                                     category for each web
                                     site*


End StaticAnalysis_MainAlgorithm


update_questions_matrix Q(I,J);
Begin
      For I=1 to #_of_categories
            For J=1 to max_#_of_questions
                  Q(I,J)=0
                  If J<max_#_of_question_number at Category I
                                             then Input Q(I,J)
            End
      End
End update_question_matrix


update_seval_matrix seval(K,I,J);
Begin
      For K=1 to #_of_websites
            For I=1 to #_of_categories
                  For J=1 to max_#_of_questions
                        If Q(I,J)=0 then exit loop
                        Input seval(K,I,J)
                  End
```

```
            End
      End
End update_seval_matrix

overall_score_evaluation;
W(K): array of website scores where K:website number

Begin
      For K=1 to #_of_websites
            W(K):=0;
            For I=1 to #_of_categories
                  For J=1 to max_#_of_questions
                        W(K)=W(K)+seval(K,I,J);
                  End
            End
      End
End overall_score_evaluation



Score_by_categories_evaluation;
W(K,I): categories evaluation matrix where K:website number
                                          I:# of categories
Begin
      For K=1 to #_of_websites
            For I=1 to #_of_categories
                  W(K,I):=0;
                  For J=1 to 15
                        W(K,I)=W(K,I)+seval(K,I,J);
                  End
            End
      End
      For K=1 to #_of_websites
            For I=1 to max_#_of_questions
                  Sort W(K,I) in descending order
            End
      End
End Score_by_categories_evaluation
```

APPENDIX A3.3: Static Analysis Results

Identity, Loading and Viewing, Navigation, Interactivity, Comprehensibility, Personalization & Content, Information Quality& Up-to-Datedness, Security & Miscellaneous

Web Sites	OVERALL		Identity		Loading and Viewing		Navigation		Interactivity		Comprehensibility		Personalization & Content		Information Quality & Up-to-Datedness		Security & Miscellaneous	
	Over Total Score 1000	Rank	Score Over 120	Rank	Score Over 125	Rank	Score Over 125	Rank	Score Over 150	Rank	Score Over 100	Rank	Score Over 150	Rank	Score Over 125	Rank	Score Over 105	Rank
LA Times	886	1	105	12	110	21	120	10	120	17	94	13	137	1	115	1	85	3
NY Times	850	2	91	31	112	11	120	10	120	17	100	1	132	2	115	1	60	43
ABT	850	2	113	3	114	6	121	8	133	5	64	74	123	5	107	22	75	17
American Airlines	849	4	96	21	119	1	116	24	127	8	98	8	125	3	81	67	87	2
Beach Camera	816	5	109	9	112	11	112	38	120	17	66	67	116	11	107	22	74	23
Guardian	811	6	100	17	96	66	107	52	103	56	100	1	125	3	115	1	65	37
Newegg	810	7	116	1	109	24	110	45	122	14	72	50	108	25	115	1	58	57
KLM	801	8	85	38	97	58	106	56	118	25	90	23	115	13	110	12	80	10
Globe and Mail	796	9	85	38	95	70	117	20	115	29	92	16	117	9	110	12	65	37
British Airways	794	10	81	56	105	31	103	63	115	29	92	16	112	19	101	32	85	3
St Louis Today	793	11	95	22	98	50	115	28	110	41	90	23	110	22	115	1	60	43

Web Sites	OVERALL		Identity		Loading and Viewing		Navigation		Interactivity		Comprehensibility		Personalization & Content		Information Quality & Up-to-Datedness		Security & Miscellaneous	
	Over Total Score 1000	Rank	Score Over 120	Rank	Score Over 125	Rank	Score Over 125	Rank	Score Over 150	Rank	Score Over 100	Rank	Score Over 150	Rank	Score Over 125	Rank	Score Over 105	Rank
Air France	788	12	81	56	112	11	102	65	119	23	94	13	120	6	78	74	82	6
Nike	784	13	105	12	113	7	100	70	119	23	67	65	115	13	100	34	65	37
Keds	784	13	110	6	112	11	116	24	120	17	65	68	116	11	85	48	60	43
Dell	782	15	85	38	118	2	110	45	139	1	71	53	114	16	75	89	70	26
Amazon	782	15	98	20	109	24	99	71	122	14	56	88	102	32	115	1	81	7
Bestbuy	781	17	111	4	91	90	104	62	112	39	55	95	109	24	106	26	93	1
Dallas Morning News	779	18	70	83	90	96	110	45	115	29	92	16	107	27	110	12	85	3
Deal Extreme	779	18	95	22	102	36	108	51	124	13	64	74	111	20	107	22	68	32
Montreal Gazette	777	20	85	38	90	96	125	1	105	47	100	1	107	27	115	1	50	65
Overstock	776	21	111	4	99	42	102	65	126	9	63	77	108	25	109	18	58	57
The Star	772	22	90	32	98	50	116	24	100	60	95	11	113	18	110	12	50	65
Zappos	770	23	85	38	111	17	103	63	136	2	75	46	95	43	110	12	55	62
Tımes	758	24	62	93	100	39	122	6	115	29	100	1	104	31	110	12	45	73
Australian	755	25	82	54	98	50	125	1	115	29	85	29	90	61	105	27	55	62
Ebay	754	26	95	22	92	81	95	80	134	4	65	68	89	65	113	11	71	25
Skechers	752	27	75	66	112	11	109	50	115	29	81	36	111	20	85	48	64	41
Vatan Bilgisayar	751	28	85	38	115	3	115	28	113	37	84	31	92	58	85	48	62	42
Korean Air	750	29	78	61	105	31	107	52	100	60	87	26	118	8	85	48	70	26
Sahibinden	749	30	85	38	112	11	112	38	135	3	71	53	89	65	105	27	40	80

Web Sites	OVERALL		Identity		Loading and Viewing		Navigation		Interactivity		Comprehensibility		Personalization & Content		Information Quality & Up-to-Datedness		Security & Miscellaneous	
	Over Total Score 1000	Rank	Score Over 120	Rank	Score Over 125	Rank	Score Over 125	Rank	Score Over 150	Rank	Score Over 100	Rank	Score Over 150	Rank	Score Over 125	Rank	Score Over 105	Rank
K-Swiss	747	31	115	2	95	70	110	45	101	58	65	68	100	33	82	64	79	15
Adidas	744	32	102	16	106	29	90	87	118	25	75	46	95	43	98	36	60	43
Altrec	743	33	95	22	111	17	106	56	129	6	56	88	91	60	95	38	60	43
Courier Mail	741	34	83	52	97	58	125	1	120	17	85	29	76	86	105	27	50	65
Puma	731	35	90	32	113	7	115	28	114	36	71	53	89	65	80	69	59	54
Sdyney Morning	730	36	73	76	97	58	116	24	83	84	100	1	86	71	115	1	60	43
Hizlial	727	37	65	88	115	3	117	20	125	11	71	53	90	61	85	48	59	54
Air Canada	724	38	78	61	97	58	106	56	87	76	86	28	114	16	76	84	80	10
Cathay Pasific	723	39	73	76	92	81	106	56	113	37	79	41	115	13	70	103	75	17
Egypt Air	723	39	48	106	111	17	112	38	106	45	89	25	107	27	75	89	75	17
Iberia	723	39	65	88	92	81	102	65	108	43	91	21	100	33	90	42	75	17
Scandinavian	723	39	90	32	99	42	118	17	88	71	79	41	97	41	86	46	66	36
Turkish Airlines	723	39	72	81	101	37	119	15	88	71	100	1	93	51	75	89	75	17
Japon Airlines	719	44	62	93	89	98	102	65	110	41	91	21	110	22	85	48	70	26
Qantas	717	45	74	75	95	70	115	28	90	69	92	16	93	51	83	59	75	17
Swiss Air	715	46	75	66	96	66	114	35	101	58	87	26	100	33	61	107	81	7
Biletix	715	46	100	17	111	17	89	89	100	60	81	36	92	58	72	99	70	26
Alitalia	707	48	75	66	91	90	120	10	79	86	81	36	100	33	81	67	80	10
Singapore Air	707	48	73	76	99	42	117	20	90	69	97	9	86	71	77	78	68	32

Web Sites	OVERALL		Identity		Loading and Viewing		Navigation		Interactivity		Comprehensibility		Personalization & Content		Information Quality & Up-to-Datedness		Security & Miscellaneous	
	Over Total Score 1000	Rank	Score Over 120	Rank	Score Over 125	Rank	Score Over 125	Rank	Score Over 150	Rank	Score Over 100	Rank	Score Over 150	Rank	Score Over 125	Rank	Score Over 105	Rank
Lufthansa	705	50	79	60	77	110	101	69	100	60	78	44	105	30	85	48	80	10
South Africa Air	702	51	75	66	99	42	120	10	80	85	97	9	93	51	78	74	60	43
Anadolu Jet	702	51	75	66	92	81	119	15	92	68	82	33	94	50	76	84	72	24
Crutchfield	702	51	95	22	107	27	106	56	126	9	48	110	117	9	73	98	30	92
Hi-tech	699	54	90	32	106	29	117	20	97	64	68	63	95	43	82	64	44	76
The Age	699	54	58	98	98	50	115	28	88	71	100	1	95	43	115	1	30	92
The Chronicle Herald	698	56	60	95	98	50	118	17	105	47	82	33	80	81	105	27	50	65
Pegasus Air	697	57	83	52	101	37	123	4	67	102	79	41	93	51	83	59	68	32
Independent	694	58	50	103	96	66	112	38	107	44	80	40	99	39	105	27	45	73
New Balance	692	59	90	32	99	42	98	73	87	76	62	80	95	43	80	69	81	7
Argos	689	60	103	14	113	7	90	87	106	45	50	106	82	77	75	89	70	26
Trendyol	686	61	110	6	107	27	115	28	52	111	72	50	80	81	108	19	42	77
Ali Express	679	62	45	108	113	7	107	52	128	7	55	95	119	7	77	78	35	85
Washington Post	677	63	85	38	91	90	80	105	122	14	76	45	88	68	115	1	20	103
GittiGidiyor	675	64	85	38	100	39	97	75	104	52	65	68	96	42	90	42	38	83
Delta Air	674	65	85	38	92	81	112	38	120	17	69	61	85	73	61	107	50	65
Atlas Jet	673	66	73	76	97	58	120	10	73	94	82	33	95	43	86	46	47	72
Aeroflot	672	67	80	58	99	42	110	45	59	107	92	16	95	43	77	78	60	43
Ritz Camera	670	68	107	11	95	70	84	95	112	39	52	102	49	109	92	41	79	15

Web Sites	OVERALL		Identity		Loading and Viewing		Navigation		Interactivity		Comprehensibility		Personalization & Content		Information Quality & Up-to-Datedness		Security & Miscellaneous	
	Over Total Score 1000	Rank	Score Over 120	Rank	Score Over 125	Rank	Score Over 125	Rank	Score Over 150	Rank	Score Over 100	Rank	Score Over 150	Rank	Score Over 125	Rank	Score Over 105	Rank
Daily Mail	669	69	43	111	85	105	105	61	95	66	95	11	93	51	108	19	45	73
Emirates	668	70	42	112	98	50	123	4	105	47	93	15	80	81	60	110	67	35
Teknosa	667	71	50	103	109	24	112	38	115	29	74	49	75	89	72	99	60	43
Buy	666	72	75	66	110	21	74	108	125	11	51	104	99	39	76	84	56	60
Daily News	662	73	103	14	95	70	96	79	117	28	53	99	70	93	108	19	20	103
Tam Airlines	657	74	60	95	99	42	118	17	55	108	71	53	100	33	74	96	80	10
Sonic Electronix	653	75	109	9	99	42	75	107	104	52	67	65	62	99	77	78	60	43
Idefix	647	76	65	88	100	39	111	44	102	57	64	74	75	89	75	89	55	62
Fila	646	77	85	38	115	3	97	75	70	100	72	50	84	76	67	104	56	60
Usa Today	641	78	85	38	98	50	91	85	104	52	65	68	77	85	101	32	20	103
Tiger Direct	637	79	82	54	97	58	91	85	86	79	58	84	81	78	85	48	57	59
HepsiBurada	632	80	78	61	98	50	92	83	87	76	65	68	93	51	97	37	22	101
BuyDig	632	80	78	61	104	33	81	100	97	64	68	63	90	61	84	58	30	92
Newyork Post	627	82	85	38	96	66	82	97	104	52	58	84	70	93	107	22	25	100
Air China	625	83	75	66	88	99	107	52	68	101	63	77	81	78	83	59	60	43
Ryan Air	621	84	51	102	85	105	113	37	73	94	61	82	88	68	80	69	70	26
Comet	620	85	95	22	104	33	86	93	84	83	58	84	90	61	93	39	10	112
Bhphotovideo	618	86	85	38	92	81	97	75	76	91	58	84	100	33	90	42	20	103
Sun Express	616	87	39	113	79	109	122	6	66	103	83	32	88	68	74	96	65	37

Web Sites	OVERALL		Identity		Loading and Viewing		Navigation		Interactivity		Comprehensibility		Personalization & Content		Information Quality & Up-to-Datedness		Security & Miscellaneous	
	Over Total Score 1000	Rank	Score Over 120	Rank	Score Over 125	Rank	Score Over 125	Rank	Score Over 150	Rank	Score Over 100	Rank	Score Over 150	Rank	Score Over 125	Rank	Score Over 105	Rank
Morhipo	610	88	70	83	110	21	114	35	72	98	63	77	59	105	100	34	22	101
Onur Air	608	89	55	100	91	90	121	8	62	106	62	80	93	51	82	64	42	77
Nordstrom	606	90	70	83	97	58	95	80	118	25	44	111	76	86	75	89	31	91
Asics	603	91	110	6	104	33	87	92	105	47	56	88	37	113	64	106	40	80
Ioffer	603	91	95	22	94	76	98	73	86	79	49	107	62	99	60	110	59	54
Jr	598	93	71	82	92	81	89	89	74	92	69	61	75	89	93	39	35	85
42photo	594	94	95	22	93	78	97	75	105	47	56	88	40	111	80	69	28	98
Next	591	95	65	88	91	90	95	80	79	86	75	46	66	97	90	42	30	92
Converse	590	96	100	17	71	112	59	113	73	94	71	53	81	78	85	48	50	65
Reebok	583	97	75	66	94	76	81	100	85	82	71	53	76	86	61	107	40	80
Markafoni	574	98	66	87	95	70	92	83	78	88	81	36	70	93	76	84	16	110
Jcpenney	571	99	45	108	91	90	99	71	88	71	59	83	85	73	72	99	32	89
Pabbuc	564	100	73	76	88	99	70	111	86	79	55	95	79	84	85	48	28	98
Under Armour	561	101	67	86	88	99	81	100	88	71	56	88	72	92	77	78	32	89
Sky Airlines	553	102	46	107	85	105	115	28	42	112	70	60	85	73	72	99	38	83
Bellacor	548	103	95	22	88	99	74	108	78	88	56	88	61	102	76	84	20	103
PCNation	547	104	87	37	97	58	82	97	64	104	56	88	49	109	77	78	35	85
Sears	535	105	80	58	92	81	83	96	54	110	53	99	60	103	83	59	30	92
Efurniture Showroom	534	106	75	66	93	78	88	91	63	105	52	102	67	96	79	73	17	109

Web Sites	OVERALL		Identity		Loading and Viewing		Navigation		Interactivity		Comprehensibility		Personalization & Content		Information Quality & Up-to-Datedness		Security & Miscellaneous	
	Over Total Score 1000	Rank	Score Over 120	Rank	Score Over 125	Rank	Score Over 125	Rank	Score Over 150	Rank	Score Over 100	Rank	Score Over 150	Rank	Score Over 125	Rank	Score Over 105	Rank
Shoes	531	107	53	101	93	78	81	100	94	67	53	99	62	99	75	89	20	103
Play	519	108	45	108	92	81	81	100	74	92	55	95	54	108	83	59	35	85
Wallgreens	516	109	76	65	88	99	82	97	55	108	51	104	56	107	78	74	30	92
İkea	513	110	50	103	86	104	85	94	77	90	49	107	60	103	65	105	41	79
Tesco	493	111	60	95	80	108	79	106	73	94	35	112	59	105	59	112	48	71
Walmart	482	112	63	92	77	110	71	110	71	99	49	107	63	98	78	74	10	112
220-electronics	316	113	56	99	56	113	63	112	14	113	16	113	39	112	59	112	13	111

APPENDIX A3.4: Static Analysis Results for Shopping Web Sites

Web Sites	Score Over 1000	Ranks
ABT	850	1
Beach Camera	816	2
Newegg	810	3
Dell	782	4
Amazon	782	4
Best Buy	781	6
Deal Extreme	779	7
Over Stock	776	8
Zappos	770	9
Ebay	754	10
Vatan Bilgisayar	751	11
Sahibinden	749	12
Altrec	743	13
Hizlial	727	14
Biletix	715	15
Crutchfield	702	16
Argos	689	17
Trendyol	686	18
Ali Express	679	19
GittiGidiyor	675	20
Ritz Camera	670	21
Teknosa	667	22
Buy	666	23
Sonic Electronix	653	24
Idefix	647	25
Tigerdirect	637	26
Hepsi Burada	632	27
Buydig	632	27
Comet	620	29
Bhphotovideo	618	30
Morhipo	610	31
Nordstrom	606	32
Ioffer	603	33
Jr	598	34
42photo	594	35
Next	591	36

Web Sites	Score Over 1000	Ranks
Markafoni	574	37
Jc Penney	571	38
Pabbuc	564	39
Bellacor	548	40
Pcnation	547	41
Sears	535	42
Efurniture Showroom	534	43
Shoes	531	44
Play	519	45
Wallgreens	516	46
Ikea	513	47
Tesco	493	48
Walmart	482	49
220-electronics	316	50

APPENDIX A3.5: Static Analysis Results for Airline Web Sites

Web Sites	Score Over 1000	Ranks
American Airlines	849	1
KLM	801	2
British Airways	794	3
Air France	788	4
Korean Air	750	5
Air Canada	724	6
Cathaypasific	723	7
Egypt Air	723	7
Iberia	723	7
Scandinavian	723	7
Turkish Airlines	723	7
Japon Airlines	719	12
Qantas	717	13
Swiss Air	715	14
Alitalia	707	15
Singapore Air	707	15
Lufthansa	705	17
South Africa Air	702	18
Anadolu Jet	702	18
Pegasus Air	697	20
Delta Air	674	21
Atlas Jet	673	22
Aeroflot	672	23
Emirates	668	24
Tam Airlines	657	25
Air China	625	26
Ryan Air	621	27
Sun Express	616	28
Onur Air	608	29
Sky Airlines	553	30

APPENDIX A3.6: Static Analysis Results for Newspaper Web Sites

Web Sites	Score Over 1000	Ranks
LA Times	886	1
NY Times	850	2
Guardian	811	3
Globe and Mail	796	4
St Louis Today	793	5
Dallas Morning News	779	6
Montreal Gazette	777	7
The Star	772	8
Times	758	9
Australian	755	10
Courier Mail	741	11
Sdyney Morning	730	12
The Age	699	13
The Chronicle Herald	698	14
Independent	694	15
Washington Post	677	16
Daily Mail	669	17
Daily News	662	18
USA Today	641	19
Newyork Post	627	20

APPENDIX A3.7: Static Analysis Results for Sport Shoe Web Sites

Web Sites	Score Over 1000	Ranks
Nike	784	1
Keds	784	1
Skechers	752	3
K-Swiss	747	4
Adidas	744	5
Puma	731	6
Hi-Tech	699	7
New Balance	692	8
FILA	646	9
Asics	603	10
Converse	590	11
Reebok	583	12
Under Armour	561	13

APPENDIX A4.1: List of Analytic Information Reached by The Analytic Tools

No	TRAFFIC DATA
1	Traffic Rank
2	Competitive Rank
3	Reach
4	Visits
5	Unique Visitors
6	Visitors by country
7	Comparison to Prior Period (Daily-Weekly-Monthly)
8	Avg visit per cookie
9	Pageviews
10	Pageviews/User
11	Bounce %
12	Time on site
13	Search %
14	Average Load Time
15	Regional Traffic Ranks
16	Subdomains
17	Visit Sessions
	SEARCH DATA
18	Search Traffic
19	Top Queries from Search Traffic
20	Search Traffic on the Rise and Decline
21	High Impact Search Queries
22	Page Keywords
	AUDIENCE DEMOGRAPHICS
23	Age
24	Gender
25	Education
26	Has Children
27	Browsing Location
28	Ethnicity
29	Household Income
30	Audience Interests
31	Audience Also Likes
	LINKS

32	Backlinks
33	Linking Root Domains
34	Total Links
35	Inbound Links
36	Anchor Text
37	Compare Link Metrics
38	HTTP Status
39	Last Link Added On
40	Link Influence Score
41	Link Popularity Ranking
42	Broken Links Check
	SOCIAL STATISTICS
43	Facebook Shares
44	Facebook Likes
45	Tweets
46	Google+1
47	Delicious
48	In Share
	SITE SPEED ANALYSIS
49	Total numbers of HTML files
50	The total number of objects
51	The total number of images
52	The total number of external CSS files
53	The total size of the page
54	The total number of external script files
55	The total size of the mainpage
56	The total size of the images
57	The total size of external scripts
58	The total size of external CSS
59	The total size of all external multimedia files
	READABILITY REPORT
60	Readability grades
61	Sentence Info
62	Word Usage
63	Sentence beginnings
	WEBSITE GRADE
64	Website grade
65	MOZ Rank

66	Mobile optimization
67	Tweet grade
68	Number of RSS feed
69	Number of web forms
	ADVERTISEMENT COMPETITION DATA
70	PPC Rank
71	SEO Rank
72	Daily Adwords (PPC) Ad Budget
73	Avg. Ad Position / # Advertisers
74	Daily Organic (SEO) Traffic Value
75	Paid vs. Organic Clicks Per Day
76	Ten best paid keywords
77	Paid keywords
78	Top Ad competitors
79	Organic keywords
80	Top organic competitors
81	Number of Paid Adds
	DOMAIN DETAILS
82	Address
83	Whois
84	DNS
85	IP Address
86	Server Location
	REVIEWS
87	Organization
88	Website
89	**CLICK STREAMS**
90	**PAGES INDEXED**
91	**TRUSTGAUGE SCORE**
92	Unique Backlinks
	ON-SITE FACTORS
93	HTTP status code
94	Robots.txt

95	Sitemap.xml
96	**CASHED SITE DETAILS**

APPENDIX A4.2: Eliminated 22 Questions From Full Question Set

No	TRAFFIC DATA	ELIMINATION REASON
7	Comparison to Prior Period (Daily-Weekly-Monthly)	Neglected because monthly comparison is taken as a scale which regards to traffic rank.
8	Avg visit per cookie	Avg visit per cookie
13	Search %	It regards to the estimated percentage of visits to amazon.com that came from a search engine. Eliminated because it refers to a specific engine.
	AUDIENCE DEMOGRAPHICS	
31	Audience Also Likes	Ranking with other web sites is impossible. It is just an information
	LINKS	
33	Linking Root Domains	It regards to the number of unique root domains (e.g. *.example.com) containing at least one linking page to this URL. Neglected since it is almost the same data with backlinks.
39	Last Link Added On	Tools did not give any consistent data for this item.
	SOCIAL STATISTICS	
48	In Share	Tools did not give any consistent data for this item.
	ADVERTISEMENT COMPETITION DATA	
73	Avg. Ad Position / # Advertisers	The other questions in the survey cover this question.
74	Daily Organic (SEO) Traffic Value	The other questions in the survey cover this question.
	DOMAIN DETAILS	
82	Address	Ranking with other web sites is impossible. It is just an information
83	Whois	Ranking with other web sites is impossible. It is just an information
84	DNS	Ranking with other web sites

		is impossible. It is just an information
85	IP Address	Ranking with other web sites is impossible. It is just an information
86	Server Location	Ranking with other web sites is impossible. It is just an information
	REVIEWS	
87	Organization	Ranking with other web sites is impossible. It is just an information
88	Website	Ranking with other web sites is impossible. It is just an information
89	**CLICK STREAMS**	Ranking with other web sites is impossible. It is just an information
91	**TRUSTGAUGE SCORE**	It is a special score achieved from a single tool "Ranking.com" and does not reflect the general score
92	Unique Backlinks	Tools did not give any consistent and comparable data for this item.
	ON-SITE FACTORS	
94	Robots.txt	Ranking with other web sites is impossible. It is just an information
95	Sitemap.xml	Ranking with other web sites is impossible. It is just an information
96	**CASHED SITE DETAILS**	Ranking with other web sites is impossible. It is just an information

APPENDIX A4.3: Automated Tools Used for Each Data Item

	ALEXA	DOUBLE CLICK AD PLANNER	QUANTCAST	SITE ANALYTICS (COMPETE)	RANKING.COM	WEB SITE OPTIMIZATION	READABILITY.INFO	WEBSITE GRADER	OPEN SITE EXPLORER	SPYFU	BROKEN LINK CHECKER	BACKLINKWATCH	GORANK	BUILTWITH	FREE BACKLINK CHECK	ATTENTION METER
TRAFFIC DATA																
Traffic Rank	1		1	1	1			1	1							1
Competative Rank				1												
Reach	1	1														
Visits		1	1													1
Unique Visitors		1	1	1	1			1								1
Pageviews	1	1			1											
Pageviews/User	1	1														1
Bounce %	1		1													
Time on site	1	1														
Average Load Time	1													1		
Regional Traffic Ranks	1															
Subdomains										1						
SEARCH DATA																
Search Traffic	1															
Top Queries from Search Traffic	1	1														

	ALEXA	DOUBLE CLICK AD PLANNER	QUANTCAST	SITE ANALYTICS (COMPETE)	RANKING.COM	WEB SITE OPTIMIZATION	READABILITY.INFO	WEBSITE GRADER	OPEN SITE EXPLORER	SPYFU	BROKEN LINK CHECKER	BACKLINKWATCH	GORANK	BUILTWITH	FREE BACKLINK CHECK	ATTENTION METER
High Impact Search Queries	1															
Page Keywords														1		
Backlinks	1				1			1	1			1			1	
Pages Indexed								1								
Anchor Text									1							
AUDIENCE DEMOGRAPHICS																
Age	1	1	1													
Education	1	1	1													
Browsing Location	1															
Ethnicity	1		1													
LINKS																
HTTP Status									1				1			
Link Influence Score															1	
Link Popularity Ranking					1										1	
Broken Links Check											1					
SOCIAL STATISTICS																
Facebook Shares								1						1		
Facebook Likes								1							1	
Tweets								1							1	
Google+1															1	

	ALEXA	DOUBLE CLICK AD PLANNER	QUANTCAST	SITE ANALYTICS (COMPETE)	RANKING.COM	WEB SITE OPTIMIZATION	READABILITY.INFO	WEBSITE GRADER	OPEN SITE EXPLORER	SPYFU	BROKEN LINK CHECKER	BACKLINKWATCH	GORANK	BUILTWITH	FREE BACKLINK CHECK	ATTENTION METER
Delicious														1		
SITE SPEED ANALYSIS (Quantitative Information)																
Total numbers of HTML files						1										
The total number of objects						1										
The total number of images						1										
The total number of external CSS files						1										
The total number of external script files						1										
Word Usage							1									
Sentence beginnings							1									
SITE SPEED ANALYSIS (Size Information)																
The total size of the page						1										
The total size of the mainpage						1										
The total size of the images						1										
The total size of external scripts						1										
The total size of external CSS						1										
The total size of all external multimedia files						1										
ADVERTISEMENT COMPETITION DATA																
PPC Rank										1						
SEO Rank										1				1		
Daily Adwords (PPC) Ad Budget										1						

	ALEXA	DOUBLE CLICK AD PLANNER	QUANTCAST	SITE ANALYTICS (COMPETE)	RANKING.COM	WEB SITE OPTIMIZATION	READABILITY.INFO	WEBSITE GRADER	OPEN SITE EXPLORER	SPYFU	BROKEN LINK CHECKER	BACKLINKWATCH	GORANK	BUILTWITH	FREE BACKLINK CHECK	ATTENTION METER
Avg. Ad Position / # Advertisers										1						
Daily Organic (SEO) Traffic Value										1						
Paid vs. Organic Clicks Per Day										1						
Organic keywords										1					1	

APPENDIX A4.4: Dynamic Analysis Algorithm

```
DynamicAnalysis_MainAlgorithm;
DI(C,Q): data items matrix where C:category number
                                 Q:dataitem number
reval(W,T,C,Q): dynamic raw evaluation matrix
                                       where W:website number
                                             T:tool number
                                             C:category number
                                             Q:dataitem number
deval(W,C,Q): dynamic evaluation matrix
                                       where W:website number
                                             C:category number
                                             Q:dataitem number
Begin
     update_dataitems_matrix DI(C,Q);*for updating the data
                                     items belonging to each
                                     category*
     update_reval_matrix reval(W,T,C,Q);*for updating the
                                     evaluated scores for each
                                     data item belonging to a
                                     category  for existing
                                     tools*
     update_deval_matrix deval(W,C,Q); *for evaluating the
                                     normalized scores for
                                     each data item
                                     corresponding to a
                                     category. For each data
                                     item, if scores for that
                                     item comes from more than
                                     one tool, each score is
                                     converted to same unit
                                     and averages of each
                                     score belonging to
                                     different tools is
                                     calculated*
     evaluate_overall_score;         *for evaluating the total
                                     score for each web site*
     evaluate_score_by_categories;   *for evaluating the
                                     scores corresponding to
                                     each category and sorting
                                     web sites for each
                                     category for each web
                                     site*

End DynamicAnalysis_Algorithm

update_dataitems_matrix DI(C,Q);
Begin
      For C=1 to #_of_categories
            For Q=1 to max_#_of_dataitems
```

```
                DI(C,Q)=0
                If Q<max_#_of_dataitems at Category C then
                                                Input DI(C,Q)
          End
     End
End update_dataitems_matrix


update_reval_matrix reval(W,T,C,Q);
Begin
     For W=1 to #_of_websites
          For T=1 to #_of_Tools
               For C=1 to #_of_Categories
                    For Q=1 to max_#of_Questions
                         Reval(W,T,C,Q):=0;
                         If DI(C,Q)=0 then exit loop
                         Input reval(W,T,C,Q)
                    End
               End
          End
     End
End update_reval_matrix


update_deval_matrix deval(W,C,Q);
Begin
  For W=1 to #_of_websites
    For C=1 to #_of_Categories
      For Q=1 to max_#of_Questions
        deval(W,C,Q):=0;
        N:=0;
        For T=1 to #_of_Tools
          Convert reval(W,T,C,Q) to same unit
          if reval(W,T,C,Q)<>0 then N:=N+1;
          deval(W,C,Q)=deval(W,C,Q)+reval(W,T,C,Q);
        End
        deval(W,C,Q):=deval(W,C,Q)/N;
      End
    End
  End
  Normalize deval(W,C,Q) out of 100
End update_deval_matrix


overall_score_evaluation;
W(K): array of website scores where K:website number
Begin
     For K=1 to #_of_websites
          W(K):=0;
          For C=1 to #_of_Categories
               For Q=1 to max_#of_Questions
                    W(K)=W(K)+deval(K,C,Q);
               End
          End
```

```
      End
End overall_score_evaluation

Score_by_categories_evaluation;
W(K,C): categories evaluation matrix where K:website number
                                           C:category number
Begin
      For K=1 to #_of_websites
            For C=1 to #_of_Categories
                  W(K,C):=0;
                  For Q=1 to max_#of_Questions
                        W(K,C)=W(K,C)+deval(K,C,Q);
                  End
            End
      End

      For K=1 to #_of_websites
            For C=1 to #_of_Categories
                  Sort W(K,C) in descending order
            End
      End
End Score_by_categories_evaluation
```

APPENDIX A4.5: Dynamic Analysis Results

Traffic, Search, Audience Demographics, Links, Social Statistics, Site Speed, Readability, Website Grade And Advertisement Competition Data

Web Sites	OVERALL TOTALS (Over 1000)	Rank	TRAFFIC DATA (Over 240)	Rank	SEARCH DATA (Over 148)	Rank	AUDIENCE DEMOGRAPHICS (Over 66)	Rank	LINKS (Over 82)	Rank	SOCIAL STATISTICS (Over 91)	Rank	SITE SPEED (Quantative Inf.) (Over 104)	Rank	SITE SPEED (Size Inf.) (Over 111)	Rank	ADV COMPETITION DATA (Over 158)	Rank
Amazon	579	1	184	2	97	1	37	44	57	5	10	86	31	91	38	75	124	1
FILA	564	2	112	25	73	17	31	86	55	87	19	17	96	5	111	1	70	53
Tesco	561	3	110	41	68	28	31	87	57	44	11	82	104	1	111	1	70	29
Ebay	559	4	193	1	63	47	39	29	57	7	18	22	41	72	47	66	102	2
Singapore Air	558	5	111	39	79	5	37	48	57	37	12	64	82	28	111	1	70	50
Keds	549	6	110	42	64	41	24	97	56	74	19	18	96	5	111	1	70	54
Ikea	548	7	114	17	78	8	34	71	57	21	10	85	102	4	84	28	70	23
Converse	544	8	106	86	68	30	37	51	57	50	39	1	84	26	84	28	70	41
Qantas	540	9	105	92	62	52	41	13	57	39	11	68	104	1	111	1	50	73
Guardian	532	10	110	40	51	94	26	94	57	11	12	49	96	5	111	1	70	26
LA Times	531	11	110	52	53	86	41	13	57	9	13	42	96	5	111	1	51	66
KLM	526	12	108	63	68	27	44	5	57	29	12	54	94	21	93	22	50	70
Iberia	526	13	111	31	52	89	38	38	57	42	12	61	96	5	111	1	50	79
Courier Mail	519	14	108	69	52	90	33	74	56	76	14	40	96	5	111	1	50	81
Argos	512	15	82	112	66	35	33	75	57	52	10	90	103	3	91	25	70	35

Web Sites	OVERALL TOTALS (Over 1000)	Rank	TRAFFIC DATA (Over 240)	Rank	SEARCH DATA (Over 148)	Rank	AUDIENCE DEMOGRAPHICS (Over 66)	Rank	LINKS (Over 82)	Rank	SOCIAL STATISTICS (Over 91)	Rank	SITE SPEED (Quantative Inf.) (Over 104)	Rank	SITE SPEED (Size Inf.) (Over 111)	Rank	ADV COMPETITION DATA (Over 158)	Rank
Jcpenney	512	16	119	7	65	40	41	15	63	3	10	107	66	41	56	46	93	3
Next	510	17	115	12	73	15	37	50	56	60	29	6	75	32	55	50	70	51
Independent	506	18	103	97	64	42	32	83	57	20	13	46	96	5	111	1	32	91
Sun Express	506	19	110	48	75	11	21	100	52	99	11	78	96	5	111	1	31	96
Turkish Airlines	505	20	111	37	80	3	35	65	56	62	10	88	58	48	85	27	70	43
Sonic Electronix	504	21	109	55	56	74	33	77	55	82	10	99	77	29	93	22	70	28
Hi-Tech	504	22	108	64	65	39	20	101	54	91	18	19	96	5	111	1	31	97
Korean Air	502	23	103	98	75	12	37	44	57	53	11	67	68	36	102	21	50	76
St Louis Today	499	24	105	93	45	105	41	11	57	15	14	37	96	5	111	1	31	92
Bellacor	498	25	108	62	53	87	35	63	56	71	10	93	91	23	73	33	70	25
Nike	498	26	112	20	59	66	41	12	57	10	24	7	60	45	74	31	70	19
Ryan Air	497	27	110	46	63	46	39	26	57	13	11	69	96	5	111	1	11	107
Sdyney Morning	497	28	101	104	30	112	39	23	57	14	14	39	96	5	111	1	50	74
Air Canada	495	29	109	53	70	22	38	37	57	34	12	60	92	22	67	35	50	72
The Age	494	30	103	99	28	113	37	44	57	19	14	38	96	5	111	1	50	77
Australian	493	31	106	84	51	92	36	56	57	33	14	41	68	35	111	1	50	71
Puma	488	32	112	21	60	58	45	4	57	48	22	10	67	38	55	50	70	40
Emirates	487	33	105	90	66	36	40	19	57	47	12	59	85	25	73	34	50	69
Reebok	484	34	115	14	47	101	17	108	57	49	19	13	67	37	91	26	70	34
Asics	481	35	107	79	59	64	8	112	56	77	18	21	96	5	111	1	27	99
Daily News	480	36	101	105	51	93	41	16	57	40	22	11	84	27	74	31	51	64

Web Sites	OVERALL TOTALS (Over 1000)	Rank	TRAFFIC DATA (Over 240)	Rank	SEARCH DATA (Over 148)	Rank	AUDIENCE DEMOGRAPHICS (Over 66)	Rank	LINKS (Over 82)	Rank	SOCIAL STATISTICS (Over 91)	Rank	SITE SPEED (Quantative Inf.) (Over 104)	Rank	SITE SPEED (Size Inf.) (Over 111)	Rank	ADV COMPETITION DATA (Over 158)	Rank
TAM Airlines	480	37	111	32	54	82	29	89	56	66	11	71	96	5	111	1	11	108
Egypt Air	474	38	112	28	76	10	38	38	55	86	12	62	74	33	57	42	50	78
Biletix	472	39	109	54	68	25	19	105	34	111	10	97	96	5	111	1	26	102
Nordstrom	469	40	111	35	61	55	36	59	36	106	11	80	75	31	66	37	74	9
K-Swiss	469	41	110	43	69	23	32	82	56	75	19	16	58	49	55	50	70	47
Dell	467	42	116	9	57	71	39	21	57	8	11	83	50	53	65	39	73	11
Japon Airlines	466	43	111	34	80	2	42	8	56	73	12	56	50	53	65	39	50	85
B&HPhotoVideo	465	44	108	66	71	19	36	54	57	41	17	24	48	64	55	50	73	12
Adidas	463	45	112	26	77	9	45	2	57	32	23	8	32	87	48	62	70	33
Swiss Air	462	46	113	19	62	50	37	43	57	45	12	58	73	34	38	75	70	39
Pegasus Air	461	47	110	51	62	48	34	69	54	89	11	75	66	41	55	50	69	59
South Africa Air	461	48	109	59	66	37	34	72	56	61	12	63	58	49	57	43	71	18
Air France	460	49	107	72	73	16	43	7	57	36	13	43	31	100	67	35	69	58
ABT	459	50	104	96	62	51	34	73	34	109	17	28	90	24	48	62	70	27
Zappos	458	51	112	27	54	85	37	49	57	35	10	92	58	47	56	49	74	7
Overstock	456	52	119	8	54	81	38	32	57	28	9	113	49	55	55	50	75	6
Newegg	454	53	115	15	53	88	42	8	57	38	9	112	58	51	47	65	73	10
New Balance	452	54	110	45	68	26	34	67	57	54	19	15	55	52	38	75	70	48
220-electronics	451	55	89	111	63	45	28	92	53	98	17	31	66	39	65	39	70	52
AliExpress	450	56	106	87	59	63	47	1	34	110	10	103	59	46	65	38	70	32
RitzCamera	449	57	100	106	67	31	43	6	56	65	17	27	49	59	47	66	70	30

Web Sites	OVERALL TOTALS (Over 1000)	Rank	TRAFFIC DATA (Over 240)	Rank	SEARCH DATA (Over 148)	Rank	AUDIENCE DEMOGRAPHICS (Over 66)	Rank	LINKS (Over 82)	Rank	SOCIAL STATISTICS (Over 91)	Rank	SITE SPEED (Quantative Inf.) (Over 104)	Rank	SITE SPEED (Size Inf.) (Over 111)	Rank	ADV COMPETITION DATA (Over 158)	Rank
Under Armour	449	58	115	13	68	29	16	110	56	57	18	20	49	55	55	50	70	20
Walmart	448	59	132	3	59	62	34	68	57	17	16	34	31	91	38	75	80	4
Buy	446	60	112	24	55	79	38	38	57	30	10	102	48	64	55	50	72	13
USA Today	441	61	111	36	50	97	39	20	57	18	35	2	32	87	47	66	70	21
Ioffer	441	62	120	6	45	106	36	59	56	55	10	91	66	41	56	46	51	63
Alitalia	439	63	106	88	79	6	36	53	56	56	13	44	32	87	47	66	70	55
British Airways	435	64	110	44	70	21	38	36	57	22	13	48	40	75	38	75	70	45
Play	435	65	112	23	57	69	33	78	57	26	11	81	49	59	47	66	70	38
Sears	433	66	115	11	67	32	36	54	57	31	11	79	31	91	38	75	77	5
Delta Air	432	67	114	16	44	108	39	23	57	23	12	57	35	86	82	30	51	67
BeachCamera	432	68	105	91	46	104	35	63	54	90	17	30	49	55	55	50	70	46
Aeroflot	431	69	111	29	75	13	36	59	56	81	12	65	64	44	29	95	50	84
Crutchfield	428	70	107	81	62	49	36	56	63	4	10	104	32	87	48	62	71	17
BuyDig	428	71	103	100	55	80	35	62	54	92	17	29	49	59	46	73	70	42
BestBuy	425	72	123	5	59	61	38	41	35	107	12	50	27	111	56	46	74	8
NY Times	423	73	124	4	49	98	38	33	57	6	16	35	40	73	47	66	53	62
Cathay Pasific	422	74	100	108	74	14	0	113	56	78	12	66	77	29	93	22	11	109
TigerDirect	416	75	111	33	50	95	35	66	63	2	17	25	30	103	38	75	72	14
American Airlines	415	76	113	18	54	83	40	18	57	25	13	47	30	103	38	75	70	31
Air China	414	77	111	38	57	73	25	95	55	85	12	53	66	40	57	43	31	95
Comet	412	78	108	65	64	44	34	70	56	70	10	88	31	91	38	75	70	43

Web Sites	OVERALL TOTALS (Over 1000)	Rank	TRAFFIC DATA (Over 240)	Rank	SEARCH DATA (Over 148)	Rank	AUDIENCE DEMOGRAPHICS (Over 66)	Rank	LINKS (Over 82)	Rank	SOCIAL STATISTICS (Over 91)	Rank	SITE SPEED (Quantative Inf.) (Over 104)	Rank	SITE SPEED (Size Inf.) (Over 111)	Rank	ADV COMPETITION DATA (Over 158)	Rank
J&R	409	79	108	68	43	109	45	3	57	51	17	26	31	91	38	75	71	16
The Chronicle Herald	409	80	107	74	54	84	32	83	56	64	33	5	41	70	55	50	31	98
Times	407	81	102	103	59	67	38	35	57	46	12	51	31	91	38	75	70	57
Washington Post	406	82	109	60	48	100	36	52	53	96	20	12	31	91	38	75	71	15
Dallas Morning News	406	83	107	73	64	43	40	17	56	79	13	45	31	101	45	74	50	80
Sahibinden	405	84	116	10	57	72	39	28	55	83	11	84	40	75	38	75	49	86
PCNation	403	85	100	107	56	75	33	76	51	103	17	32	47	66	29	97	70	49
Altrec	403	86	107	77	55	78	38	34	56	58	10	105	47	68	19	104	70	22
Onur Air	401	87	110	49	67	33	39	31	53	97	11	72	46	69	10	110	66	60
DealExtreme	398	88	110	47	62	54	28	91	56	63	17	23	37	84	19	104	70	37
Anadolu Jet	397	89	106	85	78	7	19	104	73	1	11	74	31	91	38	75	40	89
Skechers	395	90	111	30	45	107	17	108	56	68	19	14	38	83	38	75	70	36
Scandinavian	389	91	107	80	50	96	36	56	56	69	11	70	5	112	55	61	70	56
Lufthansa	386	92	110	50	61	57	39	26	57	27	12	55	38	80	19	104	50	68
Globe and Mail	384	93	109	58	41	110	39	30	57	12	33	3	38	80	19	104	50	75
Daily Mail	384	94	112	22	47	103	38	42	57	16	12	52	39	78	29	97	51	65
GittiGidiyor	380	95	109	56	57	70	25	96	56	72	9	108	40	75	38	75	46	88
Atlas Jet	376	96	108	67	72	18	17	106	55	84	11	76	37	84	19	101	55	61
Hepsiburada	374	97	107	76	58	68	30	88	56	80	17	33	31	101	28	99	47	87
Sky Airlines	371	98	99	109	66	34	17	106	52	100	11	77	48	62	38	75	39	90
Walgreens	371	99	108	70	61	56	37	47	56	59	11	73	40	73	47	66	11	111

Web Sites	OVERALL TOTALS (Over 1000)	Rank	TRAFFIC DATA (Over 240)	Rank	SEARCH DATA (Over 148)	Rank	AUDIENCE DEMOGRAPHICS (Over 66)	Rank	LINKS (Over 82)	Rank	SOCIAL STATISTICS (Over 91)	Rank	SITE SPEED (Quantative Inf.) (Over 104)	Rank	SITE SPEED (Size Inf.) (Over 111)	Rank	ADV COMPETITION DATA (Over 158)	Rank
42photo	369	100	102	102	56	76	32	81	55	88	10	106	39	78	26	100	50	83
Shoes	368	101	107	78	65	38	31	85	56	67	10	95	27	108	0	111	70	24
Idefix	366	102	106	83	69	24	13	111	51	102	10	94	41	70	55	50	21	105
Teknosa	361	103	97	110	71	20	20	103	50	104	10	87	48	63	38	75	26	100
The Star	360	104	107	75	62	53	39	23	57	24	15	36	30	103	19	104	31	93
E_Furniture Showroom	358	105	81	113	51	91	28	90	51	101	9	111	49	58	38	75	50	82
Pabbuc	358	106	109	61	59	60	32	79	48	105	9	109	47	66	29	95	24	104
Montreal Gazette	344	107	108	71	47	102	42	10	57	43	33	4	27	108	0	111	31	94
Vatan Bilgisayar	337	108	109	57	59	65	23	98	54	95	10	98	38	80	19	101	25	103
Newyork Post	329	109	106	82	48	99	39	22	54	93	22	9	29	107	19	104	11	110
Trendyol	325	110	105	94	56	77	27	93	33	112	10	100	31	91	38	75	26	101
Hizlial	301	111	106	89	60	59	20	102	54	94	10	96	30	103	19	101	2	113
Morhipo	288	112	103	101	80	4	32	79	34	108	9	110	27	108	0	111	2	112
Markafoni	282	113	104	95	33	111	22	99	30	113	10	101	5	112	57	43	20	106

APPENDIX A4.6: Dynamic Analysis Results for Shopping Web Sites

Web Sites	Score Over 1000	Rank
Amazon	579	1
Tesco	561	2
Ebay	559	3
Ikea	548	4
Argos	512	5
Jcpenney	512	6
Next	510	7
Sonic Electronix	504	8
Bellacor	498	9
Biletix	472	10
Nordstrom	469	11
Dell	467	12
B&HPhotoVideo	465	13
ABT	459	14
Zappos	458	15
Overstock	456	16
Newegg	454	17
220-electronics	451	18
AliExpress	450	19
RitzCamera	449	20
Walmart	448	21
Buy	446	22
Ioffer	441	23
Play	435	24
Sears	433	25
BeachCamera	432	26
Crutchfield	428	27
BuyDig	428	28
BestBuy	425	29
TigerDirect	416	30
Comet	412	31
J&R	409	32
Sahibinden	405	33
PCNation	403	34
Altrec	403	35
DealExtreme	398	36

Web Sites	Score Over 1000	Rank
GittiGidiyor	380	37
Hepsiburada	374	38
Walgreens	371	39
42photo	369	40
Shoes	368	41
Idefix	366	42
Teknosa	361	43
EFurnitureShowroom	358	44
Pabbuc	358	45
Vatan Bilgisayar	337	46
Trendyol	325	47
Hizlial	301	48
Morhipo	288	49
Markafoni	282	50

APPENDIX A4.7: Dynamic Analysis Results for Airline Web Sites

Web Sites	Score Over 1000	Rank
Singapore Air	558	1
Qantas	540	2
KLM	526	3
Iberia	526	4
Sun Express	506	5
Turkish Airlines	505	6
Korean Air	502	7
Ryan Air	497	8
Air Canada	495	9
Emirates	487	10
TAM Airlines	480	11
Egypt Air	474	12
Japon Airlines	466	13
Swiss Air	462	14
Pegasus Air	461	15
South Africa Air	461	16
Air France	460	17
Alitalia	439	18
British Airways	435	19
Delta Air	432	20
Aeroflot	431	21
Cathay Pasific	422	22
American Airlines	415	23
Air China	414	24
Onur Air	401	25
Anadolu Jet	397	26
Scandinavian	389	27
Lufthansa	386	28
Atlas Jet	376	29
Sky Airlines	371	30

APPENDIX A4.8: Dynamic Analysis Results for Newspaper Web Sites

Web Sites	Score Over 1000	Rank
Guardian	532	1
LA Times	531	2
Courier Mail	519	3
Independent	506	4
St Louis Today	499	5
Sdyney Morning	497	6
The Age	494	7
Australian	493	8
Daily News	480	9
USA Today	441	10
NY Times	423	11
The Chronicle Herald	409	12
Times	407	13
Washington Post	406	14
Dallas Morning News	406	15
Globe and Mail	384	16
Daily Mail	384	17
The Star	360	18
Montreal Gazette	344	19
Newyork Post	329	20

APPENDIX A4.9: Dynamic Analysis Results for Sport Shoe Web Sites

Web Sites	Score Over 1000	Rank
FILA	564	1
Keds	549	2
Converse	544	3
Hi-Tech	504	4
Nike	498	5
Puma	488	6
Reebok	484	7
Asics	481	8
K-Swiss	469	9
Adidas	463	10
New Balance	452	11
Under Armour	449	12
Skechers	395	13

APPENDIX A4.10: Correlation Between Subcategories of Dynamic Analysis

Correlations

		Traffic_data	Search_data
Traffic_data	Pearson Correlation	1	,183
	Sig. (2-tailed)		,052
	N	113	113
Search_data	Pearson Correlation	,183	1
	Sig. (2-tailed)	,052	
	N	113	113

Correlations

		Traffic_data	Audience
Traffic_data	Pearson Correlation	1	,160
	Sig. (2-tailed)		,091
	N	113	113
Audience	Pearson Correlation	,160	1
	Sig. (2-tailed)	,091	
	N	113	113

Correlations

		Traffic_data	Links
Traffic_data	Pearson Correlation	1	,105
	Sig. (2-tailed)		,270
	N	113	113
Links	Pearson Correlation	,105	1
	Sig. (2-tailed)	,270	
	N	113	113

Correlations

		Traffic_data	Social_statistics
Traffic_data	Pearson Correlation	1	,023
	Sig. (2-tailed)		,808
	N	113	113
Social_statistics	Pearson Correlation	,023	1
	Sig. (2-tailed)	,808	
	N	113	113

Correlations

		Traffic_data	Site_speed_quantitative
Traffic_data	Pearson Correlation	1	-,149
	Sig. (2-tailed)		,115
	N	113	113
Site_speed_quantitative	Pearson Correlation	-,149	1
	Sig. (2-tailed)	,115	
	N	113	113

Correlations

		Traffic_data	Site_speed_size
Traffic_data	Pearson Correlation	1	-,078
	Sig. (2-tailed)		,414
	N	113	113
Site_speed_size	Pearson Correlation	-,078	1
	Sig. (2-tailed)	,414	
	N	113	113

Correlations

		Traffic_data	Advertisement_competition
Traffic_data	Pearson Correlation	1	,430**
	Sig. (2-tailed)		,000
	N	113	113
Advertisement_competition	Pearson Correlation	,430**	1
	Sig. (2-tailed)	,000	
	N	113	113

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		Search_data	Audience
Search_data	Pearson Correlation	1	-,113
	Sig. (2-tailed)		,233
	N	113	113
Audience	Pearson Correlation	-,113	1
	Sig. (2-tailed)	,233	
	N	113	113

Correlations

		Search_data	Links
Search_data	Pearson Correlation	1	,049
	Sig. (2-tailed)		,607
	N	113	113
Links	Pearson Correlation	,049	1
	Sig. (2-tailed)	,607	
	N	113	113

Correlations

		Search_data	Social_statistics
Search_data	Pearson Correlation	1	-,164
	Sig. (2-tailed)		,083
	N	113	113
Social_statistics	Pearson Correlation	-,164	1
	Sig. (2-tailed)	,083	
	N	113	113

Correlations

		Search_data	Site_speed_quantitative
Search_data	Pearson Correlation	1	,073
	Sig. (2-tailed)		,441
	N	113	113
Site_speed_quantitative	Pearson Correlation	,073	1
	Sig. (2-tailed)	,441	
	N	113	113

Correlations

		Search_data	Site_speed_size
Search_data	Pearson Correlation	1	-,021
	Sig. (2-tailed)		,824
	N	113	113
Site_speed_size	Pearson Correlation	-,021	1
	Sig. (2-tailed)	,824	
	N	113	113

Correlations

		Search_data	Advertisement_competition
Search_data	Pearson Correlation	1	,127
	Sig. (2-tailed)		,180
	N	113	113
Advertisement_competition	Pearson Correlation	,127	1
	Sig. (2-tailed)	,180	
	N	113	113

Correlations

		Audience	Links
Audience	Pearson Correlation	1	,132
	Sig. (2-tailed)		,162
	N	113	113
Links	Pearson Correlation	,132	1
	Sig. (2-tailed)	,162	
	N	113	113

Correlations

		Audience	Social_statistics
Audience	Pearson Correlation	1	,116
	Sig. (2-tailed)		,220
	N	113	113
Social_statistics	Pearson Correlation	,116	1
	Sig. (2-tailed)	,220	
	N	113	113

Correlations

		Audience	Site_speed_quantitative
Audience	Pearson Correlation	1	-,066
	Sig. (2-tailed)		,485
	N	113	113
Site_speed_quantitative	Pearson Correlation	-,066	1
	Sig. (2-tailed)	,485	
	N	113	113

Correlations

		Audience	Site_speed_size
Audience	Pearson Correlation	1	-,094
	Sig. (2-tailed)		,320
	N	113	113
Site_speed_size	Pearson Correlation	-,094	1
	Sig. (2-tailed)	,320	
	N	113	113

Correlations

		Audience	Advertisement_competition
Audience	Pearson Correlation	1	,386**
	Sig. (2-tailed)		,000
	N	113	113
Advertisement_competition	Pearson Correlation	,386**	1
	Sig. (2-tailed)	,000	
	N	113	113

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		Links	Social_statistics
Links	Pearson Correlation	1	,148
	Sig. (2-tailed)		,118
	N	113	113
Social_statistics	Pearson Correlation	,148	1
	Sig. (2-tailed)	,118	
	N	113	113

Correlations

		Links	Site_speed_quantitative
Links	Pearson Correlation	1	,056
	Sig. (2-tailed)		,554
	N	113	113
Site_speed_quantitative	Pearson Correlation	,056	1
	Sig. (2-tailed)	,554	
	N	113	113

Correlations

		Links	Site_speed_size
Links	Pearson Correlation	1	,059
	Sig. (2-tailed)		,535
	N	113	113
Site_speed_size	Pearson Correlation	,059	1
	Sig. (2-tailed)	,535	
	N	113	113

Correlations

		Links	Advertisement_competition
Links	Pearson Correlation	1	,230*
	Sig. (2-tailed)		,014
	N	113	113
Advertisement_competition	Pearson Correlation	,230*	1
	Sig. (2-tailed)	,014	
	N	113	113

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations

		Social_statistics	Site_speed_quantitative
Social_statistics	Pearson Correlation	1	-,039
	Sig. (2-tailed)		,684
	N	113	113
Site_speed_quantitative	Pearson Correlation	-,039	1
	Sig. (2-tailed)	,684	
	N	113	113

Correlations

		Social_statistics	Site_speed_size
Social_statistics	Pearson Correlation	1	-,057
	Sig. (2-tailed)		,552
	N	113	113
Site_speed_size	Pearson Correlation	-,057	1
	Sig. (2-tailed)	,552	
	N	113	113

Correlations

		Social_statistics	Advertisement_competition
Social_statistics	Pearson Correlation	1	,083
	Sig. (2-tailed)		,381
	N	113	113
Advertisement_competition	Pearson Correlation	,083	1
	Sig. (2-tailed)	,381	
	N	113	113

Correlations

		Site_speed_quantitative	Site_speed_size
Site_speed_quantitative	Pearson Correlation	1	,812**
	Sig. (2-tailed)		,000
	N	113	113
Site_speed_size	Pearson Correlation	,812**	1
	Sig. (2-tailed)	,000	
	N	113	113

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		Site_speed_quantitative	Advertisement_competition
Site_speed_quantitative	Pearson Correlation	1	-,072
	Sig. (2-tailed)		,447
	N	113	113
Advertisement_competition	Pearson Correlation	-,072	1
	Sig. (2-tailed)	,447	
	N	113	113

Correlations

		Site_speed_size	Advertisement_competition
Site_speed_size	Pearson Correlation	1	-,067
	Sig. (2-tailed)		,478
	N	113	113
Advertisement_competition	Pearson Correlation	-,067	1
	Sig. (2-tailed)	,478	
	N	113	113

APPENDIX A4.11: Dynamic Rank vs. Performance Rank

Web Sites	Overall Dynamic Rank	Performance Rank
Amazon	1	85
FILA	2	3
Tesco	3	1
Ebay	4	67
Singapore Air	5	20
Keds	6	3
Ikea	7	22
Converse	8	27
Qantas	9	1
Guardian	10	3
LA Times	11	3
KLM	12	21
Iberia	13	3
Courier Mail	14	3
Argos	15	19
Jcpenney	16	42
Next	17	39
Independent	18	3
Sun Express	19	3
Turkish Airlines	20	33
Sonic Electronix	21	24
Hi-Tech	22	3
Korean Air	23	26
St Louis Today	24	3
Bellacor	25	28
Nike	26	36
Ryan Air	27	3
Sdyney Morning	28	3
Air Canada	29	29
The Age	30	3
Australian	31	23
Puma	32	44
Emirates	33	32
Reebok	34	30
Asics	35	3
Daily News	36	31
TAM Airlines	37	3
Egypt Air	38	37
Biletix	39	3
Nordstrom	40	34
K-Swiss	41	51
Dell	42	48
Japon Airlines	43	48
B&HPhotoVideo	44	57
Adidas	45	74
Swiss Air	46	52
Pegasus Air	47	45
South Africa Air	48	47
Air France	49	59
ABT	50	35
Zappos	51	50
Overstock	52	54
Newegg	53	53
New Balance	54	65
220-electronics	55	38
AliExpress	56	40
RitzCamera	57	62
Under Armour	58	54
Walmart	59	85
Buy	60	57
USA Today	61	76

Web Sites	Overall Dynamic Rank	Performance Rank
Ioffer	62	42
Alitalia	63	76
British Airways	64	78
Play	65	62
Sears	66	85
Delta Air	67	46
BeachCamera	68	54
Aeroflot	69	66
Crutchfield	70	74
BuyDig	71	64
BestBuy	72	73
NY Times	73	69
Cathay Pasific	74	24
TigerDirect	75	94
American Airlines	76	94
Air China	77	41
Comet	78	85
J&R	79	85
The Chronicle Herald	80	60
Times	81	85
Washington Post	82	85
Dallas Morning News	83	82
Sahibinden	84	78
PCNation	85	84
Altrec	86	97
Onur Air	87	107
DealExtreme	88	106
Anadolu Jet	89	85
Skechers	90	81
Scandinavian	91	100
Lufthansa	92	103
Globe and Mail	93	103
Daily Mail	94	96
GittiGidiyor	95	78
Atlas Jet	96	105
Hepsiburada	97	101
Sky Airlines	98	71
Walgreens	99	69
42photo	100	98
Shoes	101	111
Idefix	102	60
Teknosa	103	72
The Star	104	109
EFurnitureShowroom	105	68
Pabbuc	106	83
Montreal Gazette	107	111
Vatan Bilgisayar	108	102
Newyork Post	109	110
Trendyol	110	85
Hizlial	111	108
Morhipo	112	111
Markafoni	113	99

APPENDIX A4.12: Overall Dynamic Score vs. DoubleClick Ad Planner Score

Websites	Overall Dynamic Score	DoubleClick AD Planner Score
Ebay	559,00	646,00
Amazon	579,00	605,00
Adidas	463,00	397,00
NY Times	423,00	366,00
Walmart	448,00	357,00
Sdyney Morning	497,00	332,00
BestBuy	425,00	326,00
Montreal Gazette	344,00	318,00
Daily Mail	384,00	309,00
RitzCamera	449,00	307,00
Japon Airlines	466,00	303,00
Egypt Air	474,00	301,00
Sonic Electronix	504,00	299,00
Guardian	532,00	298,00
Altrec	403,00	297,00
Puma	488,00	297,00
Courier Mail	519,00	293,00
Ryan Air	497,00	291,00
LA Times	531,00	289,00
Newegg	454,00	288,00
Dell	467,00	287,00
South Africa Air	461,00	287,00
Scandinavian	389,00	286,00
Daily News	480,00	286,00
Overstock	456,00	286,00
New Balance	452,00	286,00
The Star	360,00	284,00
J&R	409,00	284,00
Independent	506,00	283,00
Jcpenney	512,00	281,00
The Age	494,00	280,00
Globe and Mail	384,00	280,00
Washington Post	406,00	279,00
Dallas Morning News	406,00	279,00
Nike	498,00	278,00
Australian	493,00	277,00
St Louis Today	499,00	276,00
Alitalia	439,00	276,00
Ikea	548,00	274,00
Times	407,00	274,00
Buy	446,00	274,00
American Airlines	415,00	273,00
Air China	414,00	272,00
Crutchfield	428,00	271,00
Delta Air	432,00	270,00
Singapore Air	558,00	270,00
Zappos	458,00	269,00
Newyork Post	329,00	267,00
Turkish Airlines	505,00	264,00
USA Today	441,00	263,00
Aeroflot	431,00	263,00
Nordstrom	469,00	262,00
British Airways	435,00	261,00
Iberia	526,00	260,00
Lufthansa	386,00	259,00
Sears	433,00	259,00
Onur Air	401,00	258,00
Swiss Air	462,00	255,00
Converse	544,00	254,00
KLM	526,00	253,00
Korean Air	502,00	253,00

Websites	Overall Dynamic Score	DoubleClick AD Planner Score
Comet	412,00	250,00
Qantas	540,00	246,00
K-Swiss	469,00	246,00
Bellacor	498,00	246,00
AliExpress	450,00	245,00
Play	435,00	243,00
Air France	460,00	242,00
Air Canada	495,00	241,00
Shoes	368,00	240,00
Emirates	487,00	237,00
Argos	512,00	231,00
Next	510,00	231,00
Ioffer	441,00	229,00
Tesco	561,00	228,00
TAM Airlines	480,00	228,00
Walgreens	371,00	223,00
FILA	564,00	219,00
ABT	459,00	213,00
BuyDig	428,00	213,00
BeachCamera	432,00	210,00
B&HPhotoVideo	465,00	206,00
PCNation	403,00	202,00
Sahibinden	405,00	197,00
TigerDirect	416,00	193,00
The Chronicle Herald	409,00	192,00
Atlas Jet	376,00	178,00
EFurnitureShowroom	358,00	165,00
Idefix	366,00	165,00
220-electronics	451,00	163,00
42photo	369,00	158,00
Anadolu Jet	397,00	158,00
Teknosa	361,00	157,00
Pegasus Air	461,00	153,00
DealExtreme	398,00	152,00
Vatan Bilgisayar	337,00	141,00
GittiGidiyor	380,00	131,00
Biletix	472,00	127,00
Sun Express	506,00	125,00
Hizlial	301,00	125,00
Asics	481,00	116,00
Cathay Pasific	422,00	116,00
Reebok	484,00	116,00
Under Armour	449,00	116,00
Sky Airlines	371,00	104,00
Keds	549,00	84,00
Hi-Tech	504,00	81,00
Pabbuc	358,00	81,00
Skechers	395,00	73,00
Hepsiburada	374,00	71,00
Morhipo	288,00	67,00
Markafoni	282,00	57,00
Trendyol	325,00	52,00

APPENDIX A5: Content Analysis Algorithm

```
ContentAnalysis_MainAlgorithm;
ceval(W,C,T): content evaluation matrix
                                  where W:website number
                                        C:category number
                                        T:content title
number
Begin
     update_repository;           *for      updating      all
                                  categories, content titles
                                  and content items evaluated
                                  from all web sites*

     update_ceval_matrix   ceval(W,C,T);*for   updating   the
                                  evaluated scores for each
                                  data item belonging to a
                                  content   title   and   each
                                  category for web site W*

     overall_score_evaluation;    *for evaluating the total
                                  score for each web site*

     score_by_categories_evaluation;*for    evaluating    the
                                  scores   corresponding   to
                                  each category and sorting
                                  web sites for each category
                                  for each web site*

End ContentAnalysis_MainAlgorithm


normalize(S,A);   where S : set of called elements of website
S
                        A : set of new ontology elements of
                                                    website
                        S
                        O : set of all ontology elements
                        j : element of ontology
  Begin
    A = S;
    For each e ∈ S
      if e ∈ O then   ** check e in Ontology set O;
        exit;
      else
        if (e ≡ j where j ∈ O) then
          A=A\{e}
          exit
        else
          O = O ∪ {e}
```

```
        endif
      endif
  End_normalize
```

```
update_repository;
Begin
  R = S1;
  O = S1;
  For i=2 to # of websites
    For each Category of Si
       normalize(Si,A);  **Apply set algorithm for categories
of Si
       R = R ∪ A;
    End;

    For each Category of R
      For each Content_Title of Si
       normalize(Si,A);   **Apply set algorithm for content
titles of Si
       R = R ∪ A;
      End;

      For each Content_Title of R
        For each Content_Item of Si
         normalize(Si,A);              **Apply set algorithm
for content items of Si
         R = R ∪ A;
        End;
      End
    End
  End

End update_repository;
```

```
update_ceval_matrix ceval(W,C,T);
Begin
  For W=1 to #_of_websites
    For C=1 to #_of_Categories_of_Repository
      For T=1 to #of_Content_Titles_of_Repository
        Score_of_Website=#_of_Content_Items of website Sw of
                         Category C of Content Title T
        Score_of_Repository=#_of_Content_Items of Repository R
of
                            Category C of Content Title T

ceval(W,C,T):=(Score_of_website/Score_of_Repository)*100;
```

```
      End
    End
  End
End update_ceval_matrix
```

```
overall_score_evaluation;
W(K): array of websites where K:# of websites
Begin
      For K=1 to #_of_websites
            W(K):=0;
            For C=1 to #_of_Categories_of_Repository
                  For Q=1 to
max_#of_Content_Titles_of_Repository
                        W(K)=W(K)+ceval(K,C,Q);
                  End
            End
      End
End overall_score_evaluation
```

```
score_by_categories_evaluation;
W(K,C): categories evaluation matrix where K:website number
                                           C:category number
Begin
      For K=1 to #_of_websites
            For C=1 to #_of_Categories_of_Repository
                  W(K,C):=0;
                  For Q=1 to
max_#of_Content_Titles_of_Repository
                        W(K,C)=W(K,C)+ceval(K,C,Q);
                  End
            End
      End
      For K=1 to #_of_websites
            For C=1 to #_of_Categories_of_Repository
                  Sort W(K,C) in descending order
            End
      End
End Score_by_categories_evaluation
```

APPENDIX A6.1: Questionnaire – Pilot Study

Web Sitesi Değerlendirme Anketi

Bu anketle bir web sayfasının rakip web sayfaları arasındaki durumunu değerlendirmek için kullanılacak olan değerlendirme elemanlarının belirlenmesi ve bu veriler arasındaki ağırlıkların hesaplanması planlanmaktadır. Bu kapsamda, katılımcılardan web siteleri için önem verdikleri faktörler hakkında bilgi alınarak verilerin önem derecelerine göre ağırlıklarının hesaplanması sağlanacaktır.

Ankette, kimlik belirleyici hiçbir bilgi istenmemektedir. Cevaplarınız tamamen gizli tutulacak ve sadece araştırmacılar tarafından değerlendirilecektir; elde edilecek bilgiler bilimsel yayınlarda kullanılacaktır.

Anket Etik Kurulu tarafından onay almıştır.

Anket 12 sorudan oluşmaktadır. 1-5 arasında (1: Hiç önemli değil, 2: Önemli değil, 3: Kararsız, 4: Önemli, 5: Çok önemli) seçim yapılarak doldurulmalıdır.

Katkılarınız için teşekkür ederiz.

KATILIMCI HAKKINDA (6 SORU)

1. Çalıştığınız kurumun sektörü: *

Lütfen aşağıdakilerden **yalnız birini** seçin:

Kamu
Özel

2. Çalıştığınız kurumdaki göreviniz: *

Lütfen aşağıdakilerden **yalnız birini** seçin:

Bilgi İşlem Merkezi Yöneticisi
Bilişim Yöneticisi
Çözümleyici
Proje Yöneticisi
Programcı
Sistem Yöneticisi
Diğer

3. Cinsiyetiniz *

Lütfen aşağıdakilerden **yalnız birini** seçin:

Kadın
Erkek

4. Yaşınız? *

Lütfen uygun olanların **tümünü** seçin:

20-25
26-30
31-35
36-40
41-45
46-50
51 +

5. Gelir Düzeyiniz? *

Lütfen aşağıdakilerden **yalnız birini** seçin:

1000-2000
2001-3000
3001-4000
4000 +

6. Eğitim Durumunuz: *

Lütfen aşağıdakilerden **yalnız birini** seçin:

Lise
Lisans
Yüksek Lisans
Doktora ve Üstü

TRAFİK VERİLERİ (14 SORU)

Trafik verilerinin **değerlendirilmesi amacıyla kullanılabilecek aşağıda yer alan bilgileri, size göre en önemli gördüğünüze 5, en az önemli gördüğünüze 1 vererek değerlendiriniz.*(1: Hiç Önemli Değil - 5: Çok Önemli)***

Lütfen her bir öge için uygun yanıtları seçin:

	1	2	3	4	5
1. Web sitesinin dünya web sayfaları arasındaki popülerlik sırası bilgisi					
2. Web sitesinin ilgili olduğu alan ile benzer alandaki diğer sitelerin popülerlik sıralarının karşılaştırma bilgisi					
3. Web sitesine erişen kullanıcıların İnternet kullanıcılarına oranı bilgisi					
4. Web sitesinin ziyaret edilme sayı bilgisi					

1 2 3 4 5

5. Web sitesini ziyaret eden tekil ziyaretçi sayı bilgisi

6. Ziyaretçilerin ülkelere göre dağılım bilgisi

7. Web sitesinin görüntülenme sayısı bilgisi

8. Bir ziyaretçinin sitenin ortalama kaç sayfasını görüntülediği bilgisi

9. Web sitesine erişen ziyaretçilerden sadece bir kere sayfa görüntüleme yapan ve bir daha sayfayı ziyaret etmeyen kişi sayısı bilgisi

10. Web sitesinde geçirilen ortalama süre bilgisi

11. Web sitesinin ortalama yüklenme süresinin diğer web sayfalarına göre hızlı ya da yavaş olduğunun bilgisi

12. Web sitesinin diğer ülkelerdeki popülerlik sırası bilgisi

13. Web sitesinin ziyaretçilerinin o siteye bağlı alt sayfalarını ziyaret etme yüzdesi bilgisi

14. Web sitesinde en az 20 dakika kalan ziyaretçi sayısı bilgisi

ARAMA VERİLERİ (5 SORU)

Arama verilerinin **değerlendirilmesi amacıyla kullanılabilecek aşağıda yer alan bilgileri, size göre en önemli gördüğünüze 5, en az önemli gördüğünüze 1 vererek değerlendiriniz** ***(1: Hiç Önemli Değil - 5: Çok Önemli).***

Lütfen her bir öge için uygun yanıtları seçin:

1 2 3 4 5

1. İlgili web sitesine bir arama motoru aracılığıyla erişen kişilerin sayfayı ziyaret eden kişilere göre yüzde bilgisi

2. Web sitesinde en çok aranan sözcüklerin bilgisi

3. Arama sayısında en çok artış ya da düşüş olan sözcüklerin bilgisi

4. Ziyaretçilerin arama motorları aracılığıyla web sitesine erişmelerini sağlayan sözcüklerin en çoktan en aza doğru sıralama bilgisi

5. Sitede en çok geçen anahtar sözcüklerin bilgisi

ZİYARETÇİ PROFİLİ (8 SORU)

Ziyaretçi profili verilerinin **değerlendirilmesi amacıyla aşağıda yer alan bilgileri, size göre en önemli gördüğünüze 5, en az önemli gördüğünüze 1 vererek değerlendiriniz *(1: Hiç Önemli Değil - 5: Çok Önemli).***

Lütfen her bir öge için uygun yanıtları seçin:

1 2 3 4 5

1. Ziyaretçilerin yaş bilgisi

2. Ziyaretçilerin cinsiyet bilgisi

3. Ziyaretçilerin eğitim durum bilgisi

4. Ziyaretçilerin çocuğunun olup olmadığı ve varsa çocuklarının sayı bilgisi

5. Ziyaretçilerin web sitesine eriştiği ortam (ev, okul, iş vb.) bilgisi

6. Ziyaretçilerin etnik köken bilgisi

7. Ziyaretçilerin gelir düzey bilgisi

8. Ziyaretçilerin ilgi alanları bilgisi

BAĞLANTI VERİLERİ (9 SORU)

Bağlantı ("link") verilerinin **değerlendirilmesi amacıyla kullanılabilecek aşağıda yer alan bilgileri, size göre en önemli gördüğünüze 5, en az önemli gördüğünüze 1 vererek değerlendiriniz *(1: Hiç Önemli Değil - 5: Çok Önemli).* ***

Lütfen her bir öge için uygun yanıtları seçin:

1 2 3 4 5

1. İlgili web sitesine hangi web sitelerinden tıklanarak ulaşıldığı bilgisi

2. İlgili web sitesi veya alt sayfalarının arama motorlarında yer alan referanslarının toplam sayısı

3. Diğer sitelerden referans verilen toplam bağlantı sayısı bilgisi

4. Site içinde en çok kullanılan anahtar bağlantı sözcüğü/metni bilgisi

5. Rakip sitelerin bağlantı bilgileriyle kıyaslama bilgileri

1 2 3 4 5

6. 200, 403, 404 vb. hata kodu bilgisinin varlığı

7. Yapılan bağlantıların sayısı gözetilerek hesaplanan kalite puan bilgisi

8. Sitenin popülerlik (referans) sıralama bilgisi

9. Kırık bağlantı kontrol bilgisi

SOSYAL PAYLAŞIM VERİLERİ (5 SORU)

Sosyal paylaşım verilerinin **değerlendirilmesi amacıyla kullanılabilecek aşağıda yer alan bilgileri, size göre en önemli gördüğünüze 5, en az önemli gördüğünüze 1 vererek değerlendiriniz *(1: Hiç Önemli Değil - 5: Çok Önemli).* ***

Lütfen her bir öge için uygun yanıtları seçin:

1 2 3 4 5

1. Facebook paylaşım sayı bilgisi

2. Facebook beğenme sayı bilgisi

3. Tweet paylaşım sayı bilgisi

4. Google+1 paylaşım sayı bilgisi

5. Delicious'da yer alma sayı bilgisi

SİTENİN HIZ ANALİZLERİ (11 SORU)

Hız analizi verilerinin **değerlendirilmesi amacıyla kullanılabilecek aşağıda yer alan bilgileri, size göre en önemli gördüğünüze 5, en az önemli gördüğünüze 1 vererek değerlendiriniz *(1: Hiç Önemli Değil - 5: Çok Önemli).***

Lütfen her bir öge için uygun yanıtları seçin:

1 2 3 4 5

1. Bir web sitesindeki toplam HTML dosya sayı bilgisi

2. Web sitesinde yer alan tüm objelerin (imajlar, html dosyaları, "javascript"ler, multimedia, vb.) toplam sayı bilgisi

1 2 3 4 5

3. Toplam imaj (.jpg, .gif, .png, vb.) sayı bilgisi

4. İlgili web sayfası dosyasından farklı bir dosyadan çalıştırılan toplam CSS (Cascading Style Sheets - html koda stil veren dosya) dosyaların sayı bilgisi

5. Web sitesinin dosya büyüklüğü (byte, Kb cinsinden) bilgisi

6. İlgili web sayfası dosyasından farklı bir dosyadan çalıştırılan toplam "script" sayı bilgisi

7. Ana sayfanın dosya büyüklüğü (byte, Kb cinsinden) bilgisi

8. İmajların (.jpg, .gif, .png, vb.) toplam büyüklüğü (byte, Kb cinsinden) bilgisi

9. İlgili web sayfası dosyasından farklı bir dosyadan çalıştırılan toplam "script" büyüklüğü (byte, Kb cinsinden) bilgisi

10. İlgili web sayfası dosyasından farklı bir dosyadan çalıştırılan toplam CSS (Cascading Style Sheets - html koda stil veren dosya) dosyaların büyüklüğü (byte, Kb cinsinden) bilgisi

11. İlgili web sayfası dosyasından farklı bir dosyadan çalıştırılan toplam multimedya dosyalarının büyüklüğü bilgisi

OKUNABİLİRLİK VERİLERİ (4 SORU)

Okunabilirlik verilerinin **değerlendirilmesi amacıyla kullanılacak aşağıda yer alan bilgileri, size göre en önemli gördüğünüze 5, en az önemli gördüğünüze 1 vererek değerlendiriniz *(Hiç Önemli Değil - 5: Çok Önemli)*.***

Lütfen her bir öge için uygun yanıtları seçin:

1 2 3 4 5

1. Web sitesinin okunabilirlik düzeyi bilgisi

2. Web sitesi içeriğinde kullanılan cümlelerle ilgili detayların (cümle, sözcük, karakter sayısı vb.) bilgisi

3. Web sitesi içeriğinde bulunan zamir, sıfat gibi sözcüklerin sayı bilgisi

4. Web sitesi içeriğinde bulunan cümleler ile ilgili sayısal bilgiler (Soru cümlesi sayısı ve bağlaç içeren cümle sayısı gibi)

WEB SAYFASININ KALİTE VERİLERİ (6 SORU)

Web sitelerinin kalite verilerinin **değerlendirmesi amacıyla kullanılabilecek aşağıda yer alan bilgileri, size göre en önemli gördüğünüze 5, en az önemli gördüğünüze 1 vererek değerlendiriniz *(1:Hiç Önemli Değil - 5: Çok Önemli).* ***

Lütfen her bir öge için uygun yanıtları seçin:

1 2 3 4 5

1. Web sitesinin genel değerlendirme notu bilgisi

2. Web sitesinin arama motorları tarafından üst sıralarda yer almasını sağlayan etkenlere göre (Bir sitenin kalite puanı olan MOZrank ile, algoritmaların toplam puanlaması sonucu hesaplanır) kalite puanı bilgisi

3. Mobil platform uyumluluk bilgisi

4. Tweeter'dan yapılan bağlantı sayısına göre verilen Tweet puanı bilgisi

5. Toplam RSS (Real Simple Syndication- webden yayınlanan haber vb. içeriğin tek bir ortamdan topluca izlenebilmesi) kullanımı bilgisi

6. Anket vb. formların sayı bilgisi

REKLAM KAZANIM VERİLERİ (12 SORU)

Reklam verilerinin **değerlendirilmesi amacıyla kullanılabilecek aşağıda yer alan bilgileri, size göre en önemli gördüğünüze 5, en az önemli gördüğünüze 1 vererek değerlendiriniz *(1: Hiç Önemli Değil - 5: Çok Önemli).* ***

Lütfen her bir öge için uygun yanıtları seçin:

1 2 3 4 5

1. İlgili web sitesine ücret ödenerek oluşturulan bağlantılardan (PPC) ulaşma puanı bilgisi

2. SEO (arama motoru optimizasyon) puanı bilgisi

3. Günlük arama motoru reklam bütçesi bilgisi

4. Sitenin arama motoruna reklam vermek üzere ücret ödediği anahtar sözcüklerle arama moturunda yakaladığı ortalama sıra bilgisi

5. Sitenin arama motorlarında ücret ödemediği anahtar sözcükler ile

1 2 3 4 5

yakaladığı popülaritenin günlük ortalama parasal (SEO) değeri bilgisi

6. Belirlenen anahtar sözcüklerle siteye yapılan günlük ücretli-ücretsiz tıklanma sayısı bilgisi

7. Ücretli en iyi 10 anahtar sözcüklerin bilgisi

8. Ücret ödenen anahtar sözcüklerin bilgisi

9. Aynı anahtar sözcüklere ödeme yapan benzer sitelerin sıralama bilgisi

10. Ücret ödenmeyen anahtar sözcüklerin bilgisi

11. Ücret ödenmeyen anahtar sözcükleri kullanan rakip sitelerin sıralama bilgisi

12.Ücret ödenen sözcük sayı bilgisi

GENEL VERİLER (9 SORU)

Web sitesinin değerlendirilmesi amacıyla kullanılabilecek aşağıda yer alan bilgileri, önem derecelerine göre değerlendiriniz *(1:Hiç Önemli Değil - 5:Çok Önemli).* *

Lütfen her bir öge için uygun yanıtları seçin:

1 2 3 4 5

1. Web sitesinin ziyaret trafik verileri

2. Web sitesi ile ilgili arama verileri (site üzerinde veya arama motorları aracılığı ile)

3. Ziyaretçi profilleri verileri

4. Web sitesine diğer sitelerde yer alan yönlendirme bağlantıları ile ilgili veriler

5. Web sitesine sosyal paylaşım sitelerinden bağlantı verilmesi ile ilgili veriler

6. Web sitesinin büyüklük ve yüklenme hızı ile ilgili analiz verileri

7. Web sitesinin cümle ve sözcük sayısı yönünden okunabilirlik verileri

1 2 3 4 5

8. Web sitesinin kalite değerlendirme, mobil platform uyumluluğu, canlı içerik takibi (RSS) ve tweet puanı verileri

9. Web sitesi için ücret ödeyerek yapılacak reklam katkı değerlendirmeleri ile ilgili veriler

Ankete katıldığınız için teşekkür ederiz.

Anketi Bitir.
Anketi doldurduğunuz için teşekkür ederiz.

APPENDIX A6.2: Eliminated Data Items for Dynamic Analysis

No	TRAFFIC DATA	ELIMINATION REASON
6	Visitors by country	Ranking with other web sites is impossible. It is just an information
	SEARCH DATA	
20	Search Traffic on the Rise and Decline	Ranking with other web sites is impossible. It is just an information
	AUDIENCE DEMOGRAPHICS	
24	Gender	Ranking with other web sites is impossible. It is just an information
26	Has Children	Ranking with other web sites is impossible. It is just an information
29	Household Income	Ranking with other web sites is impossible. It is just an information
30	Audience Interests	Ranking with other web sites is impossible. It is just an information
	LINKS	
34	Total Links	It regards to the all links to this page including internal, external, followed and not followed. Neglected since it is almost the same data with backlinks.
35	Inbound Links	It is the number of links that a web site has and it's neglected since it doesn't affect web sites' ranking
	READABILITY REPORT	
60	Readability grades	Tools did not give any consistent and comparable data for this item.
61	Sentence Info	Tools did not give any consistent and comparable data for this item.
	ADVERTISEMENT COMPETITION DATA	
76	Ten best paid keywords	Ranking with other web sites is impossible. It is just an information
77	Paid keywords	Ranking with other web sites is impossible. It is just an information
77	Top Ad competitors	Ranking with other web sites is impossible. It is just an information
80	Top Organic competitors	Ranking with other web sites is impossible. It is just an information

APPENDIX A6.3: List of The Data Items Obtained from 16 Web Analytic Tools

	DATA ITEMS	DESCRIPTION
	Traffic Data	
1	Traffic Rank	Global rank of the site
2	Competitive Rank	Rank of the site among its competitor
3	Reach	Estimated percentage of global internet users who visit the site
4	Visits	Estimated number of times a site is accessed by unique visitors
5	Unique Visitors	The estimated, unduplicated number of people who visit a site over a specific month
6	Pageviews	Number of pageviews
7	Pageviews/User	Estimated daily unique pageviews per user
8	Bounce %	Estimated percentage of visits to site that consist of a single pageview
9	Time on site	Estimated daily time passed on the site
10	Average Load Time	Average load time
11	Regional Traffic Ranks	Rank of the site on its region/country
12	Subdomains	Number of subdomains
13	Visit Sessions	Measurement of the total number of 20 minute sessions per random sample of one million Internet users
	Search Data	
14	Search Traffic	The percentage of site visits from search engines
15	Top Queries from Search Traffic	Percentage of the site name query
16	High Impact Search Queries	Popular queries that are relevant to this site and are actively targeted by competitors advertising on search engines
17	Page Keywords	Number of words within your page content that occur less than 30 times
	Audience Demographics	
18	Age	Age profile of the visitors
19	Education	Education profile of the visitors
20	Browsing Location	Browsing location information such as home, work, school
21	Ethnicity	Ethnicity profile of the visitors
	Links	
22	Backlinks	Number of links to the site from others
23	Pages Indexed	Number of references for the site and its subdomains on search engines
24	Anchor Text	Text that composes a link to another site within the site
25	HTTP Status	Data to check whether the site has html errors or not
26	Link Influence Score	Link Score derived from the number and quality of the links that point to the site

	DATA ITEMS	DESCRIPTION
27	Link Popularity Ranking	Rank of the site according to popularity of the links to the site
28	Broken Links Check	Check of the links that are not linked to other web sites
	Social Statistics	
29	Facebook Shares	Number of Facebook shares
30	Facebook Likes	Number of Facebook likes
31	Tweets	Number of tweets
32	Google+1	Number of Google+1 shares
33	Delicious	Number of Delicious shares
	Site Speed Analysis	
34	Total numbers of HTML files	The total numbers of HTML files
35	The total number of objects	The total number of objects
36	The total number of images	The total number of images
37	The total number of external CSS files	The total number of external CSS (Cascading Style Sheets) files
38	The total size of the page	The total size of the page in bytes
39	The total number of external script files	The total number of external script files
40	The total size of the mainpage	The total size of the mainpage in bytes
41	The total size of the images	The total size of the images in bytes
42	The total size of external scripts	The total size of external scripts in bytes
43	The total size of external CSS	The total size of external CSS in bytes
44	The total size of all external multimedia files	The total size of all external multimedia files in bytes
	Readability Report	
45	Word Usage	Number of verbs, pronouns, prepositions used in the site
46	Sentence beginnings	Numerical information about the sentence beginnings for the site
	Website Quality Grade	
47	Website grade	Grade given to the site calculated according to relevant criteria
48	MOZ Rank	Measure of link authority and popularity
49	Mobile optimization	Data shows whether the site is optimized for mobile devices or not
50	Tweet grade	Shows how many times the homepage of the site is tweeted on Twitter
51	Number of RSS feed	Number of RSS feeds used in the site
52	Number of web forms	Number of web forms used in the site
	Advertisement Competition Data	
53	PPC Rank	Rank of the site which generated the most clicks from paid keywords among all domains advertised on Google
54	SEO Rank	Rank/Score given for the market value of the organic clicks
55	Daily Adwords (PPC) Ad Budget	Estimated amount that a site spends on Google Adwords in an average day

	DATA ITEMS	DESCRIPTION
56	Avg. Ad Position / # Advertisers	An ad's position is the order it appears on the result page
57	Daily Organic (SEO) Traffic Value	Estimated amount that a site benefits from the traffic that organic rankings deliver
58	Paid vs. Organic Clicks Per Day	Ratio of the paid clicks to organic clicks that a site gets from Google
59	Organic keywords	All of the keywords that the domain ranks in the top 50 search results on Google
60	Number of Paid Adds	Number of paid keywords on Google

APPENDIX A6.4: Questionnaire – Main Study

Web Sitesi Değerlendirme Anketi

Bu anketle bir web sayfasının rakip web sayfaları arasındaki durumunu değerlendirmek için kullanılacak olan değerlendirme elemanlarının belirlenmesi ve bu veriler arasındaki ağırlıkların hesaplanması planlanmaktadır. Bu kapsamda, katılımcılardan web siteleri için önem verdikleri faktörler hakkında bilgi alınarak verilerin önem derecelerine göre ağırlıklarının hesaplanması sağlanacaktır.

Ankette, kimlik belirleyici hiçbir bilgi istenmemektedir. Cevaplarınız tamamen gizli tutulacak ve sadece araştırmacılar tarafından değerlendirilecektir; elde edilecek bilgiler bilimsel yayınlarda kullanılacaktır.

Anket Etik Kurulu tarafından onay almıştır.

Anket 12 sorudan oluşmaktadır. 1-5 arasında (1: Hiç önemli değil, 2: Önemli değil, 3: Kararsız, 4: Önemli, 5: Çok önemli) seçim yapılarak doldurulmalıdır.

Katkılarınız için teşekkür ederiz.

KATILIMCI HAKKINDA (6 SORU)

1. Çalıştığınız kurumun sektörü: *

Lütfen aşağıdakilerden **yalnız birini** seçin:

Kamu
Özel

2. Çalıştığınız kurumdaki göreviniz: *

Lütfen aşağıdakilerden **yalnız birini** seçin:

Bilgi İşlem Merkezi Yöneticisi
Bilişim Yöneticisi
Çözümleyici
Proje Yöneticisi
Programcı
Sistem Yöneticisi
Diğer

3. Cinsiyetiniz *

Lütfen aşağıdakilerden **yalnız birini** seçin:

Kadın
Erkek

4. Yaşınız? *

Lütfen uygun olanların **tümünü** seçin:

20-25
26-30
31-35
36-40
41-45
46-50
51 +

5. Gelir Düzeyiniz? *

Lütfen aşağıdakilerden **yalnız birini** seçin:

1000-2000
2001-3000
3001-4000
4000 +

6. Eğitim Durumunuz: *

Lütfen aşağıdakilerden **yalnız birini** seçin:

Lise
Lisans
Yüksek Lisans
Doktora ve Üstü

TRAFİK VERİLERİ (12 SORU)

Trafik verilerinin **değerlendirilmesi amacıyla kullanılabilecek aşağıda yer alan bilgileri, size göre en önemli gördüğünüze 5, en az önemli gördüğünüze 1 vererek değerlendiriniz.*(1: Hiç Önemli Değil - 5: Çok Önemli)***

Lütfen her bir öge için uygun yanıtları seçin:

	1	2	3	4	5
1. Web sitesinin dünya web sayfaları arasındaki popülerlik sırası bilgisi					
2. Web sitesinin ilgili olduğu alan ile benzer alandaki diğer sitelerin popülerlik sıralarının karşılaştırma bilgisi					
3. Web sitesine erişen kullanıcıların İnternet kullanıcılarına oranı bilgisi					
4. Web sitesinin ziyaret edilme sayı bilgisi					

1 2 3 4 5

5. Web sitesini ziyaret eden tekil ziyaretçi sayı bilgisi

6. Web sitesinin görüntülenme sayısı bilgisi

7. Bir ziyaretçinin sitenin ortalama kaç sayfasını görüntülediği bilgisi

8. Web sitesine erişen ziyaretçilerden sadece bir kere sayfa görüntüleme yapan ve bir daha sayfayı ziyaret etmeyen kişi sayısı bilgisi

9. Web sitesinde geçirilen ortalama süre bilgisi

10. Web sitesinin ortalama yüklenme süresinin diğer web sayfalarına göre hızlı ya da yavaş olduğunun bilgisi

11. Web sitesinin diğer ülkelerdeki popülerlik sırası bilgisi

12. Web sitesinin ziyaretçilerinin o siteye bağlı alt sayfalarını ziyaret etme yüzdesi bilgisi

ARAMA VERİLERİ (7 SORU)

Arama verilerinin **değerlendirilmesi amacıyla kullanılabilecek aşağıda yer alan bilgileri, size göre en önemli gördüğünüze 5, en az önemli gördüğünüze 1 vererek değerlendiriniz** ***(1: Hiç Önemli Değil - 5: Çok Önemli).***

Lütfen her bir öge için uygun yanıtları seçin:

1 2 3 4 5

1. İlgili web sitesine bir arama motoru aracılığıyla erişen kişilerin sayfayı ziyaret eden kişilere göre yüzde bilgisi

2. Web sitesinde en çok aranan sözcüklerin bilgisi

3. Ziyaretçilerin arama motorları aracılığıyla web sitesine erişmelerini sağlayan sözcüklerin en çoktan en aza doğru sıralama bilgisi

4. Sitede en çok geçen anahtar sözcüklerin bilgisi

5. İlgili web sitesine hangi web sitelerinden tıklanarak ulaşıldığı bilgisi

6. İlgili web sitesi veya alt sayfalarının arama motorlarında yer alan referanslarının toplam sayısı

7. Site içinde en çok kullanılan anahtar bağlantı sözcüğü/metni bilgisi

ZİYARETÇİ PROFİLİ (4 SORU)

Ziyaretçi profili verilerinin **değerlendirilmesi amacıyla aşağıda yer alan bilgileri, size göre en önemli gördüğünüze 5, en az önemli gördüğünüze 1 vererek değerlendiriniz *(1: Hiç Önemli Değil - 5: Çok Önemli).***

Lütfen her bir öge için uygun yanıtları seçin:

1 2 3 4 5

1. Ziyaretçilerin yaş bilgisi

2. Ziyaretçilerin eğitim durum bilgisi

3. Ziyaretçilerin web sitesine eriştiği ortam (ev, okul, iş vb.) bilgisi

4. Ziyaretçilerin etnik köken bilgisi

BAĞLANTI VERİLERİ (4 SORU)

Bağlantı ("link") verilerinin **değerlendirilmesi amacıyla kullanılabilecek aşağıda yer alan bilgileri, size göre en önemli gördüğünüze 5, en az önemli gördüğünüze 1 vererek değerlendiriniz *(1: Hiç Önemli Değil - 5: Çok Önemli).* ***

Lütfen her bir öge için uygun yanıtları seçin:

1 2 3 4 5

1. 200, 403, 404 vb. hata kodu bilgisinin varlığı

2. Yapılan bağlantıların sayısı gözetilerek hesaplanan kalite puan bilgisi

3. Sitenin popülerlik (referans) sıralama bilgisi

4. Kırık bağlantı kontrol bilgisi

SOSYAL PAYLAŞIM VERİLERİ (5 SORU)

Sosyal paylaşım verilerinin **değerlendirilmesi amacıyla kullanılabilecek aşağıda yer alan bilgileri, size göre en önemli gördüğünüze 5, en az önemli gördüğünüze 1 vererek değerlendiriniz *(1: Hiç Önemli Değil - 5: Çok Önemli).* ***

Lütfen her bir öge için uygun yanıtları seçin:

1 2 3 4 5

1. Facebook paylaşım sayı bilgisi

2. Facebook beğenme sayı bilgisi

3. Tweet paylaşım sayı bilgisi

4. Google+1 paylaşım sayı bilgisi

5. Delicious'da yer alma sayı bilgisi

SİTENİN HIZ ANALİZLERİ (Sayısal Bilgiler) (7 SORU)

Hız analizi verilerinin **değerlendirilmesi amacıyla kullanılabilecek aşağıda yer alan bilgileri, size göre en önemli gördüğünüze 5, en az önemli gördüğünüze 1 vererek değerlendiriniz** ***(1: Hiç Önemli Değil - 5: Çok Önemli).***

Lütfen her bir öge için uygun yanıtları seçin:

1 2 3 4 5

1. Bir web sitesindeki toplam HTML dosya sayı bilgisi

2. Web sitesinde yer alan tüm objelerin (imajlar, html dosyaları, "javascript"ler, multimedia, vb.) toplam sayı bilgisi

3. Toplam imaj (.jpg, .gif, .png, vb.) sayı bilgisi

4. İlgili web sayfası dosyasından farklı bir dosyadan çalıştırılan toplam CSS (Cascading Style Sheets - html koda stil veren dosya) dosyaların sayı bilgisi

5. İlgili web sayfası dosyasından farklı bir dosyadan çalıştırılan toplam "script" sayı bilgisi

6. Web sitesi içeriğinde bulunan zamir, sıfat gibi sözcüklerin sayı bilgisi

7. Web sitesi içeriğinde bulunan cümleler ile ilgili sayısal bilgiler (Soru cümlesi sayısı ve bağlaç içeren cümle sayısı gibi)

SİTENİN HIZ ANALİZLERİ (Büyüklük Bilgileri) (6 SORU)

Hız analizi verilerinin **değerlendirilmesi amacıyla kullanılabilecek aşağıda yer alan bilgileri, size göre en önemli gördüğünüze 5, en az önemli gördüğünüze 1 vererek değerlendiriniz *(1: Hiç Önemli Değil - 5: Çok Önemli).***

Lütfen her bir öge için uygun yanıtları seçin:

1 2 3 4 5

1. Web sitesinin dosya büyüklüğü (byte, Kb cinsinden) bilgisi

2. Ana sayfanın dosya büyüklüğü (byte, Kb cinsinden) bilgisi

3. İmajların (.jpg, .gif, .png, vb.) toplam büyüklüğü (byte, Kb cinsinden) bilgisi

4. İlgili web sayfası dosyasından farklı bir dosyadan çalıştırılan toplam "script" büyüklüğü (byte, Kb cinsinden) bilgisi

5. İlgili web sayfası dosyasından farklı bir dosyadan çalıştırılan toplam CSS (Cascading Style Sheets - html koda stil veren dosya) dosyaların büyüklüğü (byte, Kb cinsinden) bilgisi

6. İlgili web sayfası dosyasından farklı bir dosyadan çalıştırılan toplam multimedya dosyalarının büyüklüğü bilgisi

REKLAM KAZANIM VERİLERİ (8 SORU)

Reklam verilerinin **değerlendirilmesi amacıyla kullanılabilecek aşağıda yer alan bilgileri, size göre en önemli gördüğünüze 5, en az önemli gördüğünüze 1 vererek değerlendiriniz *(1: Hiç Önemli Değil - 5: Çok Önemli).*** *

Lütfen her bir öge için uygun yanıtları seçin:

1 2 3 4 5

1. İlgili web sitesine ücret ödenerek oluşturulan bağlantılardan (PPC) ulaşma puanı bilgisi

2. SEO (arama motoru optimizasyon) puanı bilgisi

3. Günlük arama motoru reklam bütçesi bilgisi

4. Sitenin arama motoruna reklam vermek üzere ücret ödediği anahtar sözcüklerle arama moturunda yakaladığı ortalama sıra bilgisi

5. Sitenin arama motorlarında ücret ödemediği anahtar sözcükler ile yakaladığı popülaritenin günlük ortalama parasal (SEO) değeri bilgisi

1 2 3 4 5

6. Belirlenen anahtar sözcüklerle siteye yapılan günlük ücretli-ücretsiz tıklanma sayısı bilgisi

7. Ücret ödenmeyen anahtar sözcüklerin bilgisi

8. Ücret ödenen sözcük sayı bilgisi

GENEL VERİLER (9 SORU)

Web sitesinin değerlendirilmesi amacıyla kullanılabilecek aşağıda yer alan bilgileri, önem derecelerine göre değerlendiriniz *(1:Hiç Önemli Değil - 5:Çok Önemli).* *

Lütfen her bir öge için uygun yanıtları seçin:

1 2 3 4 5

1. Web sitesinin ziyaret trafik verileri

2. Web sitesi ile ilgili arama verileri (site üzerinde veya arama motorları aracılığı ile)

3. Ziyaretçi profilleri verileri

4. Web sitesine diğer sitelerde yer alan yönlendirme bağlantıları ile ilgili veriler

5. Web sitesine sosyal paylaşım sitelerinden bağlantı verilmesi ile ilgili veriler

6. Web sitesinin büyüklük ve yüklenme hızı ile ilgili analiz verileri

7. Web sitesinin cümle ve sözcük sayısı yönünden okunabilirlik verileri

8. Web sitesinin kalite değerlendirme, mobil platform uyumluluğu, canlı içerik takibi (RSS) ve tweet puanı verileri

9. Web sitesi için ücret ödeyerek yapılacak reklam katkı değerlendirmeleri ile ilgili veriler

Ankete katıldığınız için teşekkür ederiz.

Anketi Bitir.
Anketi doldurduğunuz için teşekkür ederiz.

APPENDIX A6.5: Ethics Clearance

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KONU: Feride Erdal

Bilişim Sistemleri Anabilim Dalı Yüksek Lisans programı öğrencisi 760017 no.lu Feride Erdal'ın, 01 Ocak – 31 Haziran 2012 tarihleri arasında "Web Sitesi Değerlendirme Anketi " başlıklı araştırma çalışmasına ilişkin "Üniversite Öğrencileri ve Çalışan Yetişkinler"de uygulama yapmak için görevlendirme başvurusu incelenmiş, ilgili EABD Başkanlığı'nın görüşüne dayanarak adı geçen öğrencinin isteği doğrultusunda görevlendirilmesine Etik Komite onayı koşulu ile uygun görülmüştür.

Saygılarımla,

Ek: YKK
EABD

Etik Komite Onayı
Uygundur
07./02/2012

Prof. Dr. Canan ÖZGEN
Uygulamalı Etik Araştırma Merkezi
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