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# Linking Universities to the Target Market via Web Sites: A Content Analysis of Turkish Private Universities' Web Sites

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## Abstract

Internet is becoming more and more important in business. It has many advantages such as reducing marketing costs and extending target group easier. Universities, which lead the scientific developments in a society, can also benefit from the Internet. Universities have different characteristics and audiences compared to corporations. With the new generation, Web sites become more crucial in order to meet and convince prospective students, who grew up with the Internet. From this point of view, Web sites should be up-to-date, fast, interactive and user friendly.

The purpose of this study is to explore the current content information of the Turkish Private Universities' (TPUs) Web sites. By July 2013, there are 71 TPUs, but only 61 of them have an available Web site (The Council of Higher Education, 2013). The scale to assess content of the Web sites consists of 41 items and they are divided into 4 groups based on their target audience: (1) students/prospective students, (2) employees/prospective employees, (3) external stakeholders and (4) media. According to the findings, the arithmetic mean of items for students/prospective students is moderately high with 58 percent score, employees/prospective employees is moderately high with 57 percent score, external stakeholders is moderate with 50.49 percent score and media is high with 81.42 percent score.

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## 1. Introduction

With the enormous growing of information and communication technologies, people spent more time on the Web. Internet is a massive network of networks, a networking infrastructure. However, the World Wide Web, or simply Web, is a way of accessing information over the medium of the Internet. Web is an information-sharing model that is built on top of the Internet. Thus, Web is just a portion of the Internet, albeit a large portion, but they are not the same (Beal, V. 2013). Brown (2000) suggests that, Internet has a societal impact similar to that of electricity, but is developing more rapidly (Poock, M.C. & Lefond, D. 2001). Bell & Tang (1998) suggests that,

according to a senior official of Internet giant Netscape, it took radio 38 years, television 13 years but just five years for the Internet to reach 50 million users (Poock, M.C. & Lefond, D. 2001).

Wernick (1991) suggests that, the university becomes a commodity and its prospective students become consumers (Callahan, E. 2006). For business, the objectives of having a Web site are fairly transparent; in higher education however, a heterogeneous audience dictates that these goals are manifold and can become confused (Middleton, I., McConnell, M. & Davidson, G. 1999). If we assume that universities are the brands for education marketing, than Web sites should be the crucial part of this marketing process. Simmons (2007) refers to “i-branding”, and argues that many organizations are searching for new Internet branding strategies that might assist them in creating distinctiveness whilst engaging with customers (Chapleo, C., Duran, M.V.C. & Diaz, A.C. 2011).

In this study, we first aim to conceptualize Web sites in businesses, especially in higher education institutions. Second, we try to summarize the growing literature, and finally we'll give the results of the study, which was conducted on TPUs Web sites.

## 2. Literature Review

It is said that the centerpiece of any successful program is an interactive Web site designed specifically for the targeted audience the company is seeking to reach (Educational Marketing: A New Strategy for Building Customer Loyalty 2010). At this point, higher education institutions, as members of education marketing, have similar ideals as business industry has. As Hite & Railsback (2008) indicate, university Web sites have developed almost as rapidly as corporate Web sites. Similarly, Lincoln (2001) found more than 81 percent of university marketing faculty reported creating and maintaining individual faculty Web sites (Middleton, I., McConnell, M. & Davidson, G. 1999). Furthermore, his study showed that the amount of material being placed on academic Web sites had increased significantly over time.

The primary goal of university Web sites is to provide information, especially to prospective students (Padmannavar, S.S. & Joshi, M.J. 2011). Even though, prospective students are the main audience of a Website, Middleton, McConnell & Davidson (1999) suggest that a Web site of a university has two kind of audiences: the internal users and the external users. The internal users are comprised of staff and students. Some items on Web site such as telephone directory, timetables and lecture notes mainly target them. Middleton, McConnell & Davidson (1999) also indicate that, external users can be categorized by eight groups: Prospective students, prospective staff, other academics, business people, alumni, news media, donors and benefactors, legislators and others. On the academic side, the Web has become a significant part of student experiences within and outside the classroom (Bradbard, D.A., Peters, C. & Caneva, Y. 2010). Nevertheless, McAllister & Taylor (2007) identified the audiences of a university Web site in more detail. They suggest that university Web sites have four main audiences: (1) students/prospective students, (2) employees/prospective employees, (3) external stakeholders, and (4) media.

Abdullah (1998) suggests that, following the increase in internet usage, the most preferred tools in the field of education turned out to be Web sites (Kutluca, T., Aydın, S. & Baki, A. 2009). Universities that own Web sites, that have high external links, are perceived to have inculcated globalization initiative and are in agreement with the information-for-all initiative, as promoted by the open access movement (Utulu, S.C.A. 2008). Poock & Lefond (2001) found that high school students wanted to obtain information within three clicks; if they did not, they lost the initial positive feeling associated with the search. In another study, college students also did not want to have to scroll down the page to search for information (Poock, M.C., & Bishop, B.A. 2006). After a deep literature review, Poock & Lefond (2001) summarize the characteristics of effective Web sites with 8 categories: content, enjoyable experience, organization of the site, limited impact of graphics, ease of navigation, uniqueness of site, focus on target audience, speed of connection.

The literature has proposed a number of factors that may be used to assess Web site architecture, including HTML size, download time, image size, number of images, home page size, number and size of fonts, navigation tools, number of colours and screen length (Utulu, S.C., & Bolarinwa, O. 2012). The Web site quality model

suggests that, Web site quality consists 4 items: accessibility, speed, navigability and content (Mateos, M.B., Mera, A.C., Gonzales, F.J.M. & Lopez, O.R.G. 2001). Content includes the different forms of digital media – links, graphics, audio, video, lists and text (Singh, I.K. 2003). On a university Web site, content is all important (Singh, I.K. 2003). According to the study of Ford (2011), 97 percent of high school students rated content as the important characteristic of a university Web site (Ford, W. 2011). Singh (2003) summarizes the content of a Web site in five categories: information, transaction, entertainment, advanced site and perception of content. In this study, it is aimed to analyze the information of the content of the sample Web sites (Singh, I.K. 2003).

### 3. Methodology

#### 3.1. Research Design

In this study, content analysis method was adopted to explore the Web sites of TPUs. Content analysis is one of the most suitable instruments, applied by many researchers (Nejati, M., Shafaei, A., Salamzadeh, Y. & Daraei, M. 2011). It involves systematic analysis as well as observation to identify the specific information content and other characteristics of the messages. Content analysis studies the message itself and involves the design of a systematic observation and recording procedure for quantitative description of the manifest content of communication (Zikmund, W.G., Babin, B.J., Carr, J.C., Griffin, M. 2009). In this study, the scale to assess Web sites content information was adapted from the study of Padmannavar & Joshi (2011). Although there were 52 items in their study, we used 41 of them. 11 items are left outside because these variables are not suitable for TPUs Web sites and/or similar to each other (Bradbard, D.A., Peters, C. & Caneva, Y. 2010). These are: courses/programs offered, other information, international students, student exchange, faculty contact, date retrieved, forthcoming events, media, business, open days and developed by. However, we have added two more items into the scale, which are availability of vision/mission statement and availability of social media links. By mentioning social media links, we mean social networking sites (Greenwood, G. 2012), but we only check the availability of facebook and twitter links on the home pages, just because they are known as the most popular social networking sites. The final scale consists of 43 items.

#### 3.2. Sample

In the Turkish law, the universities that are not directly connected to the state, instead operated as an autonomous by a foundation, named as foundation universities (Turkish High Education Law 1981, Turkish Institution 1982). To be harmonious with the literature, we choose to use “private university” term instead of foundation university. The first private university of Turkey is Bilkent University, which was founded on 1984. As July 2013, there are 71 TPUs (The Council of Higher Education, 2013). In 2012/2013 academic year, TPUs have 260.032 students which represent 5.60 percent of all higher education students (Student Selection and Placement Center 2013). Nine private universities have not an official Web site yet, the website of one private university is under construction. Thus, the sample consists of 61 Web sites. The inaccessible Web sites of the TPUs can be seen from the Table 1 below.

Table 1. The inaccessible Web sites of the TPUs

No.	Affiliated University	Reason for inaccessibility
1.	Alanya Hamdullah Emin Pasa	Web site doesn't exist
2.	Ankara Bilge	Web site is under construction
3.	Ankara Teknoloji	Web site doesn't exist
4.	İstanbul Esenyurt	Web site doesn't exist
5.	Kanuni	Web site doesn't exist
6.	Konya Gıda ve Tarım	Web site doesn't exist

7.	Mef	Web site doesn't exist
8.	Murat Hudavendigar	Web site doesn't exist
9.	Selahaddin Eyyubi	Web site doesn't exist
10.	Sanko	Web site doesn't exist

As seen on the Table 1, 10 of 71 Web sites of TPUs are inaccessible. In other words, 14 percent of TPUs Web sites are inaccessible. The main reason for this is that they were founded recently.

### 3.3. Data Collection, Assessment Scale and Analysis

The data from the Web sites of TPUs were collected in the first week of June 2013 by the authors. Common two-dimensional “available/not” procedure in the Web site content analysis literature was adopted as assessing method of the scale (Akkan, E., Yasa, E & Bozyigit, S. 2011, Giannopoulos, A.A. ve Mavragani, E.P. 2011, Orel, F.D. & Yasa, E. 2012, Bradbard, D.A., Peters, C. & Caneva, Y. 2010). To analyze the data more easily, we separate all the items into 4 categories according to their audience: students/prospective students, employees/prospective employees, external stakeholders and media by utilizing the study of McAllister & Taylor (2007).

### 3.4. Limitations

This study is limited to the content information of the Web sites of TPUs, which have a working Web site. According to a study, which was conducted with 55 high school students, content is clearly the most important element of a Web site (Poock, M.C. & Lefond, D. 2001). We assess only the home pages (e.g.: www.example.edu.tr) of the universities, except for item “memorandumds of understanding other universities”, cause it usually takes part in the international office page (e.g.: www.international.example.edu.tr). Any other categories of content such as transaction, entertainment, perception of content, etc. (Singh, I.K. 2003) or any other attribute of a Web site, such as design, easy to use, download time, etc. (Utulu, S.C., & Bolarinwa, O. 2012) are outside the scope of the study. Furthermore, Web sites of the universities are continuously being updated and transformed. Thus, the results of the study represent the sample, only by the time when the data was collected.

## 4. Findings

The findings are based on the content and characteristics of the 61 TPUs Web site home pages for this study. Available item scores for students/prospective students can be seen in the Table 2.

Table 2. Available item scores for the students/prospective students

No.	Item	Frequency	%
1	Admission information	60	98.36
2	Exam results	1	1.64
3	Departments	61	100.00
4	Library Catalogues	54	88.52
5	Alumni information	26	42.62
6	Internal social groups	51	83.61
7	Accommodation	44	72.13
8	Placement cell	34	55.74
9	Culture and sports	46	75.41

10	Health services	41	67.21
11	Old exam papers	1	1.64
12	Current students / future students	57	93.44
13	Student development	30	49.18
14	Funds/awards/scholarships	56	91.80
15	Apply online	19	31.15
16	Parents	6	9.84
17	Events	55	90.16
18	Virtual classroom/tour	28	45.90
19	Learning and teaching	3	4.92
20	Accreditation	28	45.90
21	MoU* with other universities	42	68.85
Arithmetic mean		35.38	58

According to the Table 2, items for the students/prospective students are moderately high with 35.38 mean frequency and 58 mean percent. Item scores such as admission information (98.36 percent), current students/future students (93.44 percent), library catalogues (88.52 percent) are quite high, on the other hand, item scores such as old exam papers (1.64 percent), exam results (1.64 percent) learning and teaching (4.92 percent) are quite low.

Table 3. Available item scores for the employees/prospective employees

No.	Item	Frequency	%
22	Facilities/amenities and services	40	65.57
23	Research / specialization	37	60.66
24	Telephone directory	19	31.15
25	Internal job opportunities	24	39.34
26	International (support/services)	58	95.08
27	University publications	33	54.10
Arithmetic mean		35.16	57.65

According to the Table 3, items for the employees/prospective employees are moderately high with 35.38 mean frequency and 57.65 mean percent. International item (95.08 percent) is quite high, on the other hand items such as, telephone directory (31.15 percent) and internal job opportunities (39.34 percent) are comparatively low.

Table 4. Available item scores for the external stakeholders

No.	Item	Frequency	%
28	Search features	45	73.77
29	Foreign language	58	95.08
30	Introductory Video	47	77.05

\* Memorandums of understanding

31	Quick links	42	68.85
32	Visitors	13	21.31
33	Tenders / circulars	3	4.92
34	Frequently Asked Questions	42	68.85
35	Feedback	22	36.07
36	Freedom of Information Act	23	37.70
37	Local city information	13	21.31
Arithmetic mean		30,8	50.49

According to the Table 4, items for the external stakeholders employees are comparatively low with 50.49 mean frequency. Items such as foreign languages (95.08 percent) are very high. Even though it is not seen on the Table 4, we have to say that only ten TPUs Web site have an option for a foreign language except for English. As Callahan (2006) suggests, international student market varies for each country; thus it can be assumed that there is variation in the emphasis universities place on creating foreign language versions of their Web sites. Although English is known as the universal foreign language worldwide, it might not be sufficient for Turkey for the academic Web sites. For instance after the civil war broke out in Syria, many university students came to Turkey in order to pursue their education. Turkish government makes convenience to them including applying to particular Turkish state universities on declaration basis (<http://gundem.milliyet.com.tr/suriyeli-multeciye-universite-kapisi/gundem/gundemdetay/22.09.2012/1600266/default.htm>), but there are no TPUs that have an Arabic language option on the Web site. On the other hand, items such as tenders/circulars (4.92 percent), local city information (21.31 percent) are quite low. One reason for the item local city information being low, might be that, most of the TPUs are based in İstanbul.

Table 5. Available item scores for media

No.	Item	Frequency	%
38	About us	59	96.72
39	University info. (e-mail, phone, map, etc.)	61	100.00
40	Vision/mission	46	75.41
41	University news	60	98.36
42	University radio & TV	13	21.31
43	Social media	59	96.72
Arithmetic mean		49.66	81.42

According to the Table 5, items for the media are very high. Every TPUs have university info on their home page. Almost all of them (98.36 percent) have news, most of them (75.41 percent) have mission statement. On the other hand, only 21.31 percent of them have university radio & tv link on their home page. And finally 96.72 percent of TPUs have either facebook or twitter, or both link on their home page. From the raw data gathered for the study, 56 of 60 TPUs have both facebook and twitter links on their home page. Three of them have only one social network link either facebook or twitter. Social media is particularly important, because most of the four-year degree-granting institutions are largely targeting high school students between the ages 14 and 19. This age group, known as “digital natives”, is immersed in exposed to technology (Greenwood, G. 2012). According to a survey, 82 percent of digital natives use at least one social networking site. More specifically, 52 percent of Facebook users, 33 percent of Twitter users, and six percent of LinkedIn users engage daily (Greenwood, G. 2012). Thus, it can be said that, social media is an appropriate medium to reach prospective students.

## 5. Conclusion

Web sites, more specifically home pages, are one of the most important mediums for business in this digital age. Many companies and organizations consider their home page a virtual gateway to the world (Callahan, E. 2006). From the academic perspective, Web sites of the universities are very important for all audiences. For instance, the home page is the first glimpse of the college for many prospective students (Greenwood, G. 2012). Meyer (2008) suggests that 34.4 percent of university home page users are either future students or current students (Greenwood, G. 2012). Because the home page is the first glimpse, audience might judge the institution, by only visiting the Web site of the institution. In many countries, studies on the nature of linking by universities' Web sites have been conducted and findings have shown that, there exist relationships between the level of linking by university Web sites and activities in the universities, for example, the level of research and the productivity of the universities (Agarin, O., & Nwagwu, W. E. 2006).

According to the findings the arithmetic mean percentage of the items for the students/prospective students is 58. If it is considered that prospective students are the main audience of the universities, than this score will be assumed as low. For instance, only almost half of the TPUs Web sites (55.74 percent) have information about placement cell. Even though in the Turkish High Education system a Bachelor of Arts candidate should apply the central exam in advance, the 31.15 percent of apply online item score is still low because Master of Arts and Ph.D. programs are decenterally applied by the candidates to the institutions.

Only 9.84 percent of Web sites of TPUs have parents information on their Web site. Parents are one of the most important information party to whom a prospective student counts on. Bers (2005) and Bers & Galowich (2002) suggest that there is some evidence to explore the role of parents in community colleges (Duggan, M.H. 2010). Thus, universities should also consider parents for the choice of university to apply in the convincing process.

TPUs Web sites have comparatively high item scores with 96.7 percent on social media. If the home page content desired happens to be social media, institutions will find it advantageous to make this information easily and more importantly, quickly accessible (Greenwood, G. 2012). According to Winrech and Obendorf (2008), 77 percent of all page visits last less than 10 seconds. Thus, presenting social media link on the home page is the most effective way to reach users in this time frame (Greenwood, G. 2012).

In the future studies, Web site content items of state universities can also be explored and compared with TPUs Web sites depending on this study. Other variables of content can also be included to the research design such as architecture, speed, navigability in order to assess the higher education institutions.

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