

ARE OUR UNIVERSITIES READY FOR THE CHANGING WEB USER PROFILE IN EVERY ASPECT?

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ABSTRACT

With the widespread use of the Internet and the proliferation of services offered over the Internet, the use of the web is increasing day by day. In addition, as a result of computerization and smart phone usage in recent years, young people who have been educated, and middle-aged and older people who use computers at work places frequently use the Internet environment. The gradual increase in the computer literacy rate is making a serious change in the current web user profile in Turkey. In this study, we investigated the situation of this transformation in web usage in the recent years and some tendencies towards the future are examined by going through various published statistics. Besides, the role of the universities in Turkey on this transformation and effect of this transformation on the universities has been interpreted.

Keywords: Internet Usage, Internet in Turkey, Web User Profile, University

INTRODUCTION

The most important scaling tool for the effective transportation of the services provided in Internet to the recipients is to determine the user profiles and the habits clearly. When this determination once accomplished correctly, the users can be dispatched to a product or a service easily. It has been known that the large companies are implementing important data mining studies and high budget researches over this determination processes and the measurement of the consumer habits.

The web user profile can be described as an integration of demographical information like: gender, age, education, income status and technical information like: type of the using tool, browser type, connection and behavioral information like: type of entering the site, timing, course of action, shopping preferences. As a general approach, depending on the data type to be collected, the necessary user specifications are mostly tried to be gathered by not making understand the users as far as possible.

There are some web analytical tools for collecting information from outside of the site like: Alexa and Compete and from inside the site like: Google, Analycis, Yandex Metrica, Yahoo Web Analytics, Bing Campaign Analytics (Firat, 2015). Several research companies publish global, state based or comparable reports about web users' general profiles yearly. In spite of these general reports, the determination of the user profiles for company base can be handled in a special effort for gathering special results. For this purpose, not only the surveys but also the analytical site or some special analyzing methods and software can be used.

In Turkey before this, several scientific studies have been accomplished especially on the Internet using of the university students (Dursun, 2004; Balcı & Gülnar, 2009) and social media using (Vural & Bat, 2010; Karal & Kokoç, 2010) for determining the types of the profiles and finding out the purpose of using them. But all across Turkey there is no big scaled research about analyzing web profile trends and the university factor together.

In this study, within considering the seemingly changing of the statistics across Turkey, a future projection of how the web profile change will take place has been analyzed. Besides, how this kind of changing is going to act the universities and starting with these days, what kind of studies can be done in the universities have been considered.

THE STUDY

From 2004 till nowadays, the yearly published survey results' statistics (TÜİK, 2016) by the Turkish Statistical Institute (TÜİK) accomplished face to face with the individuals between 16-74 ages and the reports (We Are Social, 2014-2015-2016) that have been published every January in last three years by



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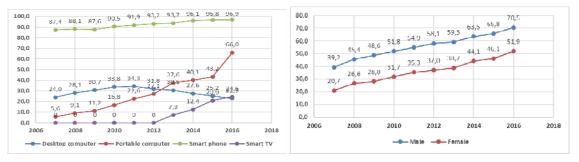
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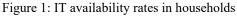
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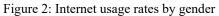
the so called "We are Social" company that has headquarters in New York, USA both present the interchanging rate of the Internet using by years. In this study, the statistics collected from the TÜİK reports that state the household Information Technologies usage (tool types) and gender, age, education and the statistics of Internet use with the rate of utilization and the so called "We Are Social" company's statistics about Internet and social web using overall Turkey have been used.

Usage of Information Technologies by Web User Profile

According to the researches made by TÜİK, in Turkey, what kind of household Information Technologies have been used and how they have been changed in recent 10 years were presented in Figure 1, the Internet usage depending on the gender types was presented in Figure 2, the Internet usage depending on the age was presented in Figure 3 and the Internet usage depending on education was presented in Figure 4.







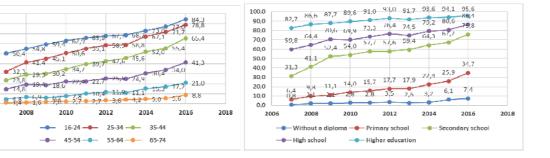


Figure 3: Internet usage by age groups

Figure 4: Internet usage by education level

In the statistics, the years in hand present that a little increase in number of smart phones, a constant decrease in number of desktop computers, and a substantial increase in the ratio of smart TV and portable computers (laptops, tablets, etc.). Besides, in Turkey as the computer and the Internet usages analyzed separately, it can be seen that the Internet usage is 10 points more than the computer usage. This has the result of a none computer using population that can have connection to the Internet of 10% by the widespread usage of Internet connection especially over the smart phones.

In Turkey, the usage of Internet depending on gender types has a constant increase, and the usage of men compared to the women is approximately 20 points more and it can be said there is no marked difference of the ratio in the usage by the years. As the age increases the Internet usage is getting decreased. The young population uses the Internet mostly, and it can be seen on the over middle-age group that Internet usage ratio is getting down. As the educational status getting higher, the Internet usage is also getting higher. The primary school graduated or the none-educated category of Internet usage is substantially lower than the other groups. This is directly related with the age groups over the Internet usage.

Usage of Internet and Social Network

According to the so called "We are Social" company's published reports (We Are Social, 2014-2015-2016) the statistics about the Internet and the social media usage in Turkey have been given in Table 1.



Parameter	2014	2015	2016
Population (Million)	73,90	76,70	79,14
Urbanization Rate	72%	73%	74%
Number of Internet Users (Million)	33,40	37,70	46,28
Internet Penetration	45%	49%	58%
Active Social Network Users (Million)	36,00	40,00	42,00
Social Network Penetration	49%	52%	53%
Unique Mobile Users (Million)	-	68,60	71,03
Unique Mobile Penetration	-	89%	90%
Active Mobile Social Users (Million)	-	32,00	36,00
Active Mobile Social Penetration	-	80%	86%

Table 1: Internet usage rates in Turkey between the years of 2014-2016

In the 2014 published report, as the "Mobile Usage" section could not have been calculated singularly, this values had not been presented. The numbers depending on the last three years show us that:

- In Turkey, the 72% of the population are living in cities and the urbanization rate is getting increased with average 1% in every year.
- The number of Internet users in Turkey are getting increased with average 4%-9% and got nearly of 60% of the population.
- Over than half of the population of Turkey use Internet and this ratio is getting approximately 2% in every year.
- In Turkey, over than 90% of the population use mobile phones and this ratio is getting approximately 1% in every year.
- In Turkey, the 86% of users are connecting the social networks by smart phones. This ratio is getting increased 6% in every year, and it is going to reach the saturating point in a few years.

Purposes of Internet Usage

According to the data of Turkish Statistical Institute (TÜİK, 2016), the purposes of Internet using and the differences depending on the gender types have been given in Table 2.

Purpose of Internet Usage	Turkey Avg. (%)	Male (%)	Female (%)	MF. Diff.
Participating in social networks (creating user profile, posting messages or other contributions)	82,4	85,0	78,8	6,2
Watching video content from sharing services (YouTube etc.)	74,5	76,8	71,3	5,4
Reading online news, newspapers or magazines	69,5	73,0	64,8	8,2
Search for health related information (injury, illness, nutrition, etc.)	65,9	60,6	73,2	-12,6
Searching for information about goods and services	65,5	66,9	63,6	3,2
Listening to music (including web radio)	63,7	63,9	63,5	0,4
Upload created content (text, photos, etc.) to share with any website	47,0	48,6	44,8	3,9
E-mail sending / receiving	46,3	50,8	40,2	10,6
Internet phone / video call (with webcam)	41,3	41,1	41,6	-0,5
Downloading or playing games	40,8	44,5	35,9	8,6
Obtaining doctor's appointment via website (health inst. or hospital etc.)	34,2	32,5	36,4	-3,9
Watch TV on the Internet (including live or missed programs)	33,7	34,2	33,1	1,2
Internet banking	31,0	38,3	21,1	17,2
Use online services for travel or travel related accommodation	20,5	23,0	17,0	6,0
Sale of goods or services	20,0	22,8	16,1	6,6
Individuals who store their personal documents on the Internet	14,2	16,2	11,5	4,7
Using payment accounts (e.g. BKM Express, AliPay) to pay for goods or services purchased over the internet	6,9	8,5	4,6	3,9
Creating websites or blogs	3,3	4,0	2,3	1,8
Watching video on demand (paid)	3,0	3,3	2,6	0,7

Table 2: Purposes of Internet Usage in Turkey



The data presents that in Turkey, Internet is being used as an entertainment tool instead of education, information or the other needs. In most of the purposes there is no difference occurring depending on gender types; the most distinctive differences are, the usage of Internet banking in men is 17.2% more than the women, and looking for information about health situations in Internet for woman is 12.6% more than men.

FINDINGS

Because of the increasing population of the computer literate infants and children, urbanization, the cheaper widespread usage of Internet, the increasing number of services moved to Internet and becoming a necessity of using these kinds of services, the usage of Internet is rapidly increasing in Turkey like the whole World. Besides, in recent years, within the widespread usage of the smart phones when compared to desktop computers, more mobile users are using the services and the applications on web. So that there is a 10% group existing can be seen in the statistics as Internet users but not using computers.

Interpretation of Web User Profile Changes for the Future

In the developed countries, the web usage ratio of men-women is approximately close to each other, on the other hand in our country the ratio of men is 20 points more than the women. Within a young population growing up with an equal ratio of man and woman, and in the long term, it is possible to estimate that the ratio of man and woman is going to get closer.

In our country and in the world, now, the young population meets the computer and Internet in early ages. The necessity of connecting to Internet for the middle age people is slightly less. Today's young and middle age group are going to be the middle age and the upper age groups in the future. Also within the consideration of the affect that Internet gets a higher participation in every part of life, it can be said the Internet usage in all age groups is going to get increased.

Also in our country and in the world, the level of education is increasing. Nowadays, when it is considered that Internet is being used by the secondary and high school graduated individuals, this can also, in the forthcoming years, get increased the Internet usage ratio of the middle and upper age groups. Besides, nowadays, when it is considered that because of beginning to use the Internet in primary school level, it is possible to say that the non-high school graduated individuals can use the Internet extensively. Web using is not only used by a specific group, more than that it was started to be used in every part of life by all the type of incoming levels of the individuals. In the future, it is estimated that this can be used more extensively.

When it is considered on the aspect of tools used to connect Internet; it can be seen that the connections made by smart phones, and tablets like mobile platforms are going to get increased. Within the IoT (Internet of Things) like approaches, and becoming the widespread using of mobile 5G and IPv6 like infrastructure technologies, in the forthcoming years, too many kind of tools like washing machines, cameras, combi boilers, refrigerators and security systems are going to connect Internet. Again in the forthcoming 5 years, within the transition from the human based Web 2.0 to machine based web 3.0, the tools are going to be able to act like users on the Internet.

The Effect of Ongoing Transformation On Universities

When the issue is being considered in a broad perspective, it can be seen that changing web user profiles can affect the universities, and at the same time the universities can affect the web user profile changings. The three main purposes of the universities are; making scientific researches, as doing the researches contribute to social development and producing qualified work force. Besides, the universities need administrative and assistant processes to enforce their activities. The universities have the responsibilities of producing technology, the effective usage of it and spreading it to a large mass. It is estimated that the computerization and the Internet usage are going to take a bigger place in every part of life than today in the forthcoming years. In this context, parameters like the number of the computers that can be connected to Internet, wireless access points, the line capacities can be considered even for the universities as an indicator of development today.

The main resource for the universities in the input, process, output and feedback recycle is the human. Whether in the administrative and academic processes, or in the student centered teaching, the Internet has become an indispensable tool. Today the students become computer literate and Internet users before starting university. In the teaching processes, making some of the examinations on web, homework assignments, internship issues like activities and registration to the classes, scores, transcript monitoring have become like necessities to be implemented on the Internet. Communication with the graduated students, gathering feedbacks from the shareholders and many of the functions handled in administrative processes can be executed through also with web.

The transition from formal education to Internet based education was a result of these like developments. Regardless of time or place, the distance learning comes forward on us as a new kind of education model. With the widespread use of the mobile technologies, it is expected to be a mobile application of every university in addition to its web site. Wide-spreading social media becomes a significant information sharing environment with the shareholders for the universities like the other institutions. The using of the web effectively in the transformation of the universities became an important fact to be taken care of by the strategical and administrative leaders of these institutions.

The Role of Universities in Experienced Transformation

In recent years, in respect of the importance of information technologies for the nation, there has been a significant awareness occurred; in addition to this, technologically, several studies have been accomplished for the transition of leaving the consumer state and being a producer. As the information technologies have been prioritized in the R&D projects, the successful completion of the FATIH (Movement to Increase Opportunities and Technology) Project in primary and secondary schools, the administrative and the legal arrangements for cyber security, the mobile 5G infrastructure, the national operating system development like studies, can be considered as hopeful ideas based upon universities. In this field, whether bringing innovation to science with the studies accomplished, or the expectations for the benefit of creating qualified manpower, the universities have an important role in the widespread usage of the web and the interchanging point of the user profiles.

CONCLUSIONS

It is expected that the universities as being on the focusing point of the scientific thoughts and the researches, are going to lead the transformation of the thoughts and the infrastructure that are needed by the society in the widespread use and the importance of the Internet. This transformation can be possible by showing more interest on notions like increasing the number of the web based services presented to the students, the expansion of the network connection opportunities, e-education, e-commerce, and e-management. For the widespread and efficient using of Internet whether in education or in other areas, notably the universities and Higher Education Council (YÖK) like governmental organizations must develop and apply nationwide policies. In addition to this, especially for the national production of hardware or software issues over information technologies, the universities must take prior responsibility and these like initiatives must be encouraged and supported.

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