POLITICAL ECONOMY OF THE INTERNET IN TURKEY: DIGITAL DIVIDE, CONCENTRATION AND CONTENT

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ABSTRACT

POLITICAL ECONOMY OF
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DIGITAL DIVIDE, CONCENTRATION AND CONTENT

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This thesis studies the internet in the context of political economy. For this, it covers the subjects of digital divide, digital inequality, concentration and content of the internet. The main goal of the thesis is to reveal the market structure of the internet today, its relation with the content and user preferences in Turkey. In order to achieve this, we define the political economy of the internet and focus on two components of it, the ownership structure of the internet and the content.

In contrast to the common idea, the internet is not only a virtual universe. It's existence is based upon a great physical infrastructure, and its content today represents an enormous economical field. In this respect, this thesis studies both spheres of the

internet segmented into their main categories and throughout this study, we aim to develop an extensive analysis of the internet, inequality on the internet, focusing on national and global digital inequality. According to this, our study endeavors how the internet globally not only reproduces inequalities of access and usage to the internet, but also imbalance between the oppressed classes, social groups, developed and undeveloped countries and carries a largely monopolistic structure today.

Consequently, this thesis tries to explain how the internet market is structured in Turkey and its dependency relations with foreign capital. In this regard, we illustrate the strong correlation between concentration and increasing mainstream and commercial content on the internet in Turkey and arrive at conclusions and suggestions for rethinking the possibilities of a democratic internet.

Keywords: *Political Economy of Communication, digital divide, new media, internet*

ÖZ

TÜRKİYE'DE İNTERNETİN EKONOMİ POLİTİĞİ:
SAYISAL UÇURUM, YOĞUNLAŞMA VE İÇERİK

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Bu çalışma, interneti ekonomi politik bir çerçevede incelemeyi hedeflemektedir. Bu amaçla, sayısal uçurum, sayısal eşitsizlik, yoğunlaşma ve internet içeriği konuları ele alınmaktadır. Böylece, dijital uçurumun yalnızca erişim ve beceriler değil, ekonomik, toplumsal ve siyasal eşitsizlikleri de taşıdığı savunulmaktadır.

Bu tezin ana hedefi, günümüzde internet endüstrisinin yapısını ortaya koyarak, Türkiye'de internet endüstrisiyle, içerik ve kullanıcı tercihleri arasındaki bağlantıyı sunmaktır. Bu çerçevede, internetin ekonomi politiğine dair tanımlamalar ele alınarak, internetin iki bileşeni olan mülkiyet yapısı ve içeriğine odaklanılmaktadır.

Genel düşünüşün aksine, internet sadece sanal alem değildir. Varlığı, muazzam bir fiziksel altyapının üzerine kurulmuşken, içeriği de bugün olağanüstü bir ekonomik alana denk düşmektedir. Bu açıdan, internetin fiziksel ve sanal uzamları ana kategorilere ayrılarak ele alınarak bu çalışmada internetin ulusal ve küresel dijital eşitsizlik çerçevesinde kapsamlı bir tahlili hedeflenmektedir. Buna göre, internet yine sıkça ifade edildiği gibi yalnızca internete erişim ve kullanımda değil, ezen ve ezilen sınıflar, toplumsal gruplar, gelişmiş ve gelişmemiş ülkeler arasında da eşitsizliği yeniden üretmekte ve oldukça tekelci bir pazar yapısını barındırmaktadır.

Bu bağlamda, bu çalışma, Türkiye'de internet pazarının nasıl yapılandığını ve yabancı sermayeyle bağlantılarını açıklamaya çalışmaktadır. Böylece, Türkiye'de yoğunlaşma ile artan tek tipleşme ve ticari içerik ortaya konulmakta ve demokratik bir internetin imkanlarına dair sonuç ve önerilere varılacaktır.

Anahtar Kelimeler: *İletişimin Ekonomi Politiği, sayısal uçurum, yeni medya, internet*

To Berkin Elvan, Özgecan Aslan and Baran Çağlı

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LIST OF ABBREVATIONS

3G	Third Generation
Ad	Advertisement
ADSL	Asymmetric Digital Subscriber Line
BTK	Turkish Institute for Information Technologies
DSL	Digital Subscriber Line
EU	European Union
GSM	Global System for Mobile Communications
ICT	Information and Communications Technology
IE	Internet Explorer
IP	Internet Protocol
ISDN	Integrated Services Digital Network
ISP	Internet Service Provider
JDP	Justice and Development Party
LAN	Local Area Network
METU	Middle East Technical University
MNC	Multi-National Corporation
OECD	Organization for Economic Co-operation and Development
OEM	Original Equipment Manifacturer
OS	Operating System
PC	Personal Computer
POP	Point of Presence

PTT	Postal, Telephone and Telegraph Administration of Turkey
RPC	Revenue per Capita
TCP/IP	Transmission Control Protocol / Internet Protocol
TNAP	Turkish Network Alliance Platform
TÜBİTAK	Turkish Scientific and Technological Research Institution
TÜİK	Turkish Statistics Institution
UK	United Kingdom
ULAKBIM	National Center of Academic Network and Information
US	United States
USD	United States Dollar
M&A	Mergers and Acquisitions
WAN	Wide Area Network

CHAPTER 1

INTRODUCTION

The internet's appearance in our lives changed many things at once; today most of the activities in our daily life are done and has to be done through the internet. Even during this study, we used the internet to reach information, on a network bandwidth provided to us by the monopoly ISP, which uses the backbone network of Turk Telekom, all the content we reached was stored on commercial data servers and we used Google's search engine to reach information and we had to use an operating system and office software to conduct this study. By stating these, our intention is to draw attention to the importance of the internet in shaping our life experiences today.

Most academic studies in the last few decades shared similar approaches towards the internet, according to these, firstly, the internet was defined as a liberating, emancipator or democratizing universe by its nature. Not only academics but also political figures regularly shared this notion of internet being intrinsically good. This enthusiastic view on the internet commonly defined the internet period as "information age, knowledge society" etc. Secondly, most mainstream studies as well as some critical studies towards the internet had their boundaries on borders of the content of the internet. Most studies that express concerns over the internet limit themselves at surveillance debates, government censorship, personal freedoms to Tweet all-day-long without interruption and sexist, racist, discriminative blogs over the internet

pretty much covered most of the studies on the internet. Thirdly, the internet is described as the "virtual sphere", as if it had no existence in the physical world, or it was an independent entity. The phrase "virtual world", "virtual universe" etc. is told so many times that now it has become a very common *cliché*. Studies on censorship of the internet content merely discusses about direct government censorship and mostly not soft censorship, which is again inadequate to explain the major problem of the internet content today.

This study is conducted to shed light on the problem of inequality on the internet. Our main goal is to cover the spectrum of inequality in both economic and socio-cultural aspects and reveal the relation between increasing concentration and dominance of the mainstream content today on the internet.

There has been various studies on the inequalities of the internet which were mainly centered around the question of the digital divide. In this context, these also limited their studies to overcome the inequality of access and usage of the internet. However, as we want to look into digital inequality today, this study aims to present a new approach. In this respect, this study has certain outcomes, firstly, the internet is not as free as it used to be, and it will not be any better only by studying its content. The internet is becoming more and more mainstream oriented, advertised and commercial. The large corporate structure of the internet today keeps personal information, distributes and manipulates information. So much so that it could possibly be called "manipulation society" instead. Thus, the tremendously large economy behind the internet needs to be studied carefully and this thesis tries to establish a connection between the corporate ownership and changing content of the internet today.

1.1. Why is a study on political economy of the internet necessary?

The internet's place in our lives today is very crucial and this creates arguably one of the largest economic industries in the world today. The internet not only a median to distribute information but also create value. Graham defines political economy as the study of how values are produced, distributed, exchanged and consumed (economic); how power is produced, distributed, exchanged and exercised(political) and how these aspects of the social world are related at any given place and time in history. (Graham, 1997: 227) In this sense, political economy of the internet becomes of great importance to cover our problems in a comprehensive way.

Political economy of communications can enclose the problems of class, gender, regional, ethnic, age etc. inequalities and market concentration, foreign dependency and content at the same time. Through this study, we will discuss how to formulate critical political economy of the internet today and will provide insight about all these inequalities. However, our main focus will be concentration, content, global digital inequality and dependency in Turkey's internet industry today.

1.2. Study Plan and Methodology

This study starts with the broader topics and gradually narrows its scope to our focus. The reason for this is the importance of building a solid framework for our work so that the discussion in the fifth chapter of this study has a considerable meaning.

In the second chapter, we engage in a theoretical discussion and present arguments which constitute the general mindset of this study.

In the third chapter, in relation to the general framework drawn in the previous chapter, we look at the international internet industry, its important components, structure and general tendencies.

In the fourth chapter, we provide a historical knowledge of Turkey's internet history and put forth claims how the internet industry of Turkey ended up in its contemporary structure and how national internet market is constructed.

In the fifth chapter, we arrive at today's internet industry in Turkey, search its players, market structure, tendencies, user preferences and this chapter constitutes the core of our study where we test its accordance with the arguments and theories we have previously presented.

In this framework, we start with the broadest discussion; what are the main approaches to the digital era (Ch 2.1), where does the internet reside within contemporary social conditions (2.2), how this new era can be characterized(2.3), what is the correct formulation of a critical political economy of the internet today (2.4 and 2.5), what are the features and the real structure of the internet(2.6 and 2.7) and how can the inequality be correctly analyzed. (2.8) After these, we wanted to attach a short discussion about why do we think that the ownership regime of the internet effects the virtual side of it. (2.9)

In the third chapter, we start with the global inequality of the internet, i.e. global digital divide (3.1), then pass to large MNCs who are in the center of this divide (3.2) and then follow the main economic source of these corporations (3.3). As a last item, we ready ourselves to narrow our scope to

Turkey and very shortly made an introduction to next chapter stating the peripheral positioning in the global internet industry.

In the fourth chapter, we explain the historical process of establishment of the internet in Turkey(4.1), which becomes very important when we discuss government's agog role to establish a monopolistic market structure in Turkey (4.2) where it was sold fairly cheap to foreign capital and by doing this driving Turkey's internet industry into a dependency relation where we discuss the idea of digital imperialism. Before going on to the next chapter where we will provide the most crucial part, we also wanted to mention other forms of digital inequality which we have stated in the theoretical discussion in the second chapter (4.3).

In the fifth chapter, we separately discover the two great spheres of the internet; infrastructure and the content. However, we start with a discussion of online advertising industry, as it is the most vital part of the internet's economy today, but is neither physical not a content of the internet. (5.1) Following this, we start looking into seven different categories of physical infrastructure and provide data for each of them. (5.2) Next section is similarly divided into categories of the internet content of major importance today, and all of them are analyzed one by one. (5.3)

In this respect, this study's route is: New communications>internet>inequality on the internet. The second chapter is the theoretical part of this study. From this point, we begin investigating the types of inequality on the internet and start the mostly factual part of our thesis. From Chapter 3 to Chapter 5 we look into: Global internet industry(3) > Turkey's internet industry's characteristics,

growth and history(4) > Turkey's internet industry in details today. (5) Then we summarize main points from our study and conclude by offering suggestions and opinions about the future prospects of an anti-hegemonic, democratic internet in Turkey.

Methodologically, we benefited from a great number of internet sources, public questionnaires conducted by private companies, government and private statistics institutions and internet metering companies' data mining. In the second chapter of the study we engaged in an extensive research of literature, and tried to combine general political philosophy with cultural theories and political economy. For this and also the theoretical discussions in the following chapters, many online databases (ScienceDirect, Jstor, EBSCO, Springer, SSRN, SAGE Online etc.) were used excessively, many national and university libraries were visited and lots of additional books were added to our own.

In the third, fourth and fifth chapters, as it is not possible to research on the internet on your own, we extensively used data from governmental organizations, large research and data providers sector oriented reports and private data. In concordance with the structure of the market, most companies refrain from directly exposing their financial tables to the public and as a single researcher it is highly doubtful that one can gather enough data to provide. However, many online data searchers helped us here (comScore, StatCounter, Internet World Stats etc.). Most of our data is sourced to large researchers (IAB, Gartner, Deloitte, TTAS etc.) and large amounts of data from government organizations libraries and online resources (TÜİK, TURKSTAT, BTK, TÜBİSAD etc.) were studied and searched deeply. Global statistics institutions' (OECD,

World Bank etc.) data was throughly studied and compiled to maintain the data for our research.

CHAPTER 2

THE INTERNET DEBATE

This chapter seeks to provide a theoretical approach to the internet and reevaluate it in correspondence with some crucial debates going on over the last few decades. We strive to rediscover our social structure today and relocate the internet within its correlation to the new formation of capitalism. In order to do this, we will put forward a discussion that seeks to maintain the notion that the internet does not correspond to a genuine period but it is a reformulation of capitalism. In this regard, it is vital to explore the internet in its many aspects and most importantly, its economical formation. Our discussion consists of many topics and opposes certain approaches that have been common in internet studies. Shortly, these are: a discussion of contemporary capitalism, different perceptions of the internet, structural analysis of the internet and the evaluation of ownership and control of the content of the internet with regards to its political economy. Then we will finalize the chapter with reference to the discussion of digital divide and unequal consequences of the internet.

It is evident that new ICTs have brought to our lives a great number of changes. To understand and particulate all these changes is a huge effort but to evaluate their social and political implications are also crucial. In this respect, we want to start with asking one of the most fundamental questions in

the last debates: How do we define the internet and the new communications with a political economy approach?

2. 1. The Frontiers of the Internet Debate

Since its foundation, the internet has gradually become a phenomenon which surrounds and penetrates our lives and exceeds the virtual world into out every day practices. As Kellner puts it, the developments in computer, communications, information and multimedia technologies have changed almost everything about individuals' living practices, from hobbies and leisure time to working conditions. (Kellner, 2005: 76-7) These monumental changes imply the existence of a "cyber-power" as a social force today. (Jordan, 1999: 5-8) With the apparent growth of cyber-power, this area has been widely studied and plenty of research have been put forward. Hereby, we can talk about two different fallacies approaching the internet: cyber-paternalism and cyber-enthusiasm. Former is characterized by a pessimistic understanding of new ICTs, describing internet as a threat towards social integration, which disarrays personal information, undermines individual privacy and is in general an oppressive entity. Among these we can mention Reidenberg (1996, 1998) and Lessig (1999), which pointed their criticisms against the early internet era. The latter, cyber-enthusiasm, has been widely accepted by the mainstream media and politics, which advocated the emancipator role of the internet, virtual freedom, participation and its egalitarian structure. Wired magazine was one of the most prominent to carry these ideals over last decades. This notion has been taken so far to claim that the internet is a prototype of an anarchist and have properties that can never be contained (Borsook, 1995). On the contrary, today it is more apparent that the internet inherits different types of inequalities.

Later on this chapter, during the discussion of digital divide, we will return to these in detail and provide examples in the third chapter. However, we here aim to avoid both approaches to achieve a broader understanding of the internet and demonstrate how the internet is deepening social inequalities while it is dialectically still of vital importance to overcome these equalities at the same time. In other words, the internet is not in a vacuum and bears the contradictions of the capitalist society. (Fuchs, 2011: 74) For this, we should first understand the internet's role and place within the contemporary society. The development in the ICTs corresponded to an era of capitalist expansion, globalization and financialization, which can lead to certain fallacies understanding new ICTs. Many different names have been spelled to describe the period of the last few decades, in which the cold war ended, global capitalism expanded rapidly and great developments occurred in the communication technologies. Some of these are to claim that we are living in a different social structure now, where as others argue that modern society has altered but not changed in its totality. As Fuchs addresses: "There are theories that conceive of the transformations of the past decades as constituting radical societal change. These are discontinuous theories. Other theories stress the continuities of modern society... Discontinuous information society theories prefix certain terms to macro-sociological categories such as society or economy, which implies that they assume that society or the economy has undergone a radical transformation in the past decades and that we now live in a new society or economy." (2012a: 3) On the other hand, Fuchs makes another distinction on a different direction, objective and subjective approaches. "Subjective information society theories place emphasis on the importance of human knowledge (thought, mental activities) in contemporary society, whereas objective information society theories foreground the role of

information technologies such as the mass media, the computer, the Internet, or the mobile phone." (Fuchs, 2012a: 3) In this context, Fuchs accurately relocates many different names used for describing the internet and takes them into four categories, objective continuous, objective discontinuous, subjective continuous and subjective discontinuous.

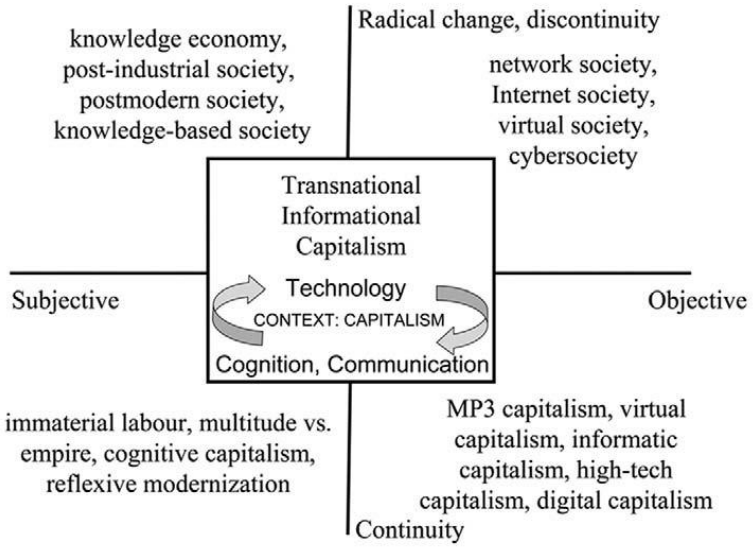


Figure 2.1. The typology of information society theories
Source: Fuchs, 2012a: 3

Continuity theories include many intersection points, and in many cases subjective and objective approaches are defended with similar motives. Both approaches can be pursued to be a certain level and not contradict each other. The following section starts with a general review of capitalism to be able to construct a correlation with current ICT industries.

2. 2. Global Informational Capitalism

There have been various approaches to locate the developments in the ICT industries over the last few decades. Even within the Marxist school, there is an ongoing debate in order to define the internet industries and their role in the contemporary social structure. Therefore, the question of whether this period represents the capitalist mode of production or a new form of social organization should be carefully answered. Technological enthusiasm's inadequacy resides in its reductionist and simplifying nature. The claim that the hastening mechanisms in global circulation of money, goods and labor presents us an even more advanced form of capitalism, let alone a break from it. "Transnational informational capitalism is the result of the dialectic of continuity and discontinuity that shapes capitalist development. Surplus value, exchange value, capital, commodities and competition are basic aspects of capitalism, how such forms are exactly produced, objectified, accumulated, and circulated is contingent and historical." (Fuchs, 2012a: 7) Marx addresses the capitalist expansion through the main motion of capitalist mode of production as the production of surplus-value. (Marx, 1867: 150) This capitalist tendency to expand found an unimaginable opportunity in the last few decades. According to Marx, this is rather a necessity. "The capital pressure to maintain higher amounts of surplus value also necessitates competition and which also requires labor productivity and therefore technical progress." (Marx: 1894: 79-80) Marx here offers us the simple solution which elaborates history in a materialist understanding where material production shapes and resembles political, social and intellectual life (Oğuz, 2014: 51) On one hand, it should be apparent that the direction of effect is not from technology to capital accumulation, but from capital accumulation to technology. (Oğuz: 2014: 52) On the other hand, it is also another reductionism to explain capitalism with its

one feature. Fuchs rightfully asserts that contemporary capitalism consists of many subheadings, which all corresponds to a similar mode of social existence:

> Transnational informational capitalism is a tendency and relative degree in the development of contemporary capitalism, which does not mean that it is the only or the dominant tendency. Capitalism is many things at the same time, it is to a certain degree informational, but also at the same time to a certain degree finance capitalism, imperialistic capitalism, hyper-industrial capitalism, etc. We have many capitalisms today existing within one overall capitalist mode of organizing society. Capitalism is at the same time a general mode of production and exploitation and a specific realization, coexistence and interaction of different types and forms of capitalist production and exploitation. (Fuchs, 2012a: 7)

Nonetheless, we need to mention a few points before proceeding to our main assumptions. First is to state that the discontinuity theories are not unique to communications. In global politics the discussion of globalization was characterized with similar attributes. Amin asserts that capitalism was always expansive and globalizing (Amin, 2011: 24-27) where Wood calls this period "internalization of capitalist imperatives" (Wood, 2003: 118-23). Second, is to establish a robust bridge between political economical approach and cultural studies on the discussion of internet today.

There has been an ever ongoing debate between critical economy and critical theory schools. It is often thought that Frankfurt school, as well as many other cultural critiques like new Deleuzians such as Negri and Hardt reject the economical determination and are external to Marxist claims.

Fuchs here takes a very necessary step to claim that "Just like Critical Political Economy was not alien to the Frankfurt School, ideology critique has also not

been alien to the approach of the Critical Political Economy of the Media and Communication." (Fuchs, 2012b: 695) Similarly, Mosco remarks that "one of the challenges facing any discipline is the understandable tendency to essentialism, i.e., an inclination to reduce reality to the discipline's central constituents." (Mosco, 1996: 70) Mosco then elaborates particularly how to avoid this tendency; where political economy should de-center the media, which means "viewing systems of communication as integral to fundamental economic, political, social and cultural processes in society." (Mosco, 1996: 71)

In this framework, Fuchs argues that:

> A difference between the Critical Political Economy of Media and Communications and Critical Theory is that the first is strongly rooted in economic theory and the second in philosophy and social theory... The approaches of the Frankfurt School and of the Critique of the Political Economy of Media and Communications should be understood as being complementary. There has been a stronger focus on ideology critique in the Frankfurt School approach for historical reasons." (Fuchs, 2014: 453)

Not only being complementary with regards to them filling the gaps of each other, we can argue that they are essential today to rightfully explain and address contemporary ICT industries.

Kellner also supports this point by a similar route, where he tries to establish a vital tie between cultural studies and political economy of communications. (Kellner, 1995) We can also mention other scholars and schools of communication theory which underline similar views. Peters and Bulut apprehends this new era as the third stage of capitalism, 'cognitive capitalism' which followed mercantilist and industrial capitalist stages. (Peters and Bulut,

2014: 31) By doing this, they construct a similar bridge between capitalist accumulation laws and the cultural sphere, where they connect the growing control over content, control mechanisms and subjectivity of cultural product as a general law of contemporary capitalism. (Peters and Bulut, 2014) This framework is further understood with reference to Deleuzian explanation of contemporary capitalism, where Deleuze acknowledges capitalist economy as a libidinal economy which also controls desire and power. (Peters and Bulut, 2014: 35, Deleuze, 1995: 171)

From the same path, Negri with Guattari and Hardt develops a theory compatible with this inclusive Deleuzian understanding of culture, which re-elaborates concepts of class, class struggle, capitalist accumulation, concentration and new labor and they also draw attention to validity of the mass society theory of the Frankfurt school. By doing this, they contribute greatly to studying contemporary capitalism and especially new communication studies.

Hardt and Negri in their major work 'Empire' signify the new capitalist model with reference to its central and concentrative characteristics, which they call as the realization of an Empire (Hardt and Negri, 2003:6) carrying capitalism's intrinsic and ever-existing expansionist characteristics. (Hardt and Negri,2003: 35)

Accordingly, this Empire presents itself as both an hierarchy and a system, which inherits at the same time consential participation as well as a central determination. In this trace, Hardt and Negri revives the discussion of new imperialism as a new form of imperial sovereignty, where they also advert a prominent discussion of center and periphery. (Hardt and Negri,2003: 134-

211) By addressing the central and absolute role of capitalism today, they explicitly recognize a holistic totality, which does not divide but "recognize and include differences and regulate them in a general economical structure." (Hardt and Negri,2003: 214) In this respect, the autonomy school settles themselves opposed to a certain form of systematic mass culture. At the point they try to utilize the term "multitude" as a revolutionary social class, which consists of also participants of new communications as subjects of the empire as well as the potential object of changing it:

> Given these conditions, the task of organizing new proletarian forms must be concerned with a plurality of relations within a multiplicity of singularities - a plurality focused on collective functions and objectives that escape bureaucratic control and over coding, in the sense that the plurality develops towards optimizing the processes of involved singularities. What is at stake here then is a functional multicennism capable, on the other hand, of articulating the different dimensions of social intellection, and on the other hand of actively neutralizing the destructive power of capitalist arrangements.
> This is the first positive characteristic of the new revolutionary subjectivity. It's cooperative, plural, anti-centralist, anti-corporatist, anti-racist, anti-sexist dimensions further the productive capacities of the singularities. Only qualified in this way will proletarian struggles be able to reconstitute coherent and effective fronts of struggle. (Guattari and Negri, 1990: 107-108)

This is also where Negri attaches class struggle to the problem of subjectivity. According to him the proletarian struggle must preserve a certain amount of subjectivity, where he again pursues to colligate Marxian critical political economy with critical theory:

> In fact, capital appears here as subject, as a dynamic and creative unity. But capital is a relation. Inside this relation, proletarian antagonism must develop itself to attain full and complete subjectivity . The subsumption

> of circulation by the production of capital must liberate the antagonism at this same level. To these conditions of socialization, we must add that the emergence of the other subject, of the proletarian subject, can't but extend itself to the whole sphere of circulation. (Negri, 1992: 177)

Negri's emphasis on this emancipating subjectivity is also rooted in critical thought's voiced concerns on mass society and its totalizing features.

2.3. Mass information and monopolistic capitalism

The emphasis on subjective emancipation against mass culture also is pertinent in this perspective to emancipation against global monopolistic capitalism. In this respect, Frankfurt school's effort to shatter mass culture also can be understood within reference to their critique of the industry's central role in forming culture. Fuchs here suggests that "Although wide-read works of the Frankfurt School focused on ideology, other books in its book series *Frankfurter Beiträgezur Soziologie* dealt with the changes of accumulation in what was termed late capitalism or monopoly capitalism." (Fuchs, 2012: 695) According to Fuchs, Frankfurt school scholars always had an economical facet in their theory even in their ideology critique. He states that "When formulating their general concepts of critical theory, both Horkheimer and Marcuse had a combination of philosophy and Marx's Critique of the Political Economy in mind. (Fuchs, 2012: 695-7) Similarly, Adorno pins the term *culture industry*, with deep connections to capitalist economy and in this sense, the cultural side of the industry is always committed to produce legitimacy for the concentration of the capital. (Adorno, 2009: 37, 208-9) Veysal points out Adorno and Horkheimer's emphasis on culture industry as an effort against the capitalist authority, to a certain extent focusing on its ideological level. (Veysal, 2009: 291) This notion implies that Adorno and Horkheimer never meant only cultural

products but aimed to outline a greater social industry. Horkheimer also similarly asserts that the true revolutionary act under late capitalism is not to foster development continuously, but to control and restrain it as necessary. (Veysal, 253) Similarly, Marcuse also recognizes the unavoidable conflict in capitalism is between the working class and the capital. He embraces the importance of dichotomy between the central capitalism and periphery countries and bases his theory upon a Marxian understanding of production of consciousness when he refers to cultural production. (Marcuse, 1987: 11-4) The very prominent scholar of the last few decades, Dallas Smythe also recognizes the capitalist production of culture as consciousness industry. (Smythe, 1981: 4-8) According to him, the main goal of this industry is to maintain the continuity of the capitalist structure, to advertise commodities, retain loyalty and make them keep paying taxes. (Smythe, 1994: 250)

On the other side of the frame, the political economy approach also includes an analysis of the cultural sphere. Fuchs states that:

> Just like Critical Political Economy was not alien to the Frankfurt School, ideology critique has also not been alien to the approach of the Critical Political Economy of the Media and Communication. For Graham Peter Murdock and Golding (1974, 4), the media are organizations that "produce and distribute commodities", are means for distributing advertisements and also have an "ideological dimension" by disseminating "ideas about economic and political structures. (Fuchs, 2012b: 277)

Parallel to this statement, Mosco also brings forward a definition of critical political economy of communications: "The tradition of Critical Political Economy of Media, Communication, Information and Culture has given attention to the commodification of content and audiences, labor spatialization,

class, gender, race, social movements, hegemony and ideology." (Mosco, 2009) Mosco here underlines a very crucial statement in harmony with our first axiom, that we have to establish a mutual understanding of the both schools when analyzing the internet. In Murdock's words(1978) when analyzing media today, "one needs a balance between ideology critique and political economy for analyzing the media in capitalism. "Garnham also draws attention to the relationship between ownership, regulation and control of the media sphere, which follows a long discussion of his critique of critical theory:

> The development of modern mass media, their wide distribution and the resulting relative democratization of cultural consumption, linked as they were to the spread of literacy and schooling, were the result of the exploitation of economies of scale and associated low prices, which were themselves inevitably linked to market concentration.(Garnham, 2011: 45)

This also leads up to a central effort of our study: We believe that there is a strong correlation between the economical and cultural spheres in the internet today. "It is also possible to evaluate the relation between the development of capitalism and the expansion of media in the context of a determined articulation between the development of media and the increasingly complicating capitalist social formation." (Çakmur, 2001: 4) In this schema, Çakmur continues with stating:

> The complex and multiple articulations between the political, cultural and economic realms, of course, require to develop a proper understanding of the ways in which the economy is being restructured, as well as the changes in cultural and political realms, which respond to (and often reinforce) the respective restructuring of the economic sphere. (Çakmur, 2001: 5)

Here, it is important to construct a theoretical framework that is beneficial for our upcoming discussion: The economical sphere of the internet should be a key element to understand the increasing mainstream content and uniformity of decisions. This discussion will be started at this point and will be carried throughout our study.

2. 4. Mass culture, political economy and the critical theory

In this section, we will try to unfold the new economical restructuring of the internet. As contemporary media and culture in general, the internet's alteration maintains a certain integration with its economical structure. As capitalism penetrates harshly into cultural production, it does so for the production of information and consciousness on the internet. The internet does many things at once: Not only it does enhance and envisage the processes of consumption of commodities, the internet plays many other roles in its advertising, the ability to create the demand, realizes almost an instantaneous consumption with less costs and at the same time integrating consumption and entertainment with an astonishing mastery. "The systematic production, storage, processing, exchange and mass characteristics of information is unique to capitalist society." (Şener, 2006a: 27) Şener continues her analysis with explaining the relation of the capitalist accumulation law and the production of knowledge: The motion of capitalism requires to produce information and knowledge to preserve the circle of production, distribution, exchange and consumption. (Şener, 2006a: 27-28) Similarly, Çakmur rightfully addresses:

> ..in the present stage of monopoly capitalism, the continuous expansion of commodity production accompanied with the continuous capital accumulation entails an imperative for the creation/production of

> demand for goods. Production of new needs, as an indispensable part of the process of commodity production, is not only an ideological production but also a process of construction of new symbolic utilities. (Çakmur, 2001: 15)

La Haye extracts two main tasks of tools of information and communication in capitalism analyzing Marx and Engels' theory: Firstly, they are main elements of forces of production. Second, they present new ways in formation of a social identity, new sentiments and areas of interest and new relations with the world. (La Haye, 1980: 29) This corresponds to where La Haye builds a bridge between the economical and cultural spheres, in which social totality consists of a sophisticated relationship. The incontrovertible relations between the ownership and content signifies a projection of the need to establish a relation between critical theory and critical political economy of communications; when Fuchs tries to do this, he formulates a joint approval of both the cultural and political economical approaches. He argues that when we look at the situation of forces of production today, we can see that we are in an information society, on the other hand, when we look at modern society's relations of production - mode of production - we are still in the capitalist society that Marx explained in the 19th century. (Fuchs, 2015: 223) To repeat what we have argued in the previous section, the information society is not a substitute for capitalism, but a new and more efficient type of it. This point corresponds to where political economy meets cultural studies and Frankfurt school remains as still having an economic perspective. We also still believe, as many critical theorists believed, that the economical relations are always the precursor of cultural properties. Geray refers to this issue in a similar manner: According to him, to overcome crisis, capitalism creates new accumulation regimes. Following these new accumulation regimes, political organizations, legal order

and cultural structures change. (Geray, 2005a: 17) Not as a preliminary analogy, but in the broadest sense, this is what can also be traced in Adorno's own work:

> The cultural commodities of the industry are governed, as Brecht and Suhrkamp expressed it thirty years ago, by the principle of their realization as value, and not by their own specific content and harmonious formation. The entire practice of the culture industry transfers the profit motive naked onto cultural forms. Ever since these cultural forms first began to earn a living for their creators as commodities in the marketplace they had already possessed something of this quality. (Adorno and Rabinbach, 1975: 13)

Marx and Engels formulates the relation between the base and the superstructure >>>economical and cultural as follows in The German Ideology:

> The ideas of the ruling class are in every epoch the ruling ideas, i.e. the class which is the ruling material force of society, is at the same time its ruling intellectual force. The class which has the means of material production at its disposal, has control at the same time over the means of mental production, so that thereby, generally speaking, the ideas of those who lack the means of mental production are subject to it. The ruling ideas are nothing more than the ideal expression of the dominant material relationships, the dominant material relationships grasped as ideas. (Marx and Engels, 2004: 64)

Under the light of these arguments, we deeply believe that there is a relation between the monopolization of the internet sphere and the mainstream flow of knowledge and information, commercialization and hegemonic structure of the internet. "It is possible to suggest that intellectual production at the stage of monopoly capitalism is situated in an intermediary space between "base" and "superstructure"," (Çakmur, 2001: 16) In this respect, the internet commodity -

website, blog, news portal etc. - becomes a field of hegemonic struggle, where "the production and exchange of cultural commodities become dominant forms of cultural relationships." (Çakmur, 2001: 17) Throughout this work, we will try to explain the economical and cultural sphere separately, while we acknowledge that they are in complex connections in many ways. Garnham suggests that no study of political economy can avoid the discussion of base and superstructure.(1990: 23) In their published interview, Garnham and Fuchs also discusses this issue, where it is suggested that such a separation is a necessity rather than a choice. (Garnham and Fuchs, 2014) Our study places this distinction for methodological reasons, which does not mean the existence of an ontological difference of level between the base and superstructure, but a dialectical methodology; in which a separation is fictionally created, to show that there is no real separation.

Adorno and Horkheimer also recognizes such a distinction and the primary role of the economical sphere, even if they focus on the ideological level in their great work Enlightenment as Mass Deception:

> The Culture Industry, the most inflexible style of all, thus proves to be the goal of very liberalism which is criticized for its lack of style. Not only did its categories and contents originate in the liberal sphere, in domesticated naturalism no less than in the operetta and revue, but the modern culture combines are the economic area in which a piece of the circulation sphere otherwise in the process of disintegration, together with the corresponding entrepreneurial types, still tenuously survives. In that area people can still make their way, provided they do not look too closely at their true purpose and are willing to be compliant. Anyone who resists can survive only by being incorporated. (Adorno and Horkheimer, 2002: 104)

So far, we have gone through similar allegations to avoid two important fallacies that Garnham has warned political economists: "economical reductionism" and "spontaneity of the ideological level". By doing this, he builds a bridge between the economical and cultural spheres. (1990: 24-54) Departing from here, in the next section, we will suggest a similar theory and discuss some of the crucial cruxes of a critical political understanding of the internet.

2.5. Critical Political Economy of the Internet

According to our studies, we come up with a formulation that is in harmony with the framework we have so far discussed. This strengthens the approach where we sought to meet critical political economy with the critical theory; we suggest that it is possible to maintain the dichotomy of the base(economical) and the superstructure(cultural, ideological) without simplifying it. This renders the critique of the capitalist mass communications with reference to its inequalities in the economical sphere, which we will name the "3+1 formula". (Gül, 2014: 74) (Figure 1.2)

Economical (Base)		**Cultural(Superstructure)**
1.Property regime	+	Content
2.Labor organization,		
3.Labor processes and conditions		

Figure 2.2. The "3+1" Base and Superstructure Formulation for Critical Political Economy of Communications [1]

According to this, the economical sphere of cultural commodity production is divided into 3 categories: 1. Property regime, which includes the ownership framework of the internet, capital accumulation, market shares, profits, investments, market movements etc. 2. Labor organization, that is the organizational structure of the workplace, the production process, the producer's relative position with the end product - the commodity- and in a broader sense, the exterior market organization of companies which can be seen as an upper level of interior organization 3. Labor processes and conditions explicitly refers job security, working place conditions, working hours, wages, social assistances etc. On the other hand, the content of the internet commodity includes the ideological structure of the information and virtual product, ideological direct and indirect messages, median of the content, its additional constituents(like advertisements etc.) and the context.

At this point, we decided to limit our study to the relation of the property regime and the content. In other words, throughout this study, the main goal

[1] ***We would like to note that all figures and tables throughout this study, if there is no source stated, are produced by the author.***

will be to exemplify and advocate how the concentration of capital effects the content and vice-versa. All three categories to an extent are in relation with each other and certainly with the content and are all in complex relations with each other. In this respect, it is true that labor process effects the content of the product etc. It is also evident that new property regime shapes the labor organization as well as labor conditions and the latter enhances and maintains the former. Developments in the ICTs have created a necessity to conceptualize digital labor and related to it, debates to define the working class in the contemporary period. Rejoicing enough, much effort has been put into this lately. Negri engages with an effort to define a new proletariat or an expansion of proletariat - which includes information workers and so on, where he coins the term "social worker". (Negri, 1988: 209) Negri and Hardt takes this discussion further, where they refer to this new class as the multitude - which is a concept that involves "everyone that is exploited directly or indirectly" (Hardt and Negri, 2005: 150) Fuchs also made an important study on the subject, which emphasizes different forms of digital labor, from those who work in mines for minerals as an ingredient of computer hardware, to call centers and social media *prosumers*. (2015) Handling all of these elements would require a much larger study and a great field study. In the third and fourth chapters, significant amounts of data about the market will be provided that focuses on the new monopolistic and centralized property regime.

Political economy of the internet should on another note bear responses to As Geray summarizes from Babe, political economy approaches have these qualities in common:

> (1) They base their theories on social power relations. In this context, they take into account contradictions and conflicts. They ask questions like "Who is winning? Who is losing?" Therefore, they analyze processes of change and emphasize the possibility of change. (2) They oppose existing hegemony mechanisms because they aim to overthrow myths and tales. According to Babe, one of the tales in our day is the belief that "technology automatically brings good results." Another tale is that "time is going forward and actuality must be accepted." Possibly this could be called a type of social-Darwinism. (3) While neo-classical economics excludes social values, political economists utilize them. Values such as equality, fairness, justice and public benefits are included in the analysis. (Geray 2005: 15)

When we narrow our scope to our stand point, it would be useful to quote from Cohen that "Marxist political economy of cultural work studies the dynamics of labor and capital relations, tensions and contradictions which shape these relations, the struggles over control and questions about power and resistance." (2014: 50) Haste of technological developments by this way can be understood with not only by its relation to individualities but with reference to a complex set of relations with the capitalist system. These relations include economical, political, social and ethical concerns which is inevitably a subject of political economy of communications. Harvey suggests that:

> ...All capitalists singularly pursue to obtain temporary surplus value by technological developments. And this is where the technological dynamism of capitalism derives from. Many dominant theories see technological developments as a savior, an external variant of the

> system. Technological development is attributed to entrepreneur's intelligence or solely to innate ability of individuals to innovation. But Marx, as always, doesn't want to attribute such a crucial thing to an external force. There, he found a simpler inner explanation of capital's technological dynamism (in other words inner-originated). Also he explains the reason why capitalists see machines as value sources in a fetishist way and why we all have a similar fetishist perception of them. Marx is clear on this. Machines are not sources of value, but sources of relative surplus value. (Harvey, 2010: 186)

Harvey points out one important problem in understanding the internet reviewing Marx's theory of technological reductionism. As we have shortly discussed earlier, a reductionist understanding of the internet stalemates the internet theory to a field of engineering and computing. New information and communication technologies are often entrapped into studies that only includes technical details and by rupturing it from its political-economical background, totalizing it. This is what Fuchs calls *Fetishism of Computing* (2009b: 97-8) The qualitative and quantitative debates over the internet industry has achieved much except computer engineering and consequently technology itself is placed at the center of attention in the industry. (Barmanbek, 2009: 96) Our study intends to maintain a sophisticated study of the internet and takes into account a high degree of ethical considerations, social analysis and inhibits them into an economical theory.

2.6. How virtual is the Internet?

Technological reductionism for explaining technological developments comes together with its twin: The internet is quite often described as 'the virtual sphere'. This is a problematic definition in many other ways. Burbules engages in a theoretical discussion about the virtuality of the virtual sphere:

> But it is also useful, and more directly relevant to my purposes here, to think of the online environment as a *space*, a place where people spend time, interact, and *do* things - for example, collaborating with others on a shared project. The fact that they inhabit a shared space is essential for this collaboration to work. We do not mean the medium/space distinction as a sharp or overly broad dichotomy; different technologies are designed with one or the other sort of purpose predominantly in mind. But to the extent that this is a useful distinction, it helps us see that the online, networked environment supports community-building, communication, and the sharing of resources in ways that are impossible to explain simply as a series of point-to-point exchanges. When this online environment is seen as a space people occupy, and through which they *move*, new ways of thinking about it come to the fore. (2006: 44)

Burbules claims that the virtual sphere does not represent a virtuality, but reality itself, because it embodies experiences that are descriptive and substantial similar to real life experiences. Concordantly, he consults cultural studies to construct a notion of virtual reality. (Burbules,2006: 37-59) There are many studies that enter into an ontological discussion about the internet's virtuality. (Kalaga, 2003: 96-103)

This theoretical discussion is not the main point we would like to debate. The internet has been described in many studies as "virtual world", "virtual sphere", "virtual space", "virtual reality" etc. (Lastowka and Hunter, 2006: 4-50; 172-92, Gigliotti, 1995: 289-295; Langman, 2005: 42-74) Similarly, in most mainstream media the internet is often described in the same fashion. In some cases, this reflects an incomplete explanation while on many others, an inadequate understanding of the internet in its totality. The internet is hereby characterized by its content, and even in critical studies of the internet, the focus remains on the content and textuality of the internet, its exclusive features, control mechanisms, digital confidentiality, surveillance concerns, information flow and so on. Hunsinger's main effort is to rally these concerns

with regard to informational manipulation on the internet. (Hunsinger, 2006: 189-206) There are numerous studies focusing on the content of the internet, both supportive or critical of the outcomes of new ICTs.

However, a study on the political economy of the internet requires a broader perception of how the internet works. In fact, the internet consists of both physical and virtual networks, commodities and is realized by the establishment and exchange of both parties. Fuchs offers us clues about the point we would like to make; where he studies digital labor, he starts with referring to miners that work for the mining companies all across the world such as Kongo, Australia, China, Canada, India etc. (Fuchs, 2015: 250-5) Certainly, the internet industry requires the existence and production of various ores in the first place. The labor process of the internet has its roots on the efforts and blood of miners of many different countries and this process starts with the most brutal form of capitalism as we know of today. On a second step, they are manufactured, handmade by workers in the factories, then processed in the silicon valley by workers. (Fuchs, 2015: 311-339) Software developers work in the Software Industry to produce all the software that runs the computer (Fuchs, 2015: 293-309) and further on the virtual sphere, social media users are conceptualized as voluntary workers as they produce surplus value without receiving wages. (Fuchs, 2015: 401-5) From here, Fuchs introduces the internet's capitalist characteristics from the bottom to the top of the system. As a second point, he discusses various forms of labor within "digital labor." These points suggest that the internet is realized within the real world, not only labor processes but also the very existence of the internet median has a dualistic pattern: The internet is constructed upon the physical and virtual entities and

the internet is neither resides in a solely technological development nor its only a virtual world.

According to this framework, we again offer a new formulation to describe the internet; the physical sphere internet is built on includes 7 sub-categories - namely: backbone infrastructure, telecommunications, internet service providers (ISPs), commercial data servers, computer hardware, e-commerce infrastructure and e-bureaucracy infrastructure; whereas the virtual sphere of the internet includes also 7 sub-categories: software(operating system [OS] and all other software), search engines, social networks, news portals, entertainment software (digital games etc.), e-commerce websites and e-bureaucracy websites. (Table 2.1) This schema could be formulated in many other ways, and certainly there are intersections and blind spots, for instance, the main component of the internet's value generator, advertising industry did not fit in either category so we will handle it as an encompassing category. The online advertising industry has too many bonds with the real advertising industry, intersecting with other real industries more than it can be categorized in this schema.

Table 2.1. The internet's two spheres: Physical and Virtual

Physical (Infrastructure)	Virtual (Content)
Backbone network	Software (OS, other software)
Telecommunications	Search Engines
Internet Service Providers (ISP)	Social Networks
Commercial Data Servers	News Portals
Hardware	E-entertainment
E-commerce infrastructure	E-commerce websites
E-bureaucracy infrastructure.	E-bureaucracy content

Through Chapter 5 of this study, we will separately analyze and discuss all these subcategories in detail, as we believe even though the problems it may theoretically endorse, could possibly lead to a healthy analysis of the internet's true form today. While each of these subcategories are related in many different ways, pursuing our pattern methodologically presents a framework to study the internet in a realistic way.

2.7. The Internet Schema

In order to access the internet, first thing the individual needs is a device. By this, we mean personal computers(PC), laptops, tablets, mobile devices etc. Every one of these devices may include different components, desktop and laptop PCs will mostly require a motherboard, graphics card, processor, storage, memory and a modem to perform. Occasionally, graphics cards are integrated to the motherboard. For tablet or mobile devices, there is also a

processor and a motherboard, integrated graphics card, storage, memory and a modem. However, all these components are sold separately for PCs while they are all sold within the product for mobile devices. Therefore, we name it "hardware", including all of these components at once. In Chapter 5, when we look at the data, it is certainly better to combine them into one subcategory for the opposite would be a very unnecessary set of data.

The device(hardware) establishes a connection with the ISP when we try to reach the internet. The market structure of ISPs differ very much in different countries, and in the Chapter 5 of this study, we will see how the Turkey ISP industry is monopolistic. In most cases, ISPs are private enterprises which lease line and bandwidth from telecommunication companies. In some cases, telecommunication company and the ISP might be owned by the same capitalist or group. In some countries like Turkey, it goes further: the backbone structure, telecommunications and ISP might be all branches of the same company by privatizing a monopolistic state institution. This will also be covered in the third chapter of this study. Telecom networks reside and realize over a backbone infrastructure. This includes all the physical network, data transmitters, satellite receivers, connection lines, general routers and so on. The backbone is usually constructed by state institutions, in some cases for military reasons during the cold-war era and developed.

The content of the internet, virtual data in other words, are stored in real physical server devices. These are called hosts and data centers. Commercial data servers provide storage for all the website contents and users pay a monthly or annual fee for the services. In Turkey, for various reasons some data servers are abroad, to avoid control mechanisms and possible

censorships. Most hosting companies also offer domain services, which is an encoded IP code that allows visitors to reach the website without entering the IP number and use a domain name such as “http://www.website.com”. The last two subcategories are e-commerce infrastructure and e-bureaucracy infrastructure. Most popular e-commerce websites and online vendors must utilize a highly institutionalized structure in real world as well as the virtual world. Large warehouses, a network of workers that take orders, compile them and transfer it to warehouse managers, branch offices, retailers, local and international suppliers are only a part of this. This is such a huge industry today, that it would be a great study to cover in detail. E-bureaucracy infrastructure includes governmental institutions’ own data servers, tech departments and real document storages.

Similarly, the user needs many virtual components to reach the internet. The device firstly needs an operating system, such as Windows, Ubuntu, Kubuntu, Backtrack, Pardus etc. Some OSs are less user friendly and highly professional, which don’t have an open interface. After the operating system is installed, other software is also needed. An internet browser is used to reach websites, such as Microsoft’s Internet Explorer, Google’s Chrome, Mozilla’s Firefox and Apple's Safari. Other software that is in general required are programs like Adobe's Flash Player, DirectX and .net. There are many software programs that are optional but is necessary for running many applications, such as Adobe's Reader, office software such as Microsoft's Office, Apache's OpenOffice, media, music and video players, antivirus and other security software are only a small portion of them.

Using these software programs, the user reaches many options on the internet, various kinds of websites on the internet may be found, from personal websites to company addresses, social networks, search engines, news portals, commercial websites, online stores, search engines etc. The online content also includes e-entertainment websites, such as online digital games on the web, online movies, TV series and music websites. There are also many digital games which are installed on the device and is offline, there are many digital games which are installed on the device but is also online and requires an internet connection. Both online content and online games store their data on commercial data servers. As a last element of our discussion, there is the rapidly developing e-bureaucracy websites, which in general have their own data storage as infrastructure and play a critical role today in bureaucracy and citizens' daily lives.

In Figure 1.3. we tried to draw an accurate schema of the internet today. It is however important to note that there are too many different types of online content so much so that it is nearly impossible to name all of them separately. The internet has grown so huge that IPv4 domain addresses have run out by July 2015 in North America.[2] Thus, our effort is to categorize the most important ones for our study and make a healthy analysis of them.

[2] See http://www.nbcnews.com/news/us-news/internet-now-officially-too-big-ip-addresses-run-out-n386081?cid=sm_fb (Last visit 17 July 2015)

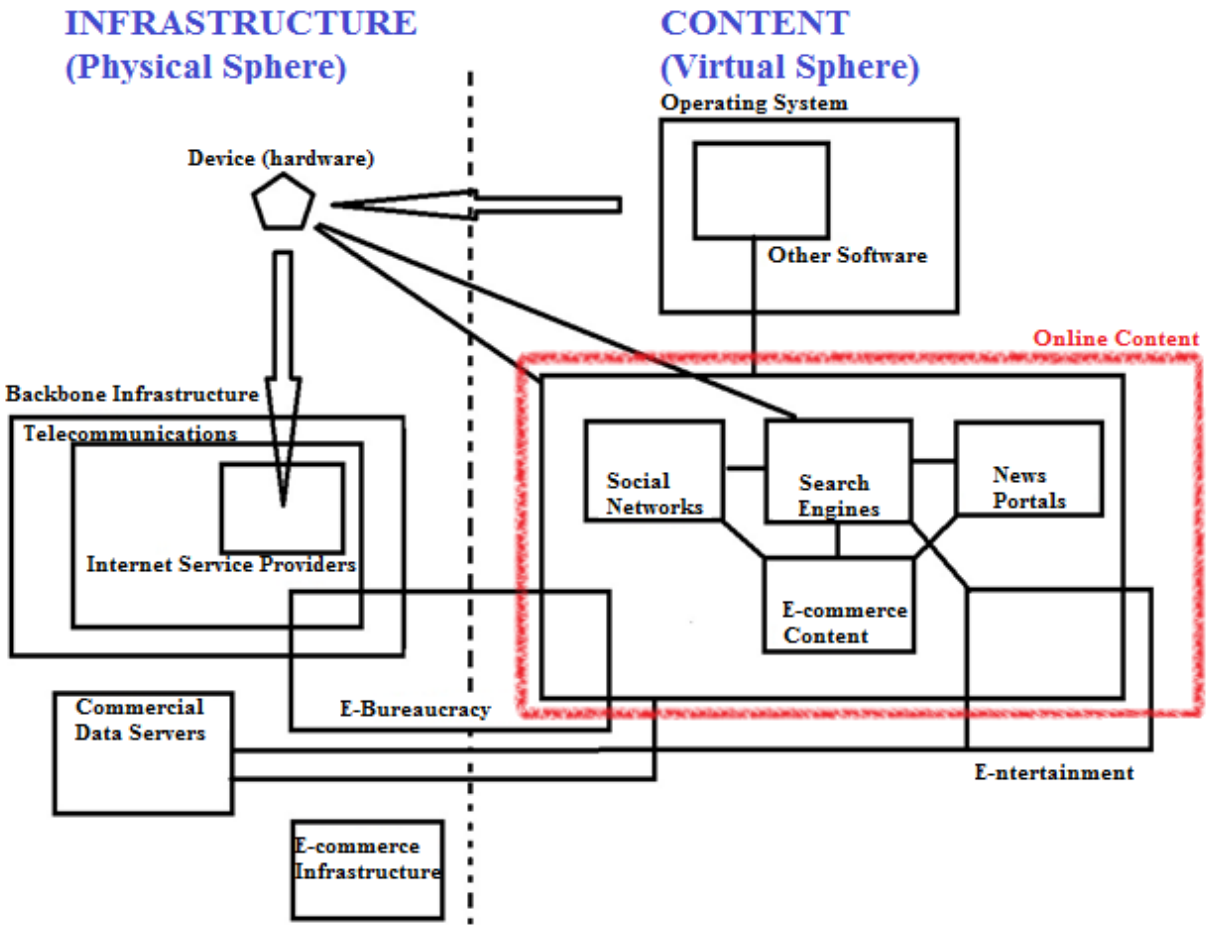


Figure 1.3. The internet schema

So far, we have discussed some theoretical assumptions, scope and methodology of our study. Lastly in this chapter, we would like to unfold some additional points that will also guide us through next chapters. The internet's two existences, the physical and the virtual spheres will be analyzed within certain categories, where we will focus on the inequalities that is reproduced on the internet, which is termed as the *digital divide*.

2.8. Internet and the Digital Inequality

During the first two decades, the internet has been greeted with a positive fashion and has been conceptualized with properties such as being democratizing, egalitarian, transparent, pluralist etc. The sudden fascination about the internet in the first years which we have discussed earlier began to decline later on. The term "digital divide" arose because of the necessity to discuss the internet's fundamental problems.

In 1999, the US Department of Commerce's National Telecommunications & Information Administration published a report named "Falling Through the Net: Defining the Digital Divide". Being one of the early discussions, the report states that:

> The digital divide closely corresponds to the historical divide between the socially privileged "haves" and the socially disadvantaged "have-nots" in our society. The digital divide is studied with reference to the lack of ability to access the internet throughout the report. (US Department of Commerce, 1999)

Similarly, later on, digital divide was in general described as inequality to access the internet and have been sought to overcome in various international platforms. The term is often used in a simplistic way, merely as the lack of ability to access and use the internet. (Öztürk, 2005: 111-2, Seferoğlu et.al, 2008, Yu, 2002: 2, Chinn & Fairlie, 2004) Similarly, Montagnier and Wirthmann's report covers digital divide as the inequality of access, usage and also mentions connection dropouts in this framework. (2011: 6-29) On the contrary to the liberal understanding of the term, the digital divide, have been studied with reference to many different properties and outcomes. The topic is

a very popular one and certainly has drawn a lot of attention in academic debates.

There are many other definitions and approaches to the digital divide which we should shortly discuss. Houston and Erdelez discusses digital divide by referring to 4 different concerns that is affiliated with it: Concerns of 1. political stability, 2. equity, 3. intellectual advancement and 4. information gap. (Houston and Erdelez, 2002: 99) These concerns provide a general understanding to why digital divide is a hot topic in academic debates, yet are inadequate to locate how they are defined. Political stability according to them is a reason of inequality of wealth and "haves and have-nots" which appears as an outcome of a more common inequality. Intellectual differences and informational gap can also be counted as questions of inequality. In this regard, the digital divide can be understood very boldly as a problem of equality on the internet.

The academic debates include many different approaches to the definition of digital divide but is commonly traced as the inequalities of access and usage of ICTs. Attewell calls the former as the first and the latter as the second digital divide. (Attewell, 2001: 252-257) Another early study by Castells was even more simplistic: Castells understands the digital divide as "the inequality of access to the internet" (Castells, 2002) Another early contributor, Foster also follows a similar route:

> The metaphor of the digital divide dwells upon the "taking away'' side of this Faustian bargain of technology. It signifies what some perceive as an unhappy rendering of our modern, technologically oriented society into a new and invidious bifurcation of what are now called "information haves" and "information have-nots". The result from the socioeconomic process that has created the digital divide is appropriately expressed in

> internet language. With information as the foundation of an emerging global economy, and with information as the primary commodity of cyberspace, one outcome of cyber-lag is the emergence of a grossly disparate world inhabited by two new distinct classes of people those who are said to be information rich and those who are information poor. (Foster, 2000: 438)

According to Fuchs and Horak "Jan van Dijk can be considered as the most important theorist of the network society defines the digital divide as the gap between those who do and do not have access to computers and the internet." (Fuchs and Horak, 2008: 100, van Dijk, 2006: 178) Guillén and Suarez broadens the term by inserting the socioeconomic aspect and defining the digital divide as "socioeconomic status, the existence of an enabling infrastructure and the cost of access." (2005: 682) Hassani also grasps the term as a problem of inequality which creates the digital divide that is shaped by many factors, among which are economical, social and demographical can be counted. (Hassani, 2006: 252-254) Yu defines the digital divide with using a broader set of problems:

> Although the origin of the term digital divide remains unknown, the term has entered everyday speech as shorthand for any and every disparity within the online community. Covering a large range of communications technologies and multiple layers of access to and use of these technologies, the digital divide represents a multifaceted problem that encompasses a wide spectrum of disparities and differences based on race, gender, age, income, education, type of household, geographic location, physical abilities, and the level of economic development. Spectrum of disparities and differences based on race, gender, age, income, education, type of household, geographic location, physical abilities, and the level of economic development. (Yu, 2002: 7)

In some cases the socioeconomic aspects of the digital divide is inserted within its definition and in some other cases, they are defined as reasons of the digital

divide. Fuchs and Horak state that the digital divide is used to define the inequality of access and usage of ICTs, yet are closely intertwined with economic divide, social divide and political divide. (Fuchs and Horak, 2008: 101) In this sense, the internet's inequality reflects all the real life's inequalities, yet extend further beyond it so that there appears also a digital inequality.

> Technologies enable and constrain human practices, their main dimensions are the material access to them(in modern society mainly with the help of money as technologies are sold as commodities), the capability to use them, the capability to use them in such ways that oneself and others can benefit, and embedding institutions. The digital divide refers to unequal patterns of material access to, usage capabilities of, benefits from computer-based information- and communication technologies that are caused by certain stratification processes that produce classes of winners and losers of the information society, and participation in institutions governing ICTs and society. Material access refers to the availability of hardware, software, applications, networks, and the usability of ICT devices and applications. Usage and skills access refers to the capabilities needed for operating ICT hardware and applications, for producing meaningful online content, and for engaging in online communication and co-operation. Benefit access refers to ICT usage that benefits the individual and advances a good society for all. Institutional access refers to the participation of citizens in institutions that govern the Internet and ICTs, and to the empowerment of citizens by ICTs to participate in political information, communication, and decision processes. Stratification patterns are on the one hand social hierarchies such as age, family status, ability, gender, ethnicity, origin, language, and geography (urban/rural).
> These categories have resulted in different types of the social divide. On the other hand unequal patterns of material access, usage capabilities, benefits, and participation concerning ICTs are also due to the asymmetric distribution of economic (money, property), political (power, social relationships), and cultural capital (skills). Hence, there is also an economic divide, a political divide, and a cultural divide. In modern society structures take on the form of capital that is accumulated and unevenly distributed so that different social classes and class fractions

> with a different (high, medium, low) total amount of economic, political, and cultural capital are created. The reason why there are gaps in access, usage/skills, benefit, and participation concerning ICTs is the multidimensional class structure of modern society that creates structural inequalities.
> People with high income, far-reaching and influential social relationships, good education and high skills are much more likely to have access to ICTs, to be capable of using ICTs, to benefit from this usage, and to be supported in political participation by ICTs than people who are endowed with only a little amount of economic, political, or cultural capital. (Fuchs and Horak, 2008: 100-101)

Pippa Norris was one of the first to argue the existence of different dimensions of the internet inequality that accommodate the digital divide. According to her, the digital divide could be separated in three different categories: Global divide; which covers the inequality between developed and undeveloped nations, social divide; which is the economical gap within each nation and the democratic divide; which encompasses the problems of ability to participate and mobilize in the digital sphere. (Norris, 2001: 4)

Regardless of the definition of the term in its very details, it should be quite obvious that the term itself in highly related to the problems of inequality. Nowadays it seems a much less popular topic than it was a decade ago, especially in the central academic debates, as the access and the ability to use the internet has been decreased significantly. The situation is not the same for the undeveloped countries still, therefore, the question of digital divide seems to have been cornered into a topic of international debate for mainstream academics. Fuchs and Horak handles the different dimensions of the digital divide in many categories: Economic capital, political capital, cultural capital, age, family status, gender, ability, ethnicity, origin, language and geography. (2008: 102) Geographical divide in our view can be understood as both at the

international and national levels. So that at the international level, it would describe the inequality between the developed and undeveloped countries and at the national level it would describe the regional differences within each country.

The question of economic inequality is also described for causing the inequality to access and use the internet. This for us seems to be the actual side of the economic inequality. What covers the digital economic inequality should be searched within the economic outcomes of the internet, who benefits economically from the internet, with reference to its advertising revenues, market shares, corporate assets, concentration of capital online, corporate acquisitions and mergers etc. as well as the discussions of digital unpaid labor, revenues and relatedly, concentration of content on the internet. The following chapters of this study will pursue to reflect the inequalities on the internet so that our framework will compass beyond the common use of the term. As Burri has pointed out, while the use of the term as a mere inequality of access and usage, the term has earned many different meanings in the last fifteen years since the term has become a center topic of debate. (Burri, 2012: 396) Burri continues her explanation by stating that "the digital divide can be broken down into many different 'divides' that are then related to inherently different issues." (Burri, 2012: 396) Following this, she recalls Norris' definition of the three different types: global, social and democratic divides. A slightly different formulation of this was done by Fuchs and Horak, where they use the term digital divide to explain the inequality of access and usage and thus separate the digital divide from economic, social and political divide.

The problem with these formulations is that by doing this, they derogate the digital divide from its total existence. By ascribing the economical gap in the ICTs into real life economical gap, these formulations overlook the additional gap that is created in the ICT industry. What we advocate here is that, while the ICT industry certainly reflects economical, political and social divides of the real life, it creates additional quanta on the digital field. Therefore, we claim that while there is certainly an economic divide, social divide and political divide that creates inequality on the internet, there is also an additional element to it: digital economic divide, digital social divide, digital political divide, etc. For this reason, in the following chapters, we try to measure the immense concentration of the ICT industry, incredible amounts of money spent by ICT companies for acquisitions and mergers, the uniformity of tastes and likes, click counts etc. The digital inequality has grown so complex and enormous with the great enlargement and expansion of the internet in the last few decades that the original use of the term has become quite ambiguous and petty in this new structure. The digital universe today, not only reflects the real life economic, social and political inequalities, but in most cases amplifies them and enhances them in such a manner that should not be ignored.

For this reason, we would like to mention the problem of digital inequality, which includes both the real life and the digital divides combined. (Figure 1.4).

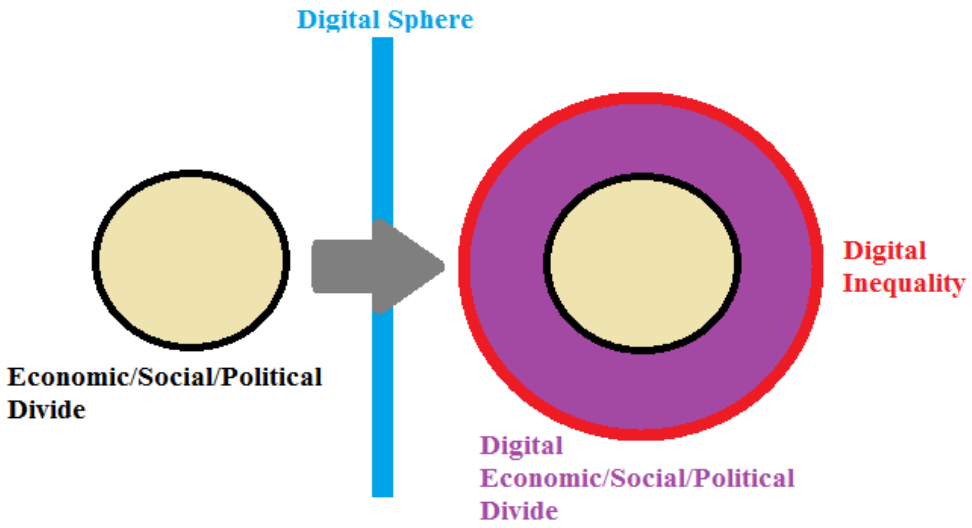


Figure 2.4. Digital Divide and Digital Inequality

As a simple categorization, we can observe four different types of digital inequalities:

1. Inequality in the ownership of the internet
2. Inequality in the means to access the internet and new media
3. Inequality in the usage and knowledge of the internet and new media
4. Inequality in the production of knowledge and data of the internet and new media

The access, usage and ability of the internet is the easiest ones to measure. The ownership regime of the internet, requires a market data research, which will also be covered in the 4th and 5th chapters of this study. The production of knowledge and data on the internet is remotely measurable by analyzing click counts, website rankings, content uniformity and such. Hereby we can see a strikingly overlapping picture with the theoretical discussion we engaged

earlier: political economy of the internet should study the base and superstructure, the economical and cultural, the ownership regime and the content at the same time.

The digital divide then can be divided with reference to its domain. In this regard, a vast number of studies have studied the "global digital divide". According to Pick and Azari, global digital divide is caused by uneven distribution of ICTs between the developed and "developing" nations and world regions. (Pick and Azari, 2008: 91) Global digital divide will be one of our main concerns in the following chapters, since "technological change and accelerating growth have been central to the economic growth and productivity of many nations." In this sense, global digital divide inherits a discussion of digital imperialism and is central to the problems of technological dependency and uneven distribution of wealth and data created over the internet. "Moreover, digital divides can not only be found between countries, but also within countries". (Busch, 2011: 341) Digital divide within one country is called as national digital divide. On the other side of the discussion resides the type of digital divide and can be studied in many different ways, yet we should mainly count them as economic, political and social digital divides.

According to these, we can count various subcategories of them: economic divide includes income gaps, capital gaps, revenue gaps and ownership gaps, while political divide includes ideological representation and participation differences, political affiliation and in some cases overlap with ethnicity(i.e. Kurds in Turkey) and lastly, social divide may include gender, sexual orientation, age, ability and education. To clear up this complicated picture, it is helpful to see Figure 2.5.

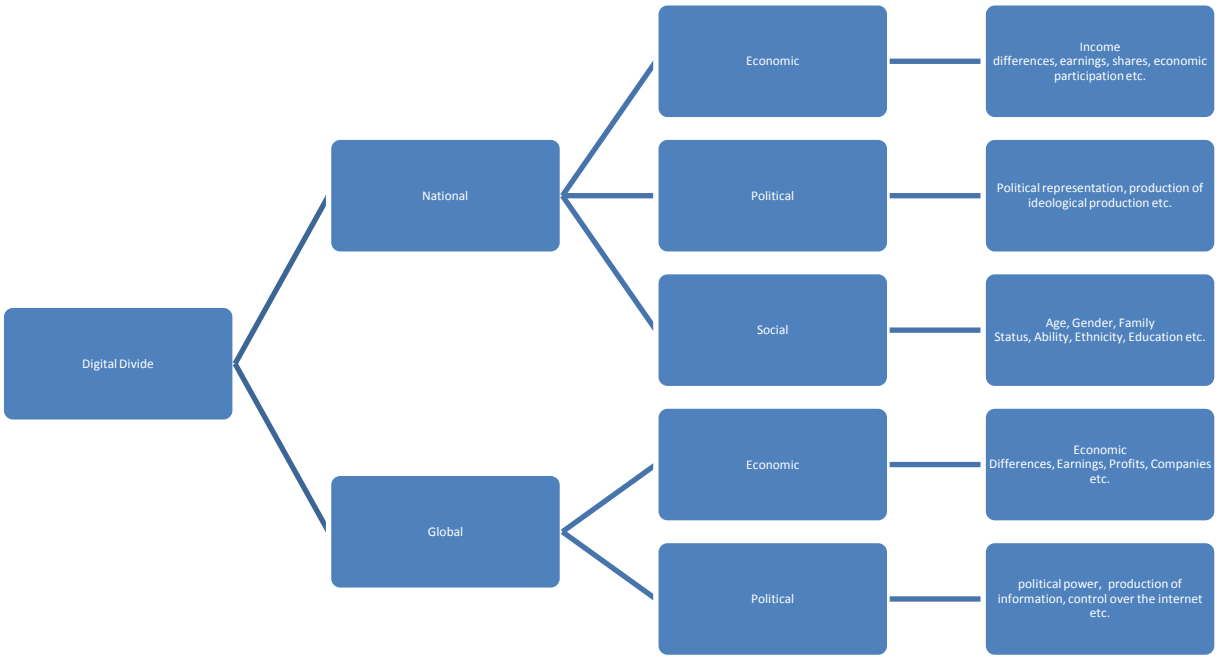


Figure 2.5 - Digital Divide Schema

In this respect, we can speak of global economical divide, global economical digital divide, national social divide, national social digital divide, global political divide, global political digital divide etc. As a sum of the reflection of global economic divide and global economic digital divide, we can speak of a digital economic inequality. In the following chapters, the inequalities we demonstrate therefore, does not imply the inexistence of real life inequalities but just the contrary, aims to draw the attention to how these inequalities increase in the digital sphere by horizontal, vertical and especially cross market concentration. Mosco reflects this skeptical approach to new media as a notion taken by many scholars who reflect the continuity of capitalist inequalities on the virtual world:

> Many who make the shift from the study of old to new media emphasize the continuities between old and new media capitalism. For them, new

> media deepen and extend tendencies within earlier forms of capitalism by opening new possibilities to turn media and audiences into saleable commodities. As a result, media concentration, commercialism, rich nation dominance over the global economy, divisions between information rich and poor, and militarism persist and grow. (Mosco, 2008: 54)

Definitely old and new media have many common grounds and critique of the latter can bear a lot of similar aspects of the former. Previously, we have discussed that the new media does not represent a structural break point from old media, as informational capitalism is still in the very basics, a new form of capitalism. As a last similarity between the two, the old and new media both carried the perpetual discussion of how concentration effects the content of media. In the next chapters, the data provided will try to shed light on this relation, which in our opinion is very critical. This notion bridges the concept of digital divide, which we have just tried to extract with the uniformity of content and existence of a real consumer preference on the internet today and in the future.

2.9. Concentration on the Internet and the Content

Therefore, last item to discuss would be our approach to the relation of concentration and the content, the links between ownership and control and how this relation is constructed. The internet has not yet drawn much attention in this sense. Despite the significant interest on the ownership and control of traditional media, almost no studies have been made to evaluate the ownership and control relation on the internet. Downing articulates three different issues that address the question of media ownership and control over content:

1. Is there sufficient evidence for there being concentrated media ownership?
2. Does a high concentration of media ownership risk, or even entail, a dangerous constriction of the interplay of perspectives and information on issues directly relevant to citizens of a democratic polity? This may be termed the "democracy-strangulation" hypothesis.
3. Does a high degree of concentrated media ownership risk, or even entail, a serious shrinkage of media product options available at the competitive prices to media consumers? This may be termed the "consumer-frustration" hypothesis. (Downing, 2011: 141)

Critical political economy of the new media seeks answers for these questions in a similar manner. It is possible to say that critical political economy shares these concerns more or less as different approaches emphasize different ones of these. Our study addresses these concerns too. As Downing addresses, ownership and control relation has been discussed by many media scholars and some of them had "the same straw man implicitly in their sights, namely a traditional leftist stick-figure who denounced the bosses' diktats. It was fairly easy to show how far from subjective professional reality in the newsroom this picture lay, and how important were organizational routines and other social dynamics in the media production process." (Downing, 2011: 141)

It is therefore important to avoid such a simplistic understanding of the media today as well, particularly over the internet. For us, the internet provides an extremely striking example for how the media is constructed by will and not by simple coercion. The internet has so many choices, yet as we will see in the following chapters, it is to the same extent becoming quite mainstream

oriented. This phenomenon shows us that there are way more than only one coercive factor which today controls the content of the ***effective information produced*** on the internet today. When analyzing Murdock and Golding's book "For a Political Economy of Mass Communications", Downing extracts that:

> Their discussion of media ownership concentration combined its depiction with full acknowledgement of the intersecting role of market forces, of professional organization routines, and the growing internationalization of media business. Their analysis of its impact on consumer choice and democracy's vigor solely rests, however, upon a selection of empirical cases - a feature of many critical discussions of media oligopoly that has been a frequent target of more optimistic media researchers. (Downing, 2011: 150)

Murdock and Golding's concerns over the relation of oligopoly and consumer choice are shared in our study and are still actual on the internet today. However, unlike many forms of traditional media, *prosumers* on the internet today are more or less free to produce their own material as digital information. This is the reason why we used the term *effective information produced*, while it is possible to produce, there appears to be a new control mechanism over the internet today. The internet is today so vast and gross that any information produced has to go through certain stages to be remotely effective.

For this, we believe that cross-market ownership on the internet today plays a crucial role in formulating these mechanisms. A few companies today over the internet has such a market structure that they have horizontal, vertical and cross(conglomerate) concentration; i.e. one company produces the hardware, software, advertisements that come with them, owns the search engine, owns the news portal, social media where we get the information from. In the third

chapter, we will take Google and other companies into account for this case. In a scenario where one company commands the whole internet information as a monopoly, any information produced has to go through their filters. To be precise, if you have a website and want to be effective you have to be in the first few pages on the Google search engine. Similarly, any website that is promoted through Google's monopolistic advertising network and thousands of websites and news portals owned by the same company and is listed top on the search engine will certainly have the attention and that without such support will not. Thus, the internet information today can be effective or ineffective, which in accordance to their self-realization. Ineffective information on the internet, which is not promoted by any means, have almost no influence whatsoever, where it becomes important to not take it in the most reductive sense simple consumer choice, but in a more sophisticated and critical sense.

These giant corporations over the internet on a global scale have become so diversified today, which we will again discuss in the third chapter, that they have gone totally off-limits of one's imagination. Glasses with internet access, mobile phones, such a vast array of internet related products, we know today that Apple is preparing to retail their own car in 2020.[3] The car owners will be directed towards using their own Apple-compatible products and visit their own range of websites, as a small example. For such enormous cross market activity, acquisitions and mergers play a crucial role, which we will again discuss in the following chapters.

When we analyze two sides of the "physical" and "virtual" sides of the internet, we can outline that while the physical side can be taken into account only with

[3] See http://www.bloomberg.com/news/articles/2015-02-19/apple-said-to-be-targeting-car-production-as-soon-as-2020 , Last visit 11.08.2015

its ownership structure, the virtual sphere can be referred by both its ownership structure and its effectiveness (i.e. its click counts, ratings etc.). The internet's virtual sphere today is sold, traded or exchanged like real commodities, and many domain names(websites), codes and certain algorithms have market values attached to them. Therefore, all the data we provide should be considered in this context: As we will exemplify the relationship between concentration of ownership and choice we can observe today that there is a certain pattern, and is not by accident.

In the next chapter, we will take all categories of digital divide into account with such an approach. We will look into the internet market's growth and structure globally, global digital divide and the giant internet corporations that constitute the major part of the internet today.

CHAPTER 3
CONCENTRATION IN THE INTERNATIONAL MARKET

In this chapter, our intention is to understand the global internet market and its tendencies which accommodates the theoretical framework sketched out in the previous chapter. The content and the property of the market has been centralized on an international level. The daily habits and usage of the internet populace corresponds to a mainstream global virtual universe. It is therefore crucial to identify the global internet market and critically understand its negative aspects, such as monopolization tendencies and soft censorship mechanisms which will be discussed with reference to actual market knowledge which currently exists. This chapter aims to develop our discussion towards a concrete understanding on the current economy of the internet.

3.1 The Idea That the Internet is Non-Geographical

Public debates on the characteristics of a newly emerging sphere, "the internet" has usually implicated the idea that internet is a non-geographical universe, which alters the geographical boundaries of the real world, to the extent that, on the internet, every consumer(user) is anonymous, free and uncontrollable. This idea has even made its way to academic grounds: Many scholars, mostly during the early stages of its rapid development, have asserted the innate egalitarian characteristics of the internet and therefore it's inevitable emancipating role (Castells, 2000; Lenihan, 2002; Norris, 2006; Stahl, 2008). Kozanoglu claims that "the internet is a sophisticated channel of thinking together which could not even be dreamed of until the near past." (Kozanoğlu, 1997: 98) One important dimension in this story is that the

internet is intrinsically "international" attributes. According to this notion, the internet could establish a sort of "world citizen" which would equally participate in and share a new form of information society. As Morozov pins out: such fascination was partake by neo-liberal politicians which later turned into a huge disappointment as they found out that "Al-Qaeda was seemed to be as proficient using the internet as its Western opponents did not chime well with a view that treated technology as democracy's best friend" (Morozov, 2012: 7) Morozov puts it further by analyzing the oppressive use of the internet by many authoritarian governments as an advanced intelligence agency mechanism. (Morozov, 2012: 8-10)

Leaving the neo-liberal enthusiasm[4] on the internet aside, it is possible to make a much broader analysis on the non-geographicality of the internet; the internet is still, as other forms of media and communications, is widely geographical. It is hereby possible to approach this question in three different dimensions:

Firstly, the internet is not established and accessible equally. In different regions of the world, or differently "developed" regions of any state and even in uneven districts of every city, internet penetration rates do greatly vary. This can be related to earning inequalities, inadequate infrastructure, distance from "central infrastructure" (Patelis, 2000: 73) or many other reasons and combinations. In this respect, evident data proves that there is an unequal opportunity to the internet in many ways.

[4] Hillary Clinton, US Secretary of State has presented us with an excellent example of how cyber-enthusiasm and fascination could be intertwined with a highly interventionist and regulatory mindset.
See : http://www.state.gov/secretary/rm/2010/01/135519.htm (Last visit on 20th July 2014)

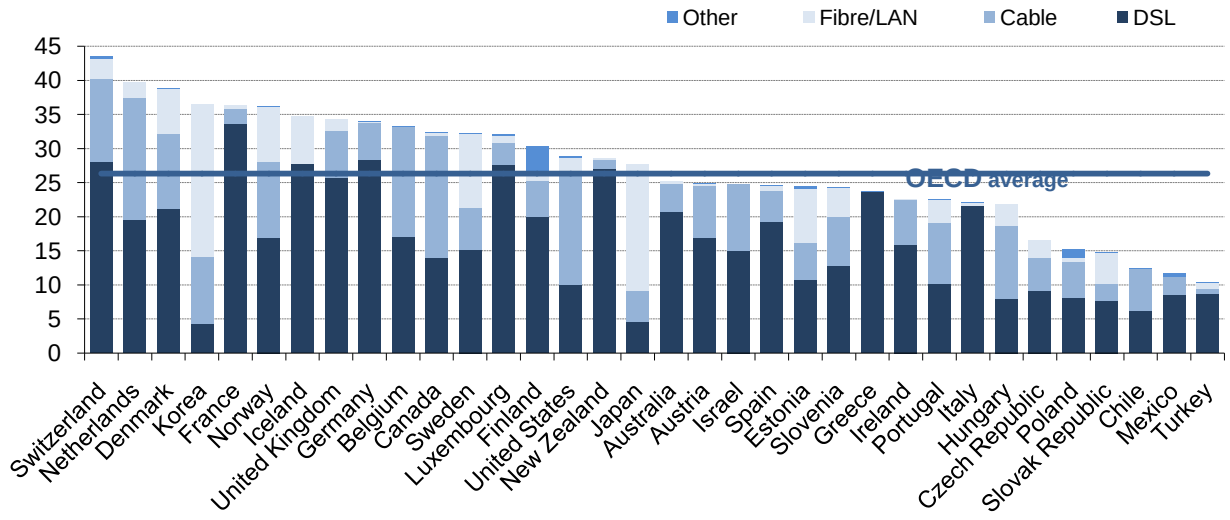


Figure 3.1. OECD Fixed (wired) broadband subscriptions per 100 inhabitants, by technology

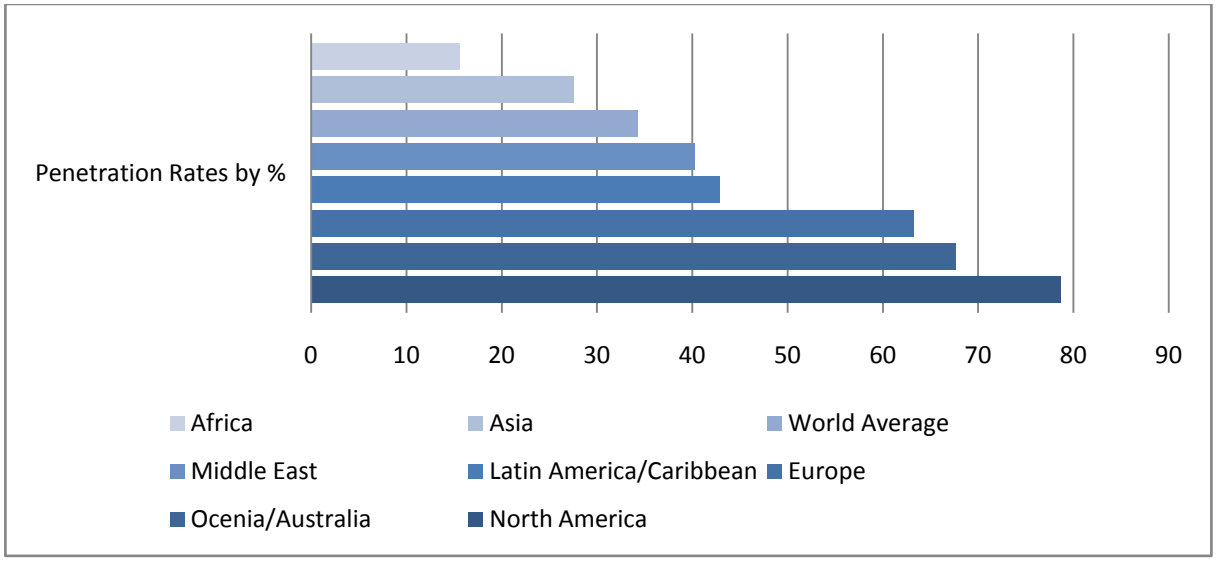
Source: OECD Broadband statistics, Dec. 2012

Fixed broadband home subscription rates is a good way to measure how "connected" we are to the internet, however, it is still possible to claim that a portion of the society might not have fixed connection at home, but still use internet at other locations. According to data composed by internetworldstats.com, internet penetration rates differ very much from one continent to another, where in North America, penetration rates is at the highest at 78,6% and in Africa 15.6% by June 30, 2012.[5] Departing from these facts, it would be unreal to claim that everyone today can reach the internet. *Ipso facto*, the usage(consumption) of the internet content is very unevenly

[5] Internet World Stats, See www.internetworldstats.com/stats.htm (Last visit on 20th July 2014)

distributed. We will also see later in the discussion of Turkey, the unequal usage of the internet among different regions of the same country.

Figure 3.2. Internet Penetration Rates by World Region, 2013



Source: Internet World Stats[6]

Secondly, the internet content is not produced and regulated equally. Patelis rightfully pointed out earlier:

> The dominance of US users documented above constitutes only one side of American dominance on-line. It is not only that the US enjoys the highest penetration of Internet use due to infrastructure and other competitive advantages, but that such dominance affects the supply of Web pages. This is to a very large extent English dominated, in consequence of which there is a linguistic dimension to the dominance of US actors on-line. OECD statistics reconfirm the dominance of the English language as the lingua franca of the Web as more than two thirds, nearly 80 per cent, of all Web pages are in the English language. (Patelis, 2000: 74-75)

[6] See: www.internetworldstats.com/stats.htm (Last visit on 20th July 2014)

Many years later, websites are similarly dominated not only linguistically, but also in "click" counts. The domination of US-based websites is striking: According to data collected by NetCraft, 19 out of 20 most popular websites globally are based in US, with the only exception of Wikipedia.org, a Netherlands-based firm, ranking 13th . Top-60 most popular websites contain 49 US-based websites, 6 UK-based, 3 Netherlands-based, 1 Italy and 1 Germany based websites. In top-100 most popular websites globally, there is not a single country outside of US and a few EU member countries. [7] Other measuring sources like Alexa sketch out an identical list. [8] According to most trusted Google rankings, Facebook had 880 million unique visitors in July 2011, while YouTube had 800 million, Yahoo.com had 590 million, live.com had 490 million and msn.com had 440 million.[9] A compilation of monthly unique visitors by eBizMBA is very recent; where Google had 900 million, where Facebook comes second with 700 million, Yahoo third with 500 million, Youtube fourth with 450 million and Wikipedia fifth with 350 million.[10] Moz.com, another traffic measuring firm, has monitored links to websites and produced a ranking list of most linked(Linked Root Domains)[11] websites where Facebook.com is linked the most, being root-linked 9,765,684 times, Twitter.com 6,458,159 times, Google.com 6,218,921 times, Youtube.com 5,222,107 times and wordpress.org

[7] See http://toolbar.netcraft.com/stats/topsites (Last visit on 31th July 2014)

[8] http://www.alexa.com/topsites (Last visit on 31th July 2014)

[9] The numbers are huge-scale estimations by Google. See http://www.google.com/adplanner/static/top1000/ (Last visit on 31th July 2014)

[10] See http://www.ebizmba.com/articles/most-popular-websites

[11] Linking Root Domains (LRD) is used to measure how many external websites link to the mentioned website. LRD as explained on (http://moz.com/community/q/what-exactly-does-linking-root-domains-mean) is a more accurate measuring as it counts two links from the website as a single linking domain.

3,993,281 times[12]. What to be extracted from all these evidence is that; costumer preference is highly concentrated on the internet, where among billions of active websites, a very little number of them gets the vast majority of attention, and are enormously US-dominated. Bearing in mind that there is almost two-hundred countries in the world, only a small number of those could have any influence of the internet audience as of today. Özdemir remarks that the dependency relations between the center and periphery is also produced by the flow of information and the traffic as well as the structure of the infrastructure. As we will also see in Turkey example, most periphery countries have only established direct connections to US internet networks. In this sense, it is possible to speak of a "desktop imperialism." (Özdemir, 2005)

Thirdly, and most importantly, the internet is not economically shared equally or fairly in any means. One crucial point is that as we have noted earlier, an analysis of the internet can't be reduced to mere content analysis: The infrastructure is at least similarly important. However, to capture most market data accurately in these industries is nearly impossible. Although, it is possible to generally grasp the structure of the market looking at the data published by OECD, which includes all components of the ICTs industry, ranging from hardware producers to mobile device producers, software programming firms to online advertising business. All these elements brought together, top 250 ICT firms according country of establishment worldwide and their revenues is shown in Figure 3.3.

[12] See http://moz.com/top500 (Last visit on 31th July 2014)

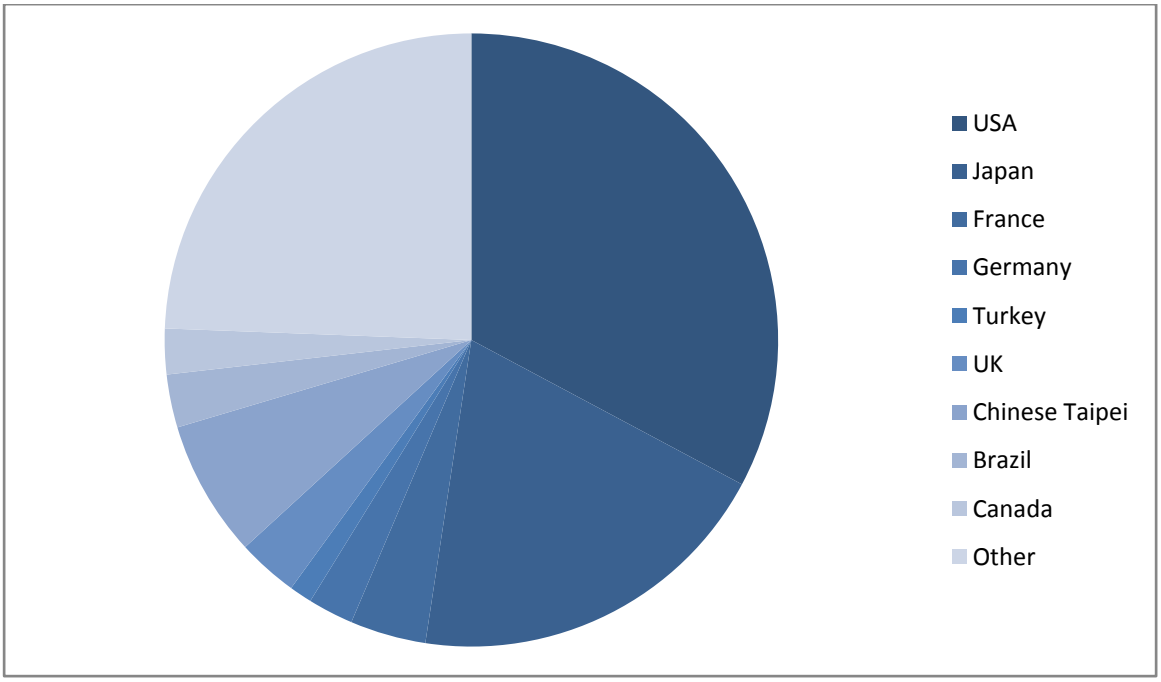


Figure 3.3. Top 250 ICT firms by country

Source: OECD Information Technology Database, Compiled from annual reports, SEC filings and market financials July 2012

OECD's economic outlook report has mentioned in short: "In 2011, Japan and the United States accounted for the largest portion of top 250 ICT firms: 82 (33%) were based in the United States, 49 (20%) were based in Japan and 18 in Chinese Taipei (7%)." (OECD, 2012) One thing to note here, is that while even this data is enough to convince us, most of those firms from "periphery" countries that could make it to these charts are telecommunication companies, which is a structural necessity rather than competition and are often established by governments themselves, or in some cases, greatly supported by them. The top 2 firms from Turkey for instance, are Turk Telekom and Turkcell which are highly corresponding in this context. Again as OECD has provided, more than one third of all revenues in ICT industries is gathered by

telecommunications industry[13]. On another account, to include telecommunications industry solely in an internet-based area is highly questionable. OECD report takes the discussion further (out of top 250 ICT firms): "Regionally, the 98 firms based in the Americas and the 89 firms in the Asia-Pacific region accounted for around 40% and 36% of total revenue (around USD 1 800 billion and 1 600 billion respectively) in 2011. Accordingly, the Americas accounted for the highest share in overall net profit in 2011" (OECD , 2012: 40) (See Figure 3.4)

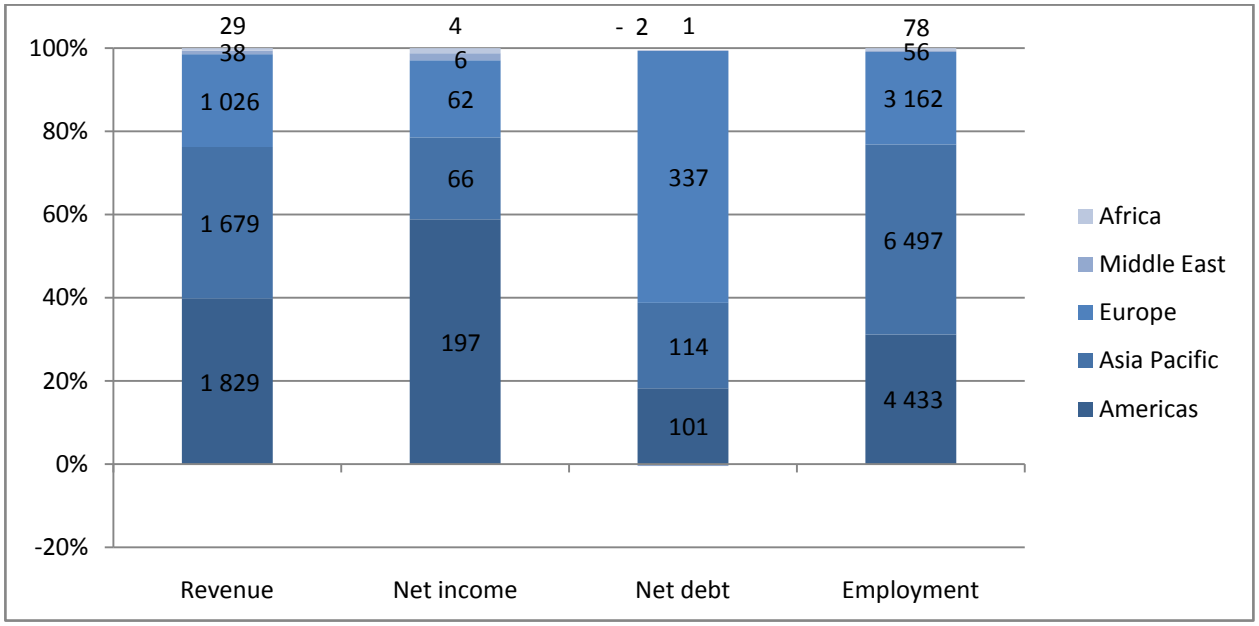


Figure 3.4. Share in revenue, net income, net debt and employment of top 250 ICT firms by region of registration, 2011

Sources: OECD Information Technology Database; compiled from annual reports, SEC filings and market financials, July 2012

[13] See Table 3.5

All three major categories we have so far evaluated explicitly shows us that the internet has national boundaries. The internet actually reproduces the center-periphery dichotomy, to a much greater extent. In this sense, the internet industry is an important example of global dependency and modern concentration tendencies.

3.2 Multi-National Corporations and their operational analysis

As we have discussed in earlier sections, the internet content today has become increasingly mainstream tendenced. According to Alexa rankings, this is more clearly exposed[14]: Taking many examples into account, from different continents and different cultures, the top rankings rarely differ from one another: Google, Facebook, YouTube, Yahoo and Amazon is the 5 most-popular websites in the US(in ranking order) while in Singapore, google.com, Facebook, google.com.sg, YouTube and Yahoo ranks the top 5. In Kenya, the list is in order: google.com , Facebook, YouTube, Yahoo and google.co.ke where as in UK it is google.co.uk, Facebook, Youtube, Amazon.co.uk and google.com, in Puerto Rico it is Facebook, YouTube google.com.pr, google.com and Amazon and in Saudi Arabia, the top-5 websites are: google.com.sa, youtube.com, facebook.com, google.com and live.com. Randomly taken, these examples can be repeated inordinately[15], although it proves that there is a global overlap of tastes and preferences in what was presented as the "emancipating" digital universe. Moreover, mainstream content -the websites, the software - are not the only constituents of this market domination. In our previous chapter, 14 different general categories have been named, to ease

[14] See http://www.alexa.com/topsites/countries (Last visit on August 2014)

[15] Turkey's internet market will be discussed in detail in the following chapters therefore it is not mentioned here.

the burden to understand the structure of the internet business. In all these categories, a similar story can be told. For instance, in the PC-selling market, in 2012, HP.com has shipped 56,5 million units worldwide, seizing 16.0% of the whole market share, where Lenovo comes second with 14.8% share and 52,1 million units, Dell third 10.7% with 37,6million units, Acer fourth with 10.4% and 36,6 million units and Asus fifth with 6,9% and 24,2 million units[16] These 5 corporations constitute 58.7% of all PC sales worldwide, while the rest of all other firms remains at 41.3%. This data is even more remarkable by recognizing that 4 of top 5 PC companies worldwide are from the US. In every possible category, these examples can be put forward, however, to not derail the focus of our discussion, we will refrain from multiplication these examples. In analyzing the internet industry in Turkey we will later have the opportunity to separately glance at each market in Turkey.

The internet is today majorly run by huge billion-dollar multi-national corporations(MNCs). Among all named categories, markets are dominated by very few firms, in some cases, making it very close to a market monopoly. In most others, the market have a small number of giant MNCs that is competing for market domination. In periphery countries, the situation depends on the volume of the market. Adequate market volume and profitability can lead these MNCs to establish local substations in order to more effectively control market tendencies. With the central and highly concentrated structure of the market, venture capitalists and miraculously developed internet-related firms find themselves as a purchase option by the giant MNCs that dominate the relevant industry. As earlier noted, horizontal, vertical and cross-market(conglomerate)

[16] http://www.gartner.com/newsroom/id/2301715 (Last visit on August 2014)

(Gaughan, 2011: 13) ownership of certain corporations lead to imbalanced capital accumulation and financial power. According to the Economist, net cash held by Apple, Amazon, Facebook, Google and Yahoo altogether has increased from less than 50 billion US dollars in 2008 to more than 200 billion dollars in 2012.[17] Mergers and acquisitions(M&As) play the major role in order to realize this. Most gigantic MNCs currently have a separate M&A department with a highly sophisticated organization body[18] , and mergers are for the smaller companies. A huge enough company doesn't need to merge, they simply acquire smaller ones. M&As do not only create profits and increased stock values for the buyer, but also creates demand and support for all products and services owned. In this sense, the internet has become the ultimately fabulous sector multiplicating its revenues and market value in a single decade.

[17] See http://www.economist.com/news/business/21578401-tech-giants-are-finding-lots-bolt-acquisitions-splash-out-platforms-upon-platforms (Last visit on August 2014)

[18] See http://gadgets.ndtv.com/internet/news/google-to-replace-mergers-and-acquisitions-chief-302798 (Last visit on August 2014)

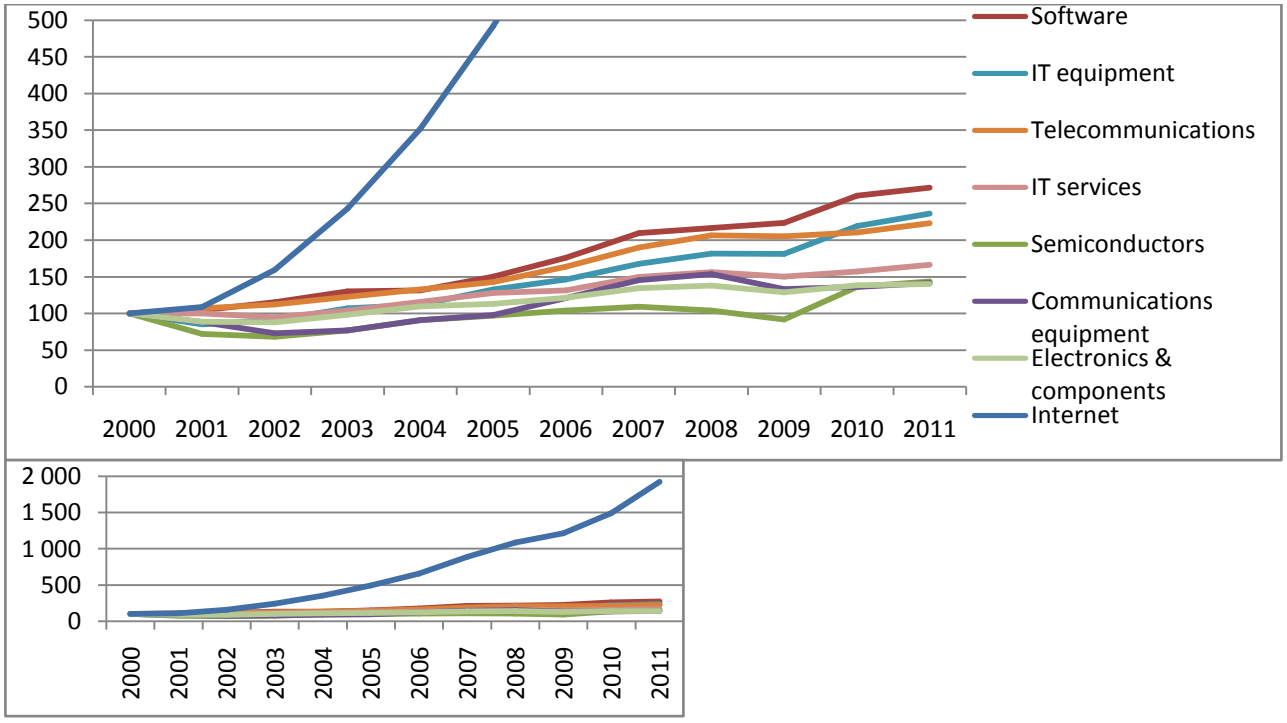


Figure 3.5. Revenue trends of Top 250 ICT firms by sector, 2000-11

Source: OECD July 2012

Another important note to consider in OECD report is that among top 50 public internet firms top 4 are as follows: Amazon.com Inc ranked 35th, Google ranked 43rd, eBay Inc ranked 109th, Yahoo! Inc ranked 146th. Amazon and eBay are generally known to be e-commerce websites, which can be characterized by being substitutes for more traditional market intermediaries. (Bajari & Hortaçsu, 2004: 457) However, it is very interesting to find out that Amazon's cross-market ownership potential arraying from IMDb, the famous movie database, Alexa.com, statistics, information and research portal, Kiva Systems, an electronic warehouse equipment producer. Therefore, a closer look at these top corporations' acquisitions and mergers should be very useful.

3.3. Concentration, Acquisitions and mergers in the global market

Amazon.com Inc is a very unique case. While not being very active in acquisitions, Amazon has acquired some important companies. Seemingly, the corporation pursues a narrow policy of acquisitions; selecting targets from a certain set of industries; including websites about cultural goods, books, music distribution etc. Such acquisitions include the acquisition of imdb in 1999, CDNow in 2003, Audible.com in 2008 etc. Although there are more interesting operations than these: the acquisition of Joyo.com[19], a huge Chinese advertising company, which later on was changed into www.amazon.cn. The acquisition of Zappos.com, an online shoe retailer and Shopbop, women clothing retailer are also uncommon businesses of Amazon.

eBay generally operates as an e-commerce focused corporation as well. What is worth noting is that most acquisitions by eBay are competitor e-commerce or advertising companies. Except these, eBay have made some very interesting acquisitions: GittiGidiyor.com from Turkey for 217,5 million$ is only an example how MNCs operate in periphery countries.[20] eBay has also made some crucial and expensive acquisitions, PayPal for 1.5 billion$ in 2002[21] , Skype for 2.6 billion$ in 2005 and GSI commerce for 2.4 billion$ in 2011. eBay has increased its portfolio mainly in the online auctioning and commerce market, as well as web consulting, advising and education business.

[19] See http://uk.reuters.com/article/2007/06/05/us-joyo-amazon-idUKPEK15159920070605 (Last visit September 2014)

[20] See http://investor.ebay.com/releasedetail.cfm?ReleaseID=240496 (Last visit September 2014)

[21] See http://news.cnet.com/2100-1017-941964.html (Last visit September 2014)

Microsoft is a more active purchaser and usually invests in a more varied markets and industries; in every different 14 category we have earlier discussed, Microsoft has made acquisitions of different sorts. Still, most of these are concentrated in the software market and its components(such as game designing companies, programming and graphic designing etc.). Microsoft has acquired Fast, a Norwegian online commerce and transportation company[22] for 1,19 billion$, and most notably, aQuantive, an online advertising company for 6.3 billion$[23] in 2007 and Skype, an online voice-communication software company for 8,5 billion$ in 2011[24]. These colossal transactions are only a portion of Microsoft's acquisition business, where they also notably bought a 3% stake at AT&T(telephone&communications) stocks for 5.5 billion$ and a 23.6% stake of Telewest Communications(Cable TV) stocks for 2.6 billion$. Microsoft also owns the search engine "Bing".

Yahoo!, in comparison to other corporations mentioned, are smaller in market cap and volume of transactions. Yet it has made some noteworthy acquisitions such as GeoCities a web hosting company for 3.6 billion$[25] and Broadcast.com, an online radio company for 5.7 billion$ in 1999, and recently, Tumblr.com for

[22] See http://www.microsoft.com/en-us/news/press/2008/jan08/01-08FastSearchPR.aspx (Last visit September 2014)

[23] See http://money.cnn.com/2012/07/02/technology/microsoft-aquantive/index.htm (Last visit September 2014)

[24] See http://about.skype.com/press/2011/05/microsoft_to_acquire_skype.html#more (Last visit September 2014)

[25] See http://money.cnn.com/1999/01/28/technology/yahoo_a/ (Last visit September 2014)

1.1 billion$ in 2013[26]. Yahoo search engine has been declining in interest and popularity for a long time, but still exists.

Apple is probably the least expansionary of these internet giants. It's acquisitions are relatively very small, and are usually for the purpose of enhancing its own physical products and software. In contrast to other corporations mentioned, Apple is seemingly less inclined to invest in particularly different industries. The company makes huge profits each year from selling Apple branded mobile phones(iPhones), tablet PCs(iPads) and computers(iMac, MacBook) and video/audio players(iPods) and most recently mobile TV players(iTVs). Apple's policy can be called more towards saving then investing. Capital accumulated by the company has reached shocking amounts. According to recent reports, Apple's net cash stock has reached 145 billion US dollars in April 2013 [27], which is almost one fifth of Turkey's GDP in 2012.[28] In the first quarter of 2013, Apple recorded a net profit 9.5 billion$, down from a net profit of 11.6 in the first quarter of 2012.

As shown in examples above, acquisitions are a key element for the gigantic capitalists of the internet today, for building digital kingdoms of the modern society. As we have seen, these corporations do spend enormous amounts of money into vertical acquisitions and mergers, as well as horizontal and cross

[26] See http://www.businessinsider.com/yahoos-board-approves-11-billion-purchase-of-tumblr-2013-5 (Last visit September 2014)

[27] See http://www.guardian.co.uk/technology/2013/apr/23/apple-profits-fall-cash-pile (Last visit September 2014)

[28] The World Bank database, http://data.worldbank.org/country/turkey (Last visit September 2014)

counterparts. All of these flourish the same results; the mainstream internet, as we have named, splendidly overlaps with the owners of the internet market today. Any exceptions are possible candidates to be acquired. It is no coincidence that online advertising companies get so much attention: By cross-marketing, promotion and orientation, the internet – a tremendously huge environment for the most – can become a large void of data where speculation and manipulation can triumph strongly. Owners of this new world can control both the supply and the demand.

3.4. The Google Kingdom

Probably the most significant MNC, Google, hereby becomes much more crucial. Firstly, it is growing in a much more venturesome pattern in terms of acquisitions and future goals. Secondly it has much more direct control on the content of the internet which will be discussed below. Thirdly, Google's initiative in great investments are self pro-liferating. With its current potential and increasing revenues per capita, Google needs special attention. Google is thus also important to show with the current political economy structure of the industry, how much potential exists for high concentration of the market and manipulation of content and information.

Google Inc, when it comes to acquisitions, is the indisputably leader of this tier. As it is noted in a New York Times Report, Google has acquired 48 other companies in 2010, and 57 companies from the start of 2011 to October[29],

[29] See http://dealbook.nytimes.com/2011/10/27/google-hits-new-ma-record/ (Last visit November 2014)

ending up in a total number of 79 by the end of 2011.[30] Google's annual fiscal report marked their policy to continue in 2011: "Acquisitions are an important element of our overall corporate strategy and use of capital, and we expect our current pace of acquisitions to continue[31]." There are so much more than only numbers though, i.e. Google's acquisition of Motorola Mobility for 12.5 billion US dollars in August 2011[32], making it the largest acquisition in the internet industry. With this transaction Motorola Mobility's mobile platform for smart phones; Android, was also seized by Google. Motorola Mobility will also now produce smart phones, which will bolster the harsh competition in the mobile device market, with the name "Google Moto X Phone" and is planned was unveiled and vendor by August, 2013.[33]

Google's acquisitions include many more to note: YouTube has been acquired by Google in 1.65 billion$[34] [35], and by this Google has actually brought together its search engines, advertising and video sharing features together. Over a hundred companies bought by Google, it is possible to find most kinds of

[30] See http://www.eweek.com/c/a/Search-Engines/Google-Spent-Nearly-2B-on-79-Acquisitions-in-2011-602042/ (Last visit November 2014)

[31]See http://www.sec.gov/Archives/edgar/data/1288776/000119312512025336/d260164d10k.htm(Last visit November 2014)

[32] See http://investor.google.com/releases/2011/0815.html(Last visit November 2014)

[33] See http://nvonews.com/2013/07/21/google-moto-x-phone-release-date-on-aug-1-specs-and-verizon-version-still-mystery/(Last visit November 2013)

[34] See http://googlepress.blogspot.com/2006/10/google-to-acquire-youtube-for-165_09.html(Last visit November 2014)

[35] See http://money.cnn.com/2006/10/09/technology/googleyoutube_deal/index.htm?cnn=yes (Last visit November 2014)

software producer companies, like Waze, an Israeli navigation programmer for 1.3 billion[36], although the more significant ones are a sheer number of advertising firm acquisitions. The most striking is probably the acquisition of DoubleClick[37], a major online advertisement company, and an old colleague of them in the online advertisement market, the deal took a spectacular amount:3.1 billion $.[38] Other online advertising company acquisitions by Google include AdMeld for 400 million$[39], Applied Semantics for 102 million$, and AdMob, a large mobile advertising company for 750 million$[40]. We will shortly try to explain why online advertising is so much emphasized by these mega-corporations.

According to StatCounter.com statistics, Google has received 90.09% of all user "clicks" in global search engines category in June 2013, where bing, a Microsoft website, received 3.75%, Yahoo! Received. 2.83%, Baidu, Chinese search engine, received 1.04%, which makes up for 97.71% with a simple calculation. All the "others" makes up a sum of 2.29%, which clearly invokes an idea about how unvaried the market actually is, despite the fact that many search engines use "dirty tricks" to manipulate users into their websites, by

[36] See http://news.cnet.com/8301-1023_3-57588731-93/google-buys-waze-in-bid-to-improve-mapping-services/ (Last visit November 2014)

[37] See http://googlepress.blogspot.com/2008/03/google-closes-acquisition-of_11.html (Last visit November 2014)

[38] See http://articles.economictimes.indiatimes.com/2007-12-23/news/28436375_1_citi-s-bpo-genpact-travelguru(Last visit December 2014)

[39] See http://techcrunch.com/2011/06/09/google-acquires-admeld-for-400-million/(Last visit December 2014)

[40] See http://www.businessinsider.com/google-to-acquire-mobile-ad-network-admob-for-750-million-in-stock-2009-11(Last visit December 2014)

installing plug-ins into different software or by detecting the internet browser of the user and changing the main page.

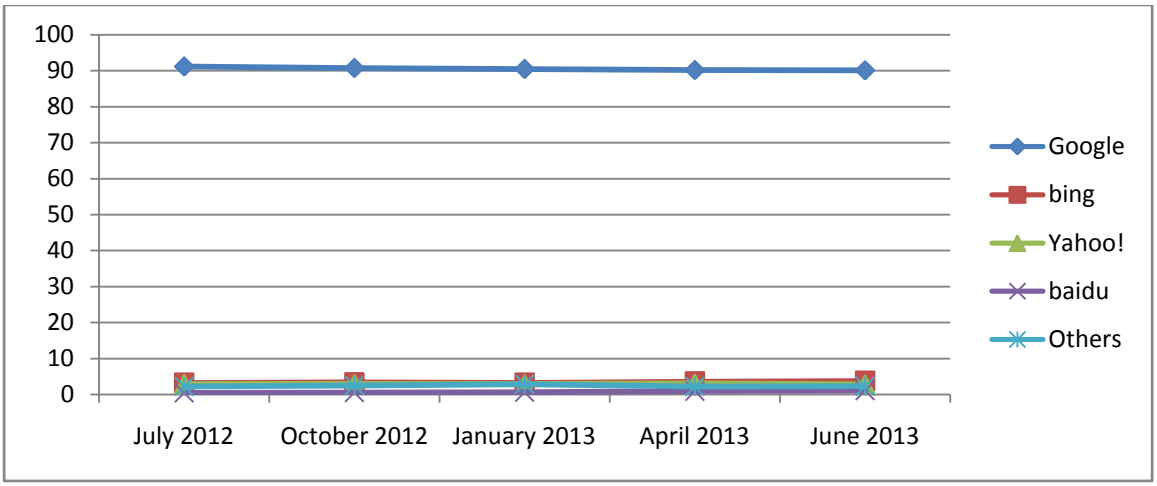


Figure 3.6. Search engines global page views

Source: gs.statcounter.com, June 2013.

In most popular browsers, Google again leads with its product, Google Chrome, being used in 42.68% of all PCs that connected to websites as of June 2013, Microsoft's Internet Explorer second with 25.44%, Firefox 20.01% , Safari 8.39% and Opera 1.03%, according to StatCounter[41]. In this category, top 5 browsers make up for 97.55% of all PC users. A similar schema can be seen in mobile browsers category; Android's internal browser[42] is first with

[41] See http://gs.statcounter.com/#browser-ww-monthly-201207-201306 (Last visit December 2014)

[42] Android and all its brands were purchased by Google as a part of Motorola Mobility acquisition of 12.5billion US dollars, which we have mentioned earlier.

29.06, Apple's iOS browser second with 22.77%, Opera third with 16.06%, UC browser fourth with 9.89% and Nokia's browser with 7.38%[43].

Being at the top of the list in many categories, and gradually escalating more, Google's success owes much to their advertising entrepreneurship and emphasis of integrating their variable products and services, as we have named, with advertisements. Revenue per unique user, which we called earlier "revenue per capita" (RPC) earned by Google is devastatingly higher than any other company, including those who offer paid services.

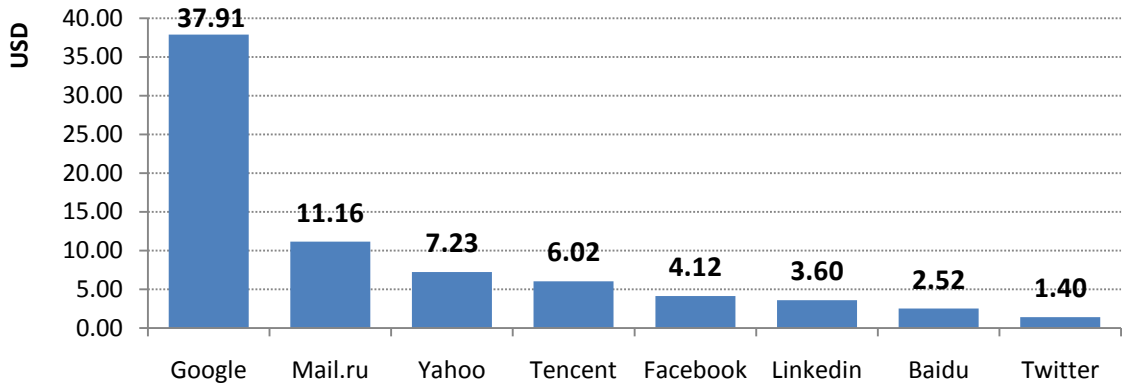


Figure 3.7. Companies financial annual statements 2012

Source: Based on comScore, Bloomberg, OECD Economy Outlook 2012.

As we have also noted earlier, Google will be producing hardware via Motorola Mobility facilities, which creates the possibility not only adding up to its online revenues in offline markets, but also to cross-promote its own applications, search engines, advertising websites etc. This means unpredictably increasing control and power. The value of 37,91$ RPC is the highest number after

[43] See http://gs.statcounter.com/#mobile_browser-ww-monthly-201207-201306(Last visit December 2014)

Amazon's amazing 397,52$ and eBay's 50,21$ RPC values, which are surely more comprehensible in the sense that they are actually online shopping websites. This brings us back to the truth that: "The digital media business is famously fragmented, but that hides the fact that a huge chunk of spending goes to a handful of firms" as Morissey puts it[44]. According to Google's financial tables, the company made 37,9 billion dollars of revenue in 2011, 36,5 billion of it from advertising, which corresponds to more than 96% of its total revenues, and in 2012, 46 billion dollars revenue, out of which 43,68 billion dollars from advertising, which is around 95%[45]. Online advertising a large chunk of this, as in other forms of media, is the main source of the internet mega corporations and it is crucial to our understanding of the internet today. Not only that it is already huge, it is still a very quickly growing industry. The growth rates and the future potential of the industry is astounding:

3.5. Global Online Advertising Industry

Kaye and Medoff (2001) remark that the first online advertisement was when HotWired sold a banner to AT&T on their website in 1994. Later on, online advertisement industry's growth has been tremendous. According to Zenith expenditure forecasts, the internet advertising expenditure is 88,4 billion US dollars in 2012 and is estimated to reach 101,7 billion in 2013 and 116,8 billion by 2014. This will account for 60% of the growth in total advertising expenditure.[46] According to OECD's report, advertising expenditures for the

[44] See http://www.digiday.com/platforms/the-rich-to-get-richer-in-digital-ad-sales/(Last visit December 2014)

[45] See http://investor.google.com/financial/2012/tables.html(Last visit December 2014)

[46] See http://www.zenithoptimedia.com/zenith/zenithoptimedia-releases-september-2012-advertising-expenditure-forecasts/ (Last visit January 2015)

internet will keep its rapid rise, while other major industries will remain constant.(Figure 3.8)

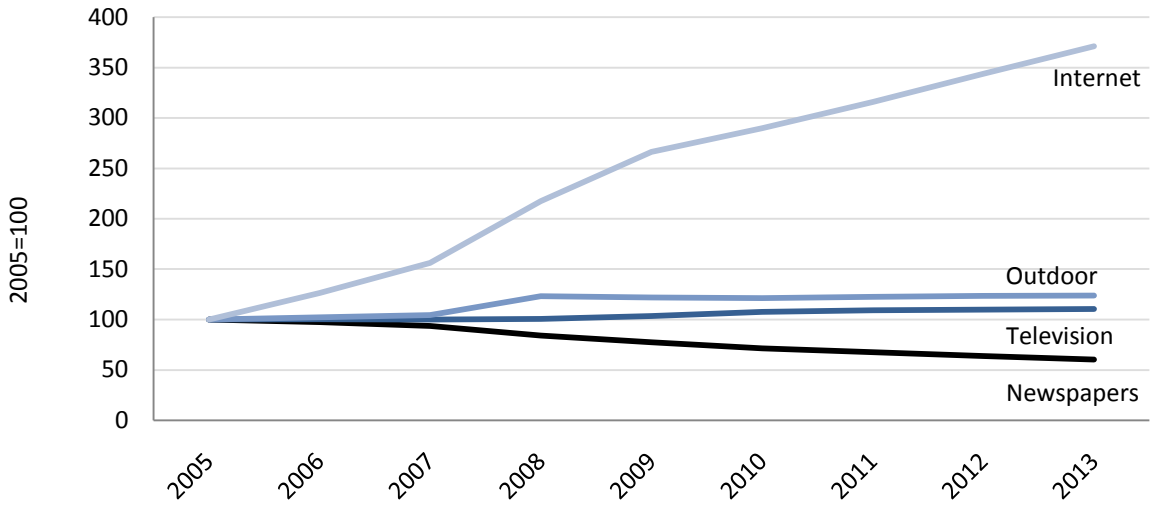


Figure 3.8. Advertising expenditures by advertising medium
Source: OECD, 2011: 28

Online advertising revenues are correspondingly increasing. According to OECD: "although television accounted for 46% of new advertising dollars globally between 2010 and 2013, the Internet is growing much faster than any other medium, at an average of 14.6% a year between 2010 and 2013" (OECD, 2012 IAB data approves this; the industry has recorded a 14.9% increase in revenues from 4th quarter of 2011 to 4th quarter of 2012, and an astonishing 11.6% from 3rd quarter to 4th.

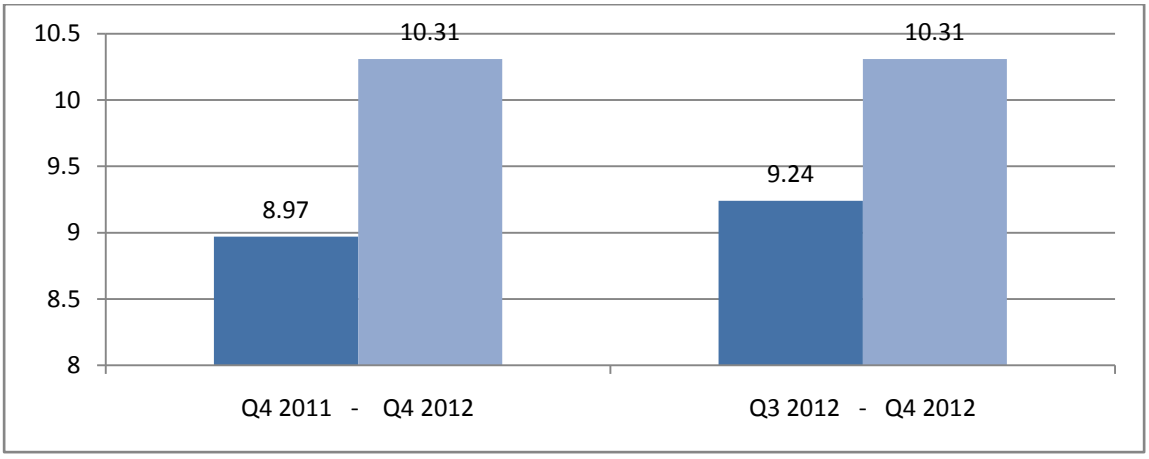


Figure 3.9. Online global advertising yearly revenues (billions of $)
Source: IAB, 2012 Report

Over the years, the trend has also been steadily upwards. As seen in Figure 3.10, the revenues of the industry has multiplied almost five times in only 9 years, from 2003 to 2012, with a compound annual growth rate of 19.7%. (Figure 3.10) Mobile ad revenues are also worth noting: According to IAB(Global Mobile Revenue Webinar), the mobile ad market has increased by 82.8% in a single year, from 2011 to 2012, from 3,76 billion to 6,88billion USD. (IAB, 2014)

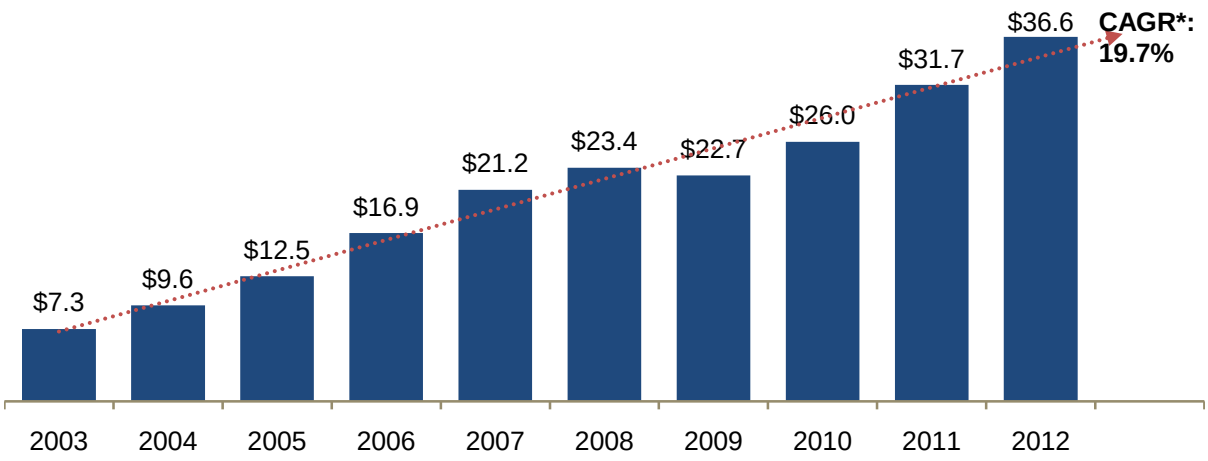


Figure 3.10. Global mobile advertising market volume growth (billions of $)
Source: IAB Mobile Webinar 2013

While it is possible to bring forward a lot more evidence, these already are sufficient to take our discussion a step forward: It is certain that the online ad industry is huge, and is massively growing, who is the beneficiaries of the industry, and how can we correlate it to understanding the internet market globally& in Turkey?

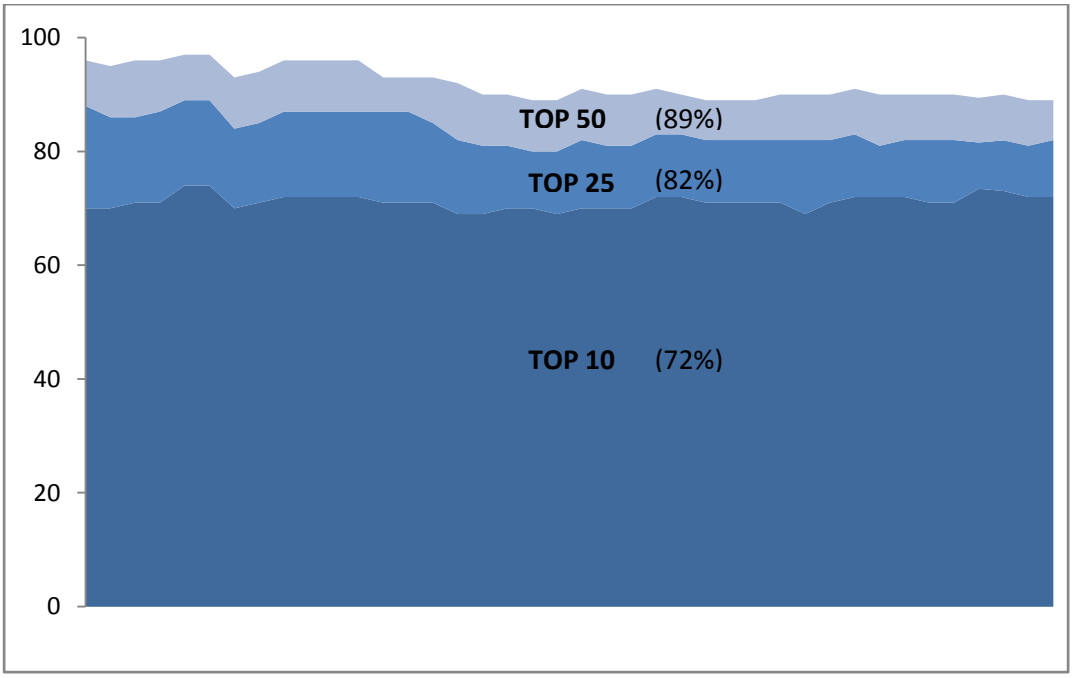


Figure 3.11. Online advertising revenues market shares top 10, 20 and 50 companies.

Source: IAB 2013 Global Advertising Report

According to IAB's report, top 10 companies receive 72% of all online advertising revenues globally, while companies ranked 11th-25th share 10% and 26th-50th share 7%, with a remarkable downwards slope(decreased 1% from 8% to 7% in consecutive years). All the other tens of thousands share 11% of the online advertising revenues. It is not surprising to find out that these top 10 firms have already been mentioned several times in this study. According to eMarketer, Google have taken 31.46% of all digital ad revenues in 2012, with an outstanding amount of 32.73 bn$, where Facebook comes second with 5.04% and 4.28 bn$; Yahoo third with 3.37% and 3.51 bn$ and Microsoft

fourth, with 1.63% and 1.70 bn$ [47]. The report estimates that these firms, remarkably Google, will increase their share of the market and revenues a lot more in 2013. Additionally, in the mobile advertising section, Google has taken 52.36% of the revenue, where Facebook remains second, with a percentage of 5.35% in 2012.[48]

As we have argued, the audience, user, are being commodified , and the ambitious conquerors of the digital world keeps expanding their profits. As we can argue, capital brings power, and power, brings more capital and power, Google example clearly shows that, search engines can bolster advertising revenues, and advertising revenues are the major contributor of what we call the mainstream internet today. The user is increasingly becoming more exposed to advertising, the number of advertisements we encounter everyday is noticeably higher. Combined with other sources of the internet, the advertisement becomes more personal – as Evans has pinned:

> Consider a business that sells saltwater fishing rods to people who enjoy fly fishing. The traditional approach to matching this buyer and seller involved the creation of a magazine, such as FlyFisherman, with content that attracts the relevant people. In contrast, the online approach relies on a variety of techniques to match an advertising message to a consumer. A search engine indexes web results that are relevant to a consumer who types in the phrase "saltwater fishing rod," and with this information, the search engine can sell ads to sellers of saltwater fishing rods. Contextual advertising on web pages could do the same thing. A consumer who visits a blog for fly fishermen could be presented with an advertisement. Developing behavioral targeting techniques …, can also

[47] See http://www.emarketer.com/Article/Google-Takes-Home-Half-of-Worldwide-Mobile-Internet-Ad-Revenues/1009966 (Last visit January 2015)

[48] İbid.

> identify individuals who are interested in fly fishing and determine whether they are looking around the web for information that would suggest they might be in the market for a saltwater rod. (Evans, 2009)

Every person that is known to these web giants get different search results from their search engines and encounter different advertisements while surfing on the web. As Evans again points out:

> Online media can often learn valuable details about the individual that has signed on to the site. Each user has an IP (Internet protocol) address which typically identifies the location of the individual down to at least the zip code level in the United States. People who browse from home and from smaller companies typically have a unique IP address that remains the same over time. Using this address it is possible for online media and advertising networks to track other sites that users with that IP address have visited and to match up other details about the individual or household. (Evans, 2009)

Since 2008, in the last five years, with both technical and ownership changes the scope of control of these companies over the populace has increased; both through synchronizing their databases periodically and merging different user identities(i.e. YouTube's merger of accounts with Gmail and other Google products under "Google Account). However, the privacy concerns, which is very often heard in public debates, are not the only issue. The techniques of advertising or the types of advertising has overwhelmingly increased. Every year, new techniques are added to older ones, which eventually invades cyberspace and also probably because consumers learn to avoid them. The oldest ads of the internet are display banners. These are usually located on the sides, top or bottom of the page, and rarely placed in between different paragraphs of the body text. Text advertisements, with many kinds, from clicked-ones to those popping up when the mouse cursor passes over, rich

media ads, which users usually unpleasantly meet up on news portals websites(which covers up a large portion of the screen), classified ads which are similar to traditional media(usually priced per line) and lead generation ads often used in social media are just some other techniques used today. Though, some types of ads are more "trendy": Search ads, which are usually displayed in search engines' result pages, digital video ads, which increases not only by numbers, but also in length of duration, with gradually disappearing "skip ad" buttons, and mobile ads. Figure 3.12 shows a general drift of advertising types in the industry. Google's interest and success in advertising can be easily deciphered in this context, where search ads gain influence as well as digital video.

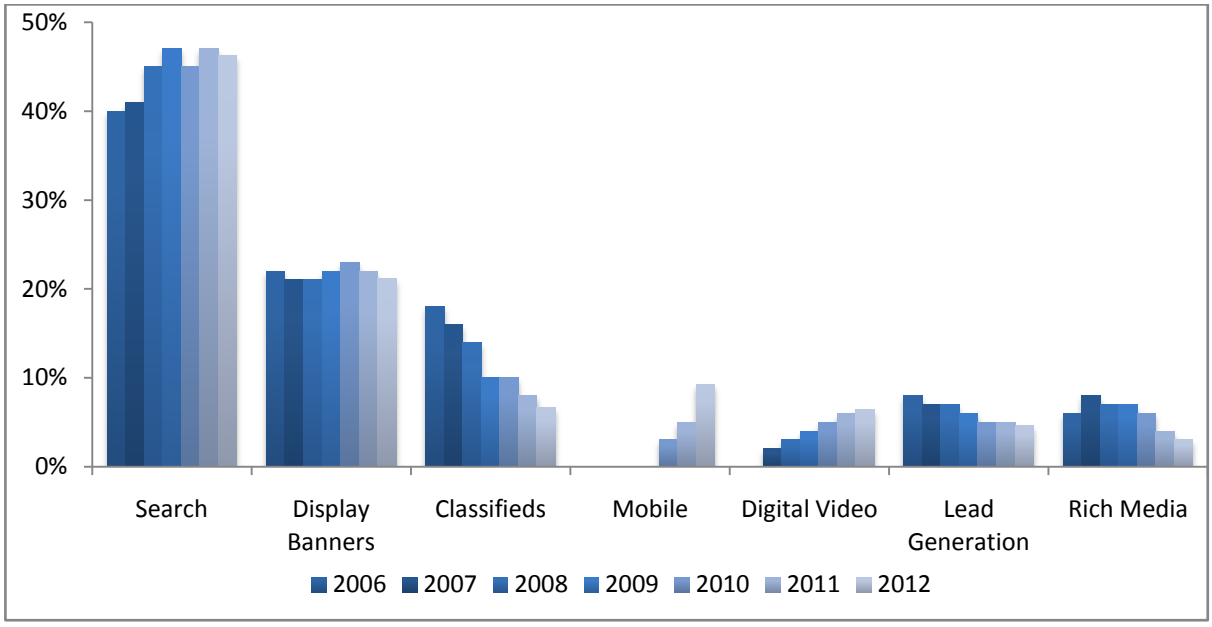


Figure 3.12: Market share of advertisement by advertisement type in years 2006-2012

Source: IAB 2012

We have earlier discussed that the internet, as in other social spatialities, carries out all the conflicts of the capitalist society, and all participants of these antagonisms, as Fuchs states: "There is a commodified Internet economy and a non-commodified Internet economy" (Fuchs, 2001: 80), however, we have to admit that in today's internet structure, being blocked or filtered by Google's search engines and sheer amount of websites, is not going to help a website owner or blogger in any way. Actually, with the speed of concentration of the market, Google's power and ability to silence disgruntled consumers, (or "audience labor[49]" as Smythe coins the term(2006), is disquieting in several ways. During the last years, Google has actually done some banning work. The largest upheaval was caused in 2011, when Google decided to block 11 million websites from its search engines[50] with domain name extensions ".co.cc". The growing anxiety has erupted in public debates and newspaper articles, many naming it "a shutting down" of those websites. Google made a statement later on[51], which failed to reduce the discontent, claiming that "over found more than 50,000 malware domains from a single bulk provider and together with them, 10,950,000 more websites were blocked. Google blocking websites, both true and wrong, have been subject to news reports over the last few years inordinate times.[52] There appears to be groups who accuse Google for banning

[49] It is necessary to note that Smythe's idea excludes the working class' and the class struggle in explaining the mass media from his theory.

[50] See http://rt.com/usa/google-11-million-cocc/ (Last visit January 2015)

[51] See http://googleonlinesecurity.blogspot.com/2011/06/protecting-users-from-malware-hosted-on.html(Last visit January 2015)

[52] See http://www.theverge.com/2013/2/9/3971766/major-websites-hit-with-malware-warning(Last visit January 2015)

their websites for being Christian,[53] or atheist[54], or piracy[55], or many other reasons[56]. Whether these claims are true or not, one thing is certain: with the increasing corporate control on the internet, the concerns over the changing nature of the internet is increasing. As in real life, on the internet today, this structure reminds us of Marcuse's idea of "repressive tolerance." (Marcuse, 1969: 95-137) The dominant corporate body that has been slowly taking over the internet is growing despite all the grumble.

3.6. Center and the periphery

We have argued in this chapter, that both spatially and economically, "digital kingdoms" have reached to great levels of capital accumulation, collecting most big property of the market by the hands of a few companies and reaching the mass with every existent apparatus of the new technological innovations, which as we have argued in the previous chapter, a necessity rather than luxury for the capital. We have also stated that this distribution of market wealth was highly US-centric, with only a few other countries taking any significant portion. And lastly, we have claimed that industry's tendency is towards more concentration and expansion, rather than balancing by diffusion in the upcoming years. Especially after the second half of 1990s, huge

[53] See http://www.pakalertpress.com/2011/07/11/us-order-to-shutdown-millions-of-christian-websites-shocks-world/(Last visit January 2015)

[54] See http://www.youtube.com/watch?v=fH2Cf3p8dMM (Last visit January 2015)

[55] See http://www.independent.co.uk/life-style/gadgets-and-tech/google-microsoft-and-yahoo-target-piracy-sites-by-blocking-ad-revenue-8711632.html (Last visit January 2015)

[56] See http://www.v3.co.uk/v3-uk/news/2180060/google-bans-134-million (Last visit January 2015)

communication monopolies which turned into MNCs has been fastened by the expansion of the computing technologies and the internet. (Şener, 2006b: 813)

Being a good example of periphery countries which are dependently developed, Turkey remains as a very interesting case. In the next chapter, we will try to explain the market development in Turkey and propound market tendencies, distribution and most substantially production, reproduction and consumption processes of the internet industry in Turkey.

CHAPTER 4
DEVELOPMENT AND TENDENCIES OF THE INTERNET IN TURKEY

Continuing our previous discussion to characterize the internet with the theoretical discussion, mapping global tendencies and monopolistic structure of the industries that form the virtual world today, in this chapter, we will aim to understand the development of the internet in Turkey. Starting from a short historical perspective of the expansion of this huge industry, continuing with an approach to correlate the discussion with the previous chapter; this chapter will quest in understanding the market characteristics, the audience of the internet and of the distinctive elements of the internet development in Turkey.

The majority of the studies on the internet in Turkey is expectedly technical and engineering-oriented. In this chapter, our intention is to avoid getting lost in technical details and provide an alternative analysis of the establishment of the internet. Additionally, the history of the internet is not the main concern of this study and only will be consulted to support our perspectives on the development of the market.

4.1. Historical Perspectives on the Market Growth in Turkey

The internet's history as discussed earlier can be traced back to late 1960s and early 1970s, but more accurately to the foundation of TCP/IP protocol in 1983 and NSFs infrastructure expansions in 1986. It is after the implementations of the Gopher engine in 1991 and World Wide Web(www) in 1993, the internet has evolved to be a common median in public life. As Murphy states: For most North Americans the Internet arrived sometime between 1993 and 1995.

(2002: 27) In only a few years, the privatization of the internet which was first established by the public sector, has been rapidly realized. By 1995, the whole backbone infrastructure of the internet has been completed, following the withdrawal of NSFNET and with new players of the industry emerging like IBM and MCI.[57]

In Turkey, unlike most other media, the internet has arrived relatively "faster": Under Özal administration's austerity program and "Master Plan" during the period Between 1982 and 1986, the total capacity of telephone exchanges increased by 83%. The number of telephone subscribers grew by 80%, and the number of villages having telephone service grew by 162%.(Wolcott, 1999: 13) In 1986 alone Türk Telekom introduced an experimental packet switched (X.25) data network, cellular mobile radio telephone system-NMT, radio paging, and fiber optic cable. (Akbalık, 1998) Wolcott addresses three main reasons for the government's eagerness for establishing the internet in Turkey:

> First, the military demanded a strong telecommunications infrastructure. The second largest army of NATO did not have a reliable communication infrastructure. Second, the open economy espoused by Özal and others required a quality telecommunications infrastructure. Third, during the early 1980s, the instability in Lebanon was causing many companies to look for safer havens in the Middle East. The lack of a good telecommunications infrastructure was a barrier to attracting these companies. (Wolcott, 1999: 12)

[57] See http://www.nsf.gov/about/history/nsf0050/internet/anend.htm (Last visit January 2015)

In this respect, the first intentions for the internet in Turkey as in most other countries, were both market-driven and according to nation-state policies. According to Marx and Engels, communication technologies in the capitalist society have two roles: Firstly, they are tools of forces of production. Secondly, at the social relations of production, they present new ways of interacting with the world and formations of new sentiments and interests. (Gürcan, 2005: 29) As Gürcan argues: Mass media is the product of capitalist organization. (Gürcan, 2005: 33) The most significant enlargement of capitalism has been accompanied with great technological advancements in the digital era. As Patelis argues, "The Internet developed within a wider climate of technological and economic change, a phenomenon taking place in the last few decades, to which numerous changes in the economic structure of the world have been attributed."(Patelis, 2000: 64). It is in the manner not surprising that rapid expansion and enthusiasm of the ICT sector in Turkey historically corresponds to the period of aggressive neo-liberal development policies following 1980 military coup.

The first attempt to construct a Wide Area Network(WAN) was accomplished in Ege University in 1987, named as TUVEKA (Turkish Universities and Research Institutions Network)[58]. A later effort was in 1992, when a connection has been established to the Netherlands, using a X.25 protocol suite, which is a simpler and less user-friendly counterpart of TCP/IP. However, it is widely accepted that by utilizing a TCP/IP connection, Turkey has first reached the internet in 5 April 1993, which was realized with a project by DPT(State Planning Organization) and mutual practice by METU(Middle East Technical University) and TUBITAK(The Scientific and Technological Research Council of Turkey).

[58] See http://www.internetarsivi.metu.edu.tr/tarihce.php (Last visit January 2015)

By 12th April of 1993, this first connection was done through a leased line from PTT to NSFNET in the US.

Following this, some other universities in Turkey has also established connections to the internet: in 1994, Ege University, in 1995, Bilkent and Boğaziçi University and in 1996 ITU(Istanbul Technical University) established their first connections to the internet. In the same year, 1996, TURNET has been built. In 1997, with ULAKNET[59], which encapsulated academic institutions, police and military organizations, the National Library[60] which in total , 176 institutions gained a very large inner network, which was established by TUBITAK. In this schema, ULAKNET was the local wide network for the state institutions, TURNET was mostly for commercial usage and rental towards Internet Service Providers, and there were other direct connections established by some universities.

In the year of 1995, Türk Telekom has called up the a tender for construction of the backbone of the internet infrastructure, and the winner was announced on 16th of November. There were four bidders: 1. MCI and Nurol 2. IBM 3. ITD Laserex 4. Satko, METU and GlobalOne(a consortium of Sprint, Deutsche Telekom and France Telecom). The winner of the auction was the consortium of GlobalOne, Satko and METU.

> In the spring of 1996, the consortium began to unravel. The consortium had been created with the understanding that the three partners would

[59] See http://www.ulakbim.gov.tr/hakkimizda/tarihce/ulaknet/dunbugun.uhtml (Last visit January 2015)

[60] Milli Kütüphane

> split the revenue evenly. Once the award had been granted, however, GlobalOne and Satko sought to change the terms of the agreement. During the spring of 1996, METU left the consortium. GlobalOne and Satko carried out the project alone. TURNET began offering service in October, 1996. (Wolcott, 1999: 24)

The physical construction of the internet has started as a very simplistic one. Only three major routers was placed: in Istanbul, Ankara and Izmir, with a triangle-connection, where in Ankara and İstanbul, external connections were established to 3 locations which connected for both of the nodes.

TURNET's presence remarked a very distinctive period in Turkey. In the period between 1996 and early 2000s, great numbers of internet service providers has swarmed the industry. Only one year after TURNET going on-line the number of ISPs leasing connections to TURNET went from 19 to 69 (Güngör and Evren, 2002). By the year 1999, the number was already 80. (Wolcott, 1999: 24-25) Some of memorable ISPs of the time were: ixir, e-kolay, turk.net, tr.net, Superonline, İşNet, Vestelnet etc. Commercials on the TV was in huge numbers; the first excitement was so great that these firms paid fortunes to celebrities and famous artists, which skyrocketed the competition for public attention. Dial-up connections through TURNET's standardized services 145(fixed price with membership) and 146 (for non-member users, an extremely expensive service) was in general left behind by the much cheaper private entrepreneurs, which in some cases distributed a few days of internet access coupons, sometimes even more. Occasionally, these gifts were collected by the consumers through shopping in a market, or buying oil from certain oil companies. With usually much less usage of the internet and very unpleasant

phone bills, the dial-up era in Turkey made it through first few years of the new millennia. This situation led to a significant internet café phenomenon: 42,2% of internet users preferred internet cafes (Gürcan, 2005).

4.2. State pioneerism in the establishment of the internet infrastructure

In the years of 1996 and forwards, the sheer numbers of ISPs and the increasing popularity of the internet created the necessity for improvisations in the backbone. As Wolcott points: "While the overall capacity of the backbone doubled from 1996 to 1999, the aggregate capacity of ISP connections increased by 300% from 1997 to 1999 alone". (Wolcott, 1999: 25) During these years, many improvements on the existing infrastructure has been projected, but they were merely enhancements of the inadequate and geographically very limited backbone. TURNET, the only existing backbone network at the time(except for ULAKBIM which was used for academic and governmental purposes) had a very simplistic structure.(Figure 3.1.) By 1997 the technical and operational shortcomings of TURNET had become severe enough that a significant change, or upgrade had to be made to the network.(Wolcott, 1999: 27) In this year, the new governments intensive efforts to construct a new backbone which was called "TTNet" was followed by searches for direct funding. Alcatel has won the tender for the equipment and establishment with this deal which was worth 35 million$. (Wolcott, 1999: 28)

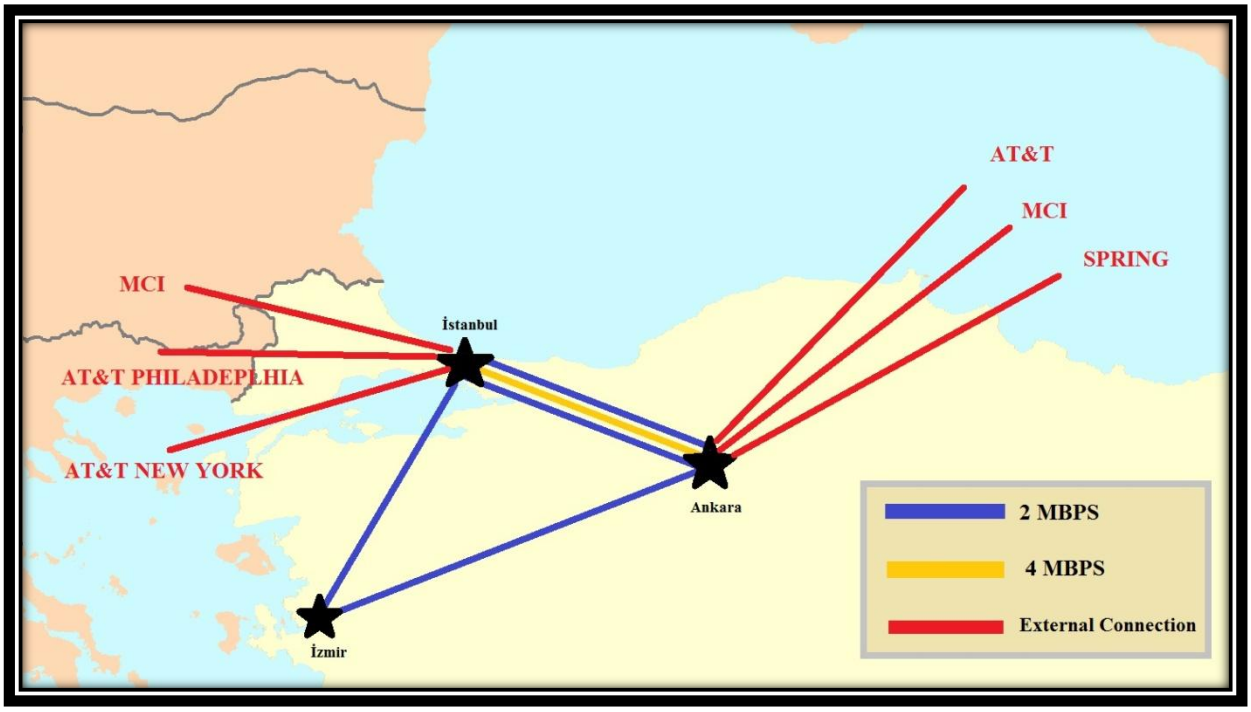


Figure 4.1. TURNET internet backbone in 1999

Source: TURNET, <http://www.turnet.net.tr:/cgi-bin/port/mporttra.cgi>

In 1999, large alterations in the TURNET infrastructure concluded in a change to TTNet, which was still a state agency. Turk Telekom has also abolished TURNET in 1999. The change from TURNET to TTNet brought a gigantic change in both in the geographical availability of the internet in different regions and also in overall speed and quality of the internet services. TTNet's new topology consisted of 140 POPs in the first architecture of the new infrastructure. (Wolcott and Çağıltay, 2001: 139) In most developing countries, telecommunications infrastructure and services have been owned and operated by the government, typically through a postal, telephone, and telegraph administration (PTT). (Wolcott and Çağıltay, 2001: 139) Backbone infrastructure is usually called for being a natural monopoly by many scholars.

In Turkey, in the years between 1996 to 2005, backbone was constructed and administered by the state. However, ISP sector had a different structure. Through leased lines, many local entrepreneurs entered into the internet industry, and in the dial-up period private sector was dominant. In 2002, according to BTK report, 6.1% of all internet traffic was taken by TTNet's 145, 3.1% by TTNet's 146, where 90.8% of all traffic was from private ISPs. (Table 4.1)

Table 4.1. ISPs total data traffic, subscription numbers and connected users in 2002 Turkey

	TTNET 145	TTNET 146	OTHER ISPs
Data traffic(%)	6.1	3.1	90.8
Subscribers(x1000)	91.1	~20	796.5 +- %25
Connected Users(x1000)	39.3	~20	585.8

Source: TK internet report, 2002

After 2002, dial-up connection gradually left its place to broadband connections. ADSL has a big part in this new equation. When looked at the other broadband option, Cable Net, it was not possible to observe any progress in its popularity. (BTK, 2006: 34) Both ADSL subscription numbers and internet penetration rates has an enormous boom in the years 2004 and 2005.(Table 4.2)

Table 4.2. DSL subscription by year in Turkey 2002-2006

Years	Subscription Numbers
2002	2999
2003	56624
2004	452398
2005	1539477
2006	2723547

Source: BTK 2006 Annual Report

With the popularity of ADSL increasing, the dial-up ISPs lost control and their shares in the market to Turk Telekom. With the DSL glut, private ISPs have suddenly deteriorated from the market. (Figure 4.2) Dial-up has very suddenly vanished from the market.

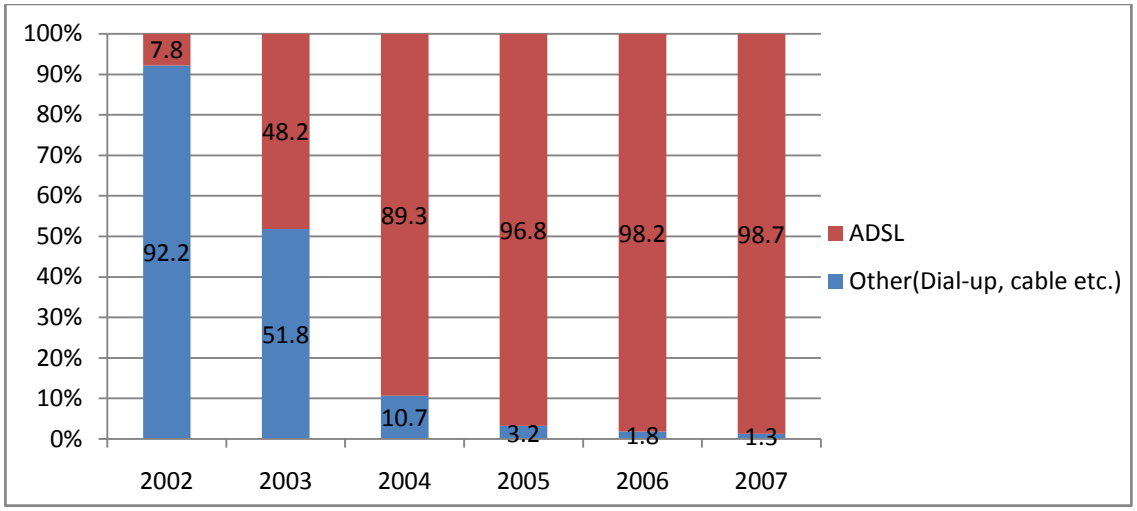


Figure 4.2 Percentage of connection types by year

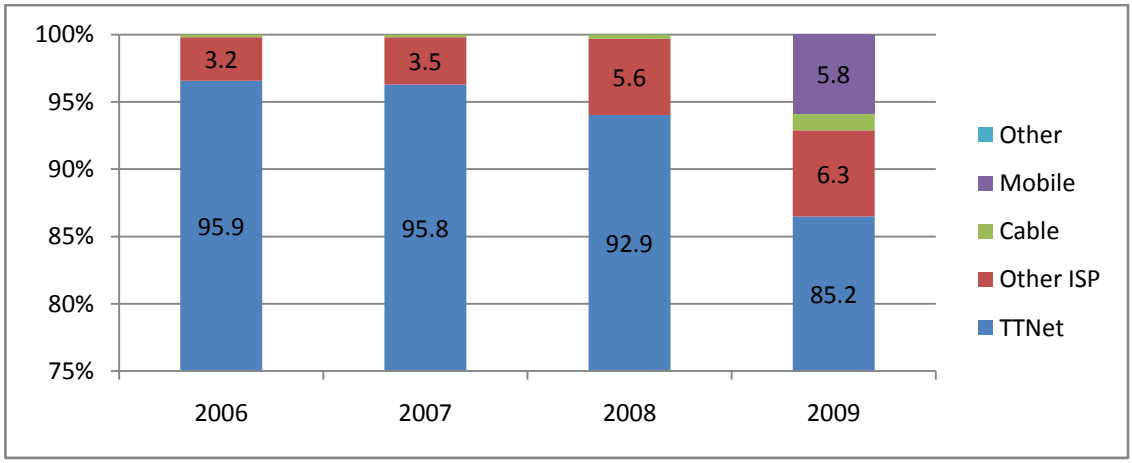
Source: TTAS Privatization Report v7

With the appearance of ADSL, a practical monopoly of TTNet on the ISP market has also been realized, in addition to backbone infrastructure monopoly. There may be counted several reasons for this:

1. Huge amounts of state investments in the broadband infrastructure
2. The prices for services decreased to more reasonable levels
3. The constraints for other ISPs to be organized in the broadband sector
4. Inadequacy of investments by other ISPs in the DSL market
5. DSL required a stationary phone line and subscription

This practical monopoly has continued in the following years as well. Most up-to-date market information will be discussed in the next chapter. However, it would be still worthy stating that today, the dominance of the ISP market has not significantly changed. Still after the arrival of new connection types like Fiber, improved satellite technologies and ISDN technologies, and most importantly, mobile connections showing up after 2009, the new privatized Turk Telekom company, TTnet, dominates the ISP market. In the years 2006-2009 market shares of broadband ISPs are shown in Figure 4.3. One important dimension of the sudden increase in mobile internet usage is caused by the new 3G technology that entered the market in the same year. Mobile phone operators such as Turkcell, Avea and Vodafone started to distribute and sell services of portable small-sized 3G modems. TTNet not long ago also joined this new competition.

Figure 4.3. ISP market shares by percent



Source: Deloitte., TC Başbakanlık Bilgi ve İletişim Teknolojileri Sektörü Raporu 2010

In April 2003, the Turkish parliament has come to an end with the long-sought demands of privatization of Turk Telekom. Big capital's demands for the institution were well known. According to Akgül, the privatization efforts of PTT was continuing for 20 years. Geray mentions that Privatization of Turk Telekom; famous International Institutions of US such as World Bank and IMF has pressured the government for privatization arguing that this would lower budget deficit and foreign debt stock (Geray 2002: 144) According to these, 51% of Turk Telekom was to be privatized. Later in the same year, a set of new regulations to make grounds for this operation have been passed from the parliament. Among these are:

- Removal for the foreign threshold
- Making 100% of all shares of the company to be available for purchase
- Upon public sector's shares to fall under 50% , all non-contracted personnel to be transferred to other public agencies in 30 days

- Removal of various taxations from Turk Telekom's obligations. (Cantekinler et.al., 2008: 3)

4.3 Rapid Expansion of the Turkish market and its beneficiaries

The distribution of some licenses of telecommunications industry to private sector in June 2004 has been presented by the media as a transition to free competitive market.[61] This was followed by the privatization of Turk Telekom:
On 15th October 2004, it has been decided to sell 55% of Turk Telekom's shares and for this, a tender to be made until the end of the year. Bids have been taken and the decision has been announced by 1st July 2005. 4 formal bids have been done until the deadline: OGER Telecom was victorious with an offer of 6.55 billion$. The other bidders were: American Carlyle group, Turkish Koç Holding group, who withdraw their bids after the first round. The second highest- bidder was a consortium of Çalık group and Etisalat Emirates Telecommunications corp. with an offer of 6.5 billion$. (Cantekinler et.al., 2008: 4) This operation has been remarked as the highest privatization fee ever received, although it was also the most controversial tender in the public debates in many decades. With a comparative approach, it is possible to highlight some important arguments:

Turk Telekom's privatization process was in same period as its huge enlargement in the internet industry. The enormous increase in TTNet's market shares in the ISP market was accompanied by Turk Telekom's large investments in the backbone infrastructure. Additionally, in the last few years before the privatization of Turk Telekom, the public sector investments have

[61] Geray,H. Telekomünikasyonda Yeni Dönem, Birgün daily news, 15th July 2005

significantly increased. According to a report by a group of Turk Telekom employees (*Telekomcular*) when privatized, Turk Telekom had a central capacity of 21.5 million users, 80.000 phone cabs, 19.5 million phone, 50.000 dial-up and 750.000 ADSL subscribers[62] Besides Turk Telekom's established monopoly in the ISP market and backbone structure, the company also had a 40% share in one of the largest GSM operators in Turkey, Avea. Moreover, many public valuables including Turk Telekom's Health Funding which was accumulated by wage cuts from Telekom workers as well as its facilities were included without any extra paying to the winner.[63] After the privatization, in 2006, TTNet has been separated from Turk Telekom and was relocated as an ISP company. As we have seen earlier, both Turk Telekom and TTNet continued to be monopolies in their own tiers. Most recently, this is still the case; as we will discuss in detail. comReg's report in 3rd quarter of 2010 has brought forward this interesting structure.

Privatization of Turk Telekom was highly questioned due to its monopolistic shares of the market, as well as significant public expenditures in this area in the final few years before the tender. According to Ministry of Labor's report, total expenditures of Turk Telekom were in 2001 1.3 billion$, in 2002 1,79 billion$, in 2003 2,18 billion$ and in 2004; 2,69 billion$. After the privatization, this increase continued, 3,27 billion in 2005 and estimated to be 5.5 billion in 2010.

[62] See http://www.acikistihbarat.com/dosyalar/telekom-ozellestirmesi-talan-acik%20istihbarat.pdf (Last visit Decembe 2014)

[63] ibid, p.21

A few years later, some pundits suggested that privatization of Turk Telekom has caused in net loss instead of profits to the public sector.[64] Also, another argument for this privatization, liberalization and competitiveness (Güngör and Evren, 2002: 70-71) have not gotten any better if not worse. Primary ISP company in Turkey holds a market share of 85, while alternatives hold an amount of 15%. On an EU average, primary ISP makes up for 44% where alternatives have 56%. In most developed countries this figure remains even lower.[65] Concerns over market monopoly have been ever existent in EU's annual progress reports.

Secondly, Turk Telekom's subscription numbers as well as revenues have recorded an outstanding increase before the tender. As we have seen earlier, DSL subscription numbers have very rapidly increased before and after 2005. The enormous increase in the first two years have continued whatsoever, significantly after the entrance of mobile broadband connections after 2008.

Thirdly, Turk Telekom's privatization has caused a huge disappointment for many critics. One major reason for this was that the company was doing well financially. As Karsu claims, Turk Telekom has recorded an average annual profit of 1.5 billion liras for the last 5 years before being sold.[66] The Association of Telekom workers also has pointed out that the gross profit of the company

[64] ibid, pp. 44-46.

[65] BTK 2011 First Quarter Report

[66] See http://www.emo.org.tr/ekler/a96efc03b9a050d_ek.pdf?dergi=3 (Last visit January 2015)

in the last 2 years before privatization was 5,23 billion$. Correspondingly, Oger Telekom has earned 50% of the amount paid at the tender back by 2009.[67]

Added up to our previous claim that the market monopoly has not been broken after the privatization, and the market enormously grew in the same period, the privatization was perceived as an abysmal decision by many researchers.
Another thing to note is, as earlier seen, in the US internet has taken attention and started to being used by the general public only in a span of few years. In Turkey, however, only almost after a decade from first connection to the internet, internet penetration rates have reached reasonable levels. According to Kızılca and Urhan 62% of the whole population in Turkey have not used internet before 2009. This is more than twice the EU average and ten times higher than Norway and Iceland. Similarly, internet access rates in households were much lower until the usage of 3G connections.[68] Even today, broadband connection rates in Turkey remains much lower than OECD average. While OECD average can be seen at a level of 26% fixed and 56,6% mobile broadband connections, it is 10,6% and 16,3% respectively in Turkey.

In this regard, Turkey's fast reaction to establish an internet connection has turned into a process of lagging behind; the expansion of the internet in Turkey has been very late, reducing the chances of local investors to compete in the international arena.

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[67] See http://www.acikistihbarat.com/dosyalar/telekom-ozellestirmesi-talan-acik%20istihbarat.pdf(Last visit January 2015)

[68] See http://www.tepav.org.tr/upload/files/1297779538-1.How_does_Internet_Usage_Change_in_Turkey.pdf (Last visit January 2015)

Lastly, with the privatization of Turk Telekom to a foreign corporation, the only related markets that local capital was well established and dominant has been given away to foreign capital. In this perspective, it would be beneficial to visit the third world perspectives and dependency theories in the communications and in general the culture industry. In the second chapter, we have mentioned the unequal distribution of the new media ownership and shares of revenues. Başaran evaluates the development of internet and mobile devices in Turkey and addresses that the overall process has been a process of technological import, instead of self development and research. This is unsurprisingly a similar process with other underdeveloped countries. (2010: 197-8) In this regard, Turkey's internet industry needs a deeper evaluation.

4.4. Digital Imperialism and Dependency

A study on the political economy of communications inevitably intersects with the term "digital divide". We have discussed this in Chapter 2, however we need to turn back to it in order to discuss what is called digital dependency or more specifically, digital imperialism. As in many other areas, there appears inequalities in the access and usage of the internet. Digital Divide constitutes a huge problem when the dynamics of the ICTs are considered. (Öztürk, 2005: 112) Digital Divide appears as not only a virtual problem, but also one that may increase and deepen the problems of the actual world. It increases and enhances both the capital and informational accumulation processes towards the privileged and the advantageous.

Many different types of digital divide can be mentioned in this perspective: International or global, socio-economical, regional, ethnical and gender-oriented inequalities can be counted at the first glance. As seen in Chapter 2,

the ICTs was approached as *sine qua non* equalizing and emancipating processes by the dominant discourse. A similar optimistic approach was that the new communication technologies was supposedly going to increase interdependency and global accordance between the developed and non-developed countries. (Yücesan-Özdemir, 2010: 21) However, the internet sooner than expected turned into a tool to sharpen the dichotomy of the developed and non-developed countries. As earlier discussed, internet today has recreated a new form of center and periphery dichotomy. Başaran states that this new imperialist dependency is maintained by the reproduction of socio-economic and political structures towards the interest of the dominant center. (Başaran, 2000: 45) Amin was one of the earlier thinkers to outline the relationship between imperialism and the new technological advancements. According to Amin, technological innovation is tool for a monopolistic capital. In this context, technology transfer is realized in many levels: In the global schema, this appears as a two-way transfer: firstly, the labor and money stock is soaked from periphery to center. Secondly, technology and information flows vice-versa. Similarly, Geray states that this corresponds to a "desktop imperialism". According to this, the new communication technologies is a new sphere for a new capitalist organization which entails a substantial amount of dependency, inequality and exploitation comparably to the earlier imperialist discourses. (Geray, 2005b: 186-187) This factually corresponds to a portrait with the US in the center. Consequently, the "Third World" discourse has emerged as a critique of the US originated paradigm of development. (Özdemir, 2000: 206) According to the third world and dependency discourses, the term of imperialism constitutes the key part of their theoretical bases. (Başaran, 2000: 44) Political economy of the new communications focus on the distribution problems in this new era. Accordingly, when analyzing these,

political economy of globalization defines the problems at a level of capitalist system. Pertinently, global communications can not only be seen as internal inequalities and injustice, but also as a cause of underdevelopment. (Özdemir, 2009: 33)

In this perspective, the relations of unequal distribution can be traced at many different levels. In Chapter 2, we have classified it on four different categories:

- Inequality in the ownership of the internet
- Inequality in the means to access the internet and new media
- Inequality in the usage and knowledge of the internet and new media
- Inequality in the production of knowledge and data of the internet and new media

This definition corresponds with our earlier discussion of digital divide. However, digital divide is also characterized as an international inequality. In other words, digital divide is compatible and generally remembered together with the dependency studies. It is not at all surprising that both issues address the inequalities in the new communications.

This short outline of our new discussion was indispensable with our main topic: The internet industry in Turkey can be therefore relocated as one of the good examples in this picture as we will discuss in details. At the very least, Turkey appears as a periphery country with good potential. In the following section, we will strive to explain some of these points.

As we have seen in Chapter 3 of this study, the ownership of the internet is highly centralized and increasingly monopolistic. This is a valid statement at

both national and international levels. It is unlikely to say that Turkish capital can render a significant amount of services abroad. As we have discussed, the global internet market is heavily dominated by the companies from the US, Japan and few European countries. However, more interestingly the profitable parts of the local internet market is also fetched by the foreign capital. Therefore, it is possible to claim that the internet in Turkey is "outsourced". In this regard, Turkey appears as subject to an electronic imperialism (McPhail, 1981: 11-12) and "technology transfer" (Amin, 1977: 169-175).

The internet industry is not only "outsourced" in terms of ownership, however. The production of the content is similarly vital. To understand how the data flows on the internet, one important dimension appears to be the internet traffic. Özdemir states that the information flow can be divided into two categories: Production and distribution. The direction of this flow is defined by the unequal shares of the new technologies. In this sense, underdeveloped countries are forced to export raw data to the center and import finished data from the center. According to this, on a global scale, as it has been implied in our previous chapter, the internet data flow in the year of 1995 is vastly US-oriented. The number of computer networks was 8569 in North America, 3210 in Europe, 977 in Australia and the Pacific, 146 in South America, 89 in the Middle East and only 68 in Africa. Similarly, Data exported from Africa was 2073.53 megabytes, where data imported to Africa was 9032.88 megabytes. Similarly, in all other continents, data exported seems comparably very low to data imported, except from the only exception of North America, where data exported was more than data imported. (Özdemir, 2000: 214; Özkaya, 1995) However, today, the data monitoring has become much more of a problem. Walmart's transaction databases exceeded 2.5 petabytes(10^{15} bytes) and

Facebook included more than 40 billion photos" in 2012. (Lehr, 2012) The amount of data is untraceable by its enormous volume and most reports cannot provide very precise results.

This corresponds with the expansion in the ICT industries and revenues of the developed central countries and decline of the non-developed. (Özdemir, 2000: 213)

3.5 Class Formation and the National Digital Divide in Turkey

However, as we have noted earlier, a similar inequality can be traced at the national level. According to this, first of all, class divisions are reproduced in an unequal way in the form of digital divide. The set of data provided by TÜİK's report, in 2013, access ratios to internet by job type is significant. According to this, employers of both genders have a rate of 78.6% access to the internet, where when it comes to employees this ratio declines to 65.5%, those who run their own businesses(small-scale insecure vendors) have a rate of 33.8% and unemployed labor have a rate of 49.7%. [69] In terms of education level, graduates of a university-equivalent institution have an access rate of 91.7%, while those with a diploma from a higher school have 76.5% where as the number goes down to a level of 22.5% for those graduated from preliminary schools and only 6.1% for those didn't enroll in education.[70] This signifies a dramatic inequality in the sense that internet access and usage bears an intrinsic relationship with social class in Turkey. Supporting our discussion, another data appears important: According to TÜİK's report, usage rates of internet in Turkey is 48.9%, in the urban areas appears as 58% where as in

[69] TÜİK January-March Quarterly Report, use rates by household.

[70] ibid.

rural areas is drops down to 28.6%.[71] Consequently, the internet in Turkey is characterized not only by an inequality in terms of production and ownership but also an inequality in terms of the capability to reach and consume the information commodities.

A second crucial note is the inequality of access and participation in different geographical regions. In Turkey, this inequality is largely intense. According to TÜİK 2013 report, Turkey has an average of 49.1% access to the internet. This rises up to an average of 63.3% in İstanbul and falls down to an average of 27.5% in South- Eastern region.[72]

The vast inequality of access to the internet is not the only case. As we have discussed earlier, backbone and storage of the internet in Turkey is largely based in a few large cities in the Western part of Turkey. For instance, the developing fiber network is comparably very concentrated in İstanbul and Ankara, according to BTK's report. (Karaçuha et al., 2010: 147) Hence, this problem appears as a question of development and underdevelopment which is almost identical to its global counterpart. In addition to this, some other reasons can be put forward: The economical development inequalities are accompanied by ethnic and socio-cultural problems. For instance, the sheer low number of subscribers in the south-eastern part of Turkey requires more than

[71] ibid, ratio by last use, TÜİK 2013 First Quarter

[72] Households' access to the internet by statistical region rankings, compiled from TÜİK 2013 data.

a simplistic and reductionist answer. The hegemonic content of the internet is worth mentioning.

Table 4.3. Access to the Internet by region (percent)

Region	Access	No access	Doesn't know
Turkey	49.1	50.2	0.7
Urban	57.4	42.0	0.6
Rural	29.1	69.8	1.1
Western Anatolia	52.4	45.6	1.9
Central Anatolia	46.8	52.4	0.8
Western Black Sea	39.9	59.1	0.9
Eastern Black Sea	34.8	65.0	0.2
İstanbul	63.3	36.4	0.3
Western Marmara	58.8	40.9	0.3
Aegean	46.7	52.4	0.9
Mediterranean	44.4	54.8	0.8
Central East Anatolia	37.7	61.8	0.5
South East Anatolia	27.5	71.4	1.1

Source: Compiled from data in TÜİK.

As we have stated earlier, the internet in Turkey has always been state-oriented. After the privatization process, the market structure of the internet is still highly centralized. This leads us to three different observations: first of all, state regulations on the internet content has been in conjunction with official ideological discourse. This means that most ethnic minority groups, mostly Kurds come across restrictions and bans because of the disruptive content of websites. Secondly, the lack of these groups in the ownership mechanisms at the same time means a lack in the content these minorities happen to produce.

In contemporary political studies, internet has been the center for democratic participation as a new public sphere.(Bayraktutan Sütçü, 2007: 72) In this regard, ethnic minorities in Turkey hardly had much participation in the central internet media. Thirdly, ethnic minorities face a language barrier in this participation. The vast majority of internet websites in Turkey are still mono-lingual, where those few that has multi-language support are usually not appealing to those minorities. As a result of these, Kurdish citizens have started to spend efforts to build a local network.[73]

Thirdly, gender inequality is another topic of our digital divide discussion. While the usage and access inequalities constitute a structural division, the internet functions as a factor that reproduces "real" gender inequalities. In this perspective, today, the internet content is gradually overlapping with the traditional media. Attewell explains digital divide in two articles: the first divide is "access" and the second digital divide is "usage" (Attewell, 2001: 253- 255) in the sense that the former is a pre-requisite for the latter. This at the same time means that usage rates of the internet might include many other reasons than merely access. Additionally, we want to expand the discussion by also adding the reflective and reproductive role of the internet in the discussion of gender inequalities.

In the first instance, we can clearly say that women have much less access and usage in Turkey compared to men. Looking at table 4.4, we can conclude many critical insights. First of all, obviously, women in Turkey have a much lesser rate of access and usage of computer and the internet. Compared to 41.0% of all men, 61.5% of all women have never used a computer and

[73] http://birgun.net/haber/kurtler-internette--ozerklik-ilan-edecek-7685.html

similarly, while 41.9% of men never used the internet, 63.0% of women have never used the internet. The huge gap in usage of both computers and the internet is striking enough to convince us that this corresponds to a major social inequality.

Table 4.4. Computer and internet usage rates in Turkey, 2012 (percent),

	Computer			Internet		
	Total	**Men**	**Women**	**Total**	**Men**	**Women**
Computer and Internet Users	48.7	59.0	38.5	47.4	58.1	37.0
Last 3 months before the report (Jan-March 2013)	43.5	53.7	33.4	42.7	53.0	32.6
Between last 3 months and 1 year before the report	2.3	2.6	2.0	2.4	2.8	2.0
More than one year	2.9	2.7	3.1	2.3	2.3	2.4
Never used it	51.3	41.0	61.5	52.6	41.9	63.0

Source: TÜİK 2013

A second insight would be that women use the ICTs much less often than men. According to this, 53.7% of men have used computer once or more in the last 3 months, whereas in the same category only 33.4% of women have used a computer. Parallel to this, 53.0% of men and 32.6% of women have used the internet in the last 3 months(January-March 2013). This means that ICTs are much less of an everyday activity for women than men. In this sense, we can claim that women in Turkey are much less bound with the internet and the digital information flow and online participation. Thirdly, women user profile fascinatingly differs from men user profile. As seen in table 4.4, women with

lower education levels have drastically less usage rates compared to men, whereas women with diplomas from a higher education or university have almost the same rates with men. According to this, universities appear as an emancipating factor for women much more than men and also implies that in a socio-economical perspective, general populace enforces women to stay "offline" in a different way than men. It is easy to claim that as education level increases, men and women ratio gradually equalizes. A last point is that about women internet usage and behavior differs from men. Reported by Göker's research (2007: 210-218) women using the internet more to use the internet for more serious purposes and usually to fulfill their real life practices. These include shopping online, communicating with their relatives -both on voice communication programs or social media - and sharing their experiences on online women platforms. It would be a very notable effort to analyze the rise in women websites[74] in Turkey.

[74] Some of these are kadinlarkulubu.com, kadinvekadin.net, yenikadin.com, mahmure.com

Table 4.5. Computer and internet usage rates by gender and education level in Turkey

	Computer usage rate		Internet usage rate	
Education Level	**Men**	**Women**	**Men**	**Women**
Literate without diploma	9.6	1.7	10.0	1.6
Primary School	23.1	14.5	22.0	13.5
Secondary and Vocational secondary school	64.5	51.0	63.8	49.4
High and vocational high school	80.5	72.4	79.7	71.3
Higher education	93.7	92.7	93.1	92.8

Source: Compiled from TÜİK 2013 report

It is very significant to say that these websites are mostly about beauty, fashion, horoscope and cooking recipes. Political issues seldom find any place and they are also filled with populist discourses and hegemonic comments. We have earlier noted that the internet also plays a part to reflect and reproduce gender inequalities and roles. This is not unique to Turkey. Oksman explains how women create their own social roles and spatiality on the internet. (2006) Women are in most cases reduced and emboldened to motherhood and house-working models. The internet enables the opportunities to cross social gender roles, however, this ability can strengthen gender boundaries instead of dissolving them. (Kendall, 1998: 133) It would be beneficial to conclude this part by saying that the internet in Turkey has deep gender inequalities in terms of benefiting goods of the internet.

A last point of our discussion is about the age groups on the internet. Firstly, Turkey has a very young internet user population. Not only that Turkey has a relatively younger population than most Western Countries, but also that youth in Turkey is getting more integrated to the ICTs in their everyday practices. According to many researches, ICT access and usage has more than tripled among 16-24 years old category in the last few years.

Table 4.6. Individuals that use the internet in last 3 months, by age group (%)

Years	16-24	25-34	35-44	45-54	55-64	65-74
2007	50.4	32.3	23.8	14.8	4.8	1.4
2008	54.8	41.4	29.3	19.4	6.9	1.6
2009	59.4	45.1	30.2	18.6	6.2	2
2010	62.9	50.6	34.7	22.4	7.8	2.7
2013	70.6	59.6	47	26.1	11.9	4.4

Source: Compiled from TURKSTAT data 2007-2013.

Statista.com's data goes further than this: According to their report, in 2014, 84% of those between 16 and 24 where 77% of 25 and 34, used the internet on a daily basis.[75]Another important thing is that youth in Turkey have a common tendency to use the internet very intensely for leisure time purposes. Gaming is very popular among children and teenagers and most internet cafes make good examples of this. Yesil claims that the internet cafés as a battlefield for the youth and their families and government. (2003) There is a high potential in the market for competition yet in the last decade, we have seen

[75]See http://www.statista.com/statistics/348230/daily-internet-usage-age-group-turkey/ (Last visit June 2015)

the western entrepreneurs more often acquiring local websites which were successful.

The high potential of Turkey's internet industry is a good attraction for most ICT companies and the general underdeveloped structure of the market has drawn some attention from foreign capital. In the next chapter, we will discuss Turkey's internet industry within the framework of physical and virtual categories we offered in Chapter 2. The development of Turkey's internet infrastructure and its general statistical knowledge should be considered an important asset as we monitor today's market structure in all different fields.

CHAPTER 5

TURKEY'S INTERNET TODAY

This chapter examines the current structure of the internet industry in Turkey. The data and knowledge may vary in terms of as the researches are usually not very regular and is quite spread to collect.

In the first chapter, we have claimed that the internet has two main categories and many segments under these. In this regard, we have based our discussion on 14 different categories. This chapter aims to analyze internet market in Turkey in the same way. The economical aspects of the industry has an indivisible bound with the production of content and preferences of the internet audience. This corresponds well with the theoretical assumptions of our first chapter, after all, "political economists of communication have paid considerable attention to the institutional control over media production and to the extent of the impact on audiences." (Mosco, 1996: 158) It is also indeed plausible to claim that the internet provides a wider array of opportunities to commoditize audience preferences than traditional media. In this perspective, the more "clicks" today mean more advertising value and direct profits.

The success stories of smaller firms and creative men attracts industry praisal every now and then, however, as Mosco puts it, these individual creativity stories only obscure the structural economy in the communications (1996:157-8). In Turkey's internet market this is also crystal clear. While there were some

examples of successful branding in the history of the Turkish internet, those examples have also ended up being acquired by foreign capital. The vast majority of Turkey internet firms today function as an intercessor of giant MNCs or as sole service companies. We have discussed in the earlier chapter that during the establishment and expansion of the ICTs in Turkey, a high degree of dependency has remained as a constant. Today, in all categories we have forged, we can trace a similar pattern. This chapter will examplify these inequalities. In this sense, market shares, revenues, profits and sales, clicks, audience interest and preferences are both correspondingly similar and will be taken into account.

In this framework, the internet has become more commercialized in the sense that it is full of advertising today, more than it was yesterday and certainly less than tomorrow. As in earlier forms of media, the internet functions in two economical dimensions, "both a direct economic role as creators of surplus value through commodity production and exchange and an indirect role, through advertising, in the creation of surplus value within other sectors of commodity production". (Fuchs, 2009: 84), Garnham, 1990: 61) Therefore, we will start by discussing the unique and vital element of the internet in Turkey: online advertising.

5.1. ONLINE ADVERTISING IN TURKEY

Turkey's online advertising market has been developing very rapidly over the last decades. According to IAB's AdEx findings[76], the online advertising

[76]See http://www.iabturkiye.org/sites/default/files/basin_bulteni_-_iab_turkiye_2013_dijital_reklam_yatirimlari_raporu.v2_0.pdf (Last visit 5 March 2015)

expenditures sum up to 1.17 million Turkish liras (TL) in 2013. In 2012, it was 943 million TL. This insights a growth rate of 24% in a year. From 2010 to 2011, this number was 22.4% and from 2011 to 2012, it was 30%. Turkey's online internet market is certainly one of the fastest growing. According to IAB's data presented by Knapp, in terms of market growth in European countries' online advertising, Turkey comes second with an enormous amount exceeding 30% from 2011 to 2012, where Russia is seen as first. [77] In the same study, European average appears as 12%. The astonishing rates of growth in Russia has resulted in major Russian companies to be acquired by Google.

In all advertising categories, internet advertising is by far the fastest growing one. According to Nielsen's 2013 Global Adview Pulse, internet has a growth rate of 26.3%, subsequently newspapers advertising as declined by 4.7%, cinema advertising by 5.8%, and magazines by 2.8%[78]. As Evans discusses, online advertising gradually is taking grounds of traditional advertising: "newspapers, particularly, are losing readers and advertisers to web media supported by online advertising". (2009: 3) When we come back to Turkey, we can see that online advertising constituted 18% of the whole advertising market in 2012, second in place, following TV advertising. (IAB AdEx 2012)

Looking into components of online advertising, in the second chapter, we have mentioned different categories, including search engine advertisements, display advertisements, mobile, digital in-game advertising, mobile, etc. In

[77] IAB Adex Benchmark 2012 Daniel Knapp, IHS Electronics & Media.

[78] Nielsen Global Adview Pulse Light 2013.

2013, among these categories, we can observe that search engine advertising has the most expenditure, according to IAB 2013 report[79], with 587.3 million TL. An astounding amount of this (401.5 million TL) is word-based research, and the rest (185.8 million TL) is search engine visual advertisements. The second segment of the industry in terms of expenditure is display advertisements, with a total of 446.5 million TLs. This includes display or click-based ads (319.2 million TLs), video advertisements (69.5 million TLs), sponsorship (35.5 million TLs) and income-sharing advertisement expenditures (22.2 million TLs). When we look at the statistics a year before[80], the picture is as follows: Search engine advertising was again first on the ladder with 448 million TLs, including word based-research ads expenditures of 320 million TLs and visual search engine advertisements of 128 million TLs. The second on the list is again display advertisement expenditures, summing up to 374 million TLs, consisting of display or click-based ads (278 million TLs), video advertisements (45 million TLs), sponsorship advertisements (32 million TLs) and income-sharing advertisement expenditures(19 million TLs). This market structure as well as the overall volume and growth of the Turkey online advertisement industry is shown in Figure 5.1.

[79]IAB Adex 2013 See http://www.iabturkiye.org/sites/default/files/basin_bulteni_-_iab_turkiye_2013_dijital_reklam_yatirimlari_raporu.v2_0.pdf (Last visit 7 March 2015)

[80]IAB AdEx 2012 See http://infografik.com.tr/wp-content/uploads/2013/03/iab_infografik_2012.jpg (Last visit 7 March 2015)

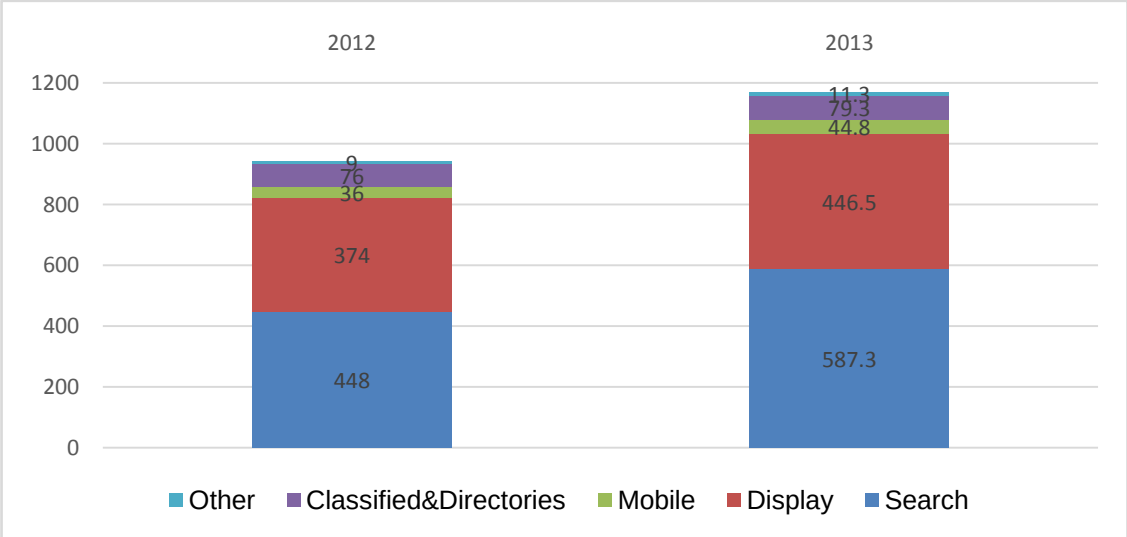


Figure 5.1. Turkey's Online AdMarket Expenditure by Ad Type (in million TLs)
Source: Compiled from IAB AdEx reports 2012-2013

Turkey has a younger population than most if not all developed countries. Not only being a very highly populated country, Turkey also has a large population at the age of pre-adolescent. The potential in the industry is unmatched by advertising companies. We can claim that a local advertising industry has never been effectively established in Turkey. Advertising industry in Turkey is highly foreign-dependent. According to MediaCat's inclusive report based on Nielsen's 2014 statistics[81], the top 6 largest advertising agencies in Turkey are 1. Saatchi&Saatchi 2. Y&R İstanbul 3. TBWA\İstanbul 4. Lowe İstanbul 5. PublicisTürkiye and 6.Alice BBDO. Which all 6 of them are US or EU-based global enterprises. When we look at all top-100 companies, the majority of them are also either representatives of similar MNCs or a global partnership. These advertising firms however, aren't only doing online advertisements. In

[81]See http://www.dijitalajanslar.com/2014-ilk-yarisi-en-buyuk-reklam-ajanslarini-acikladi/ (Last visit 19.08.2015)

fact, as we have seen earlier, TV, outdoor and other advertisements still constitute the greater part of advertising in Turkey.

When we narrow our research into digital advertising companies in Turkey only we can see a handful of companies[82]. Most of these companies are small or middle-scale enterprises. A remarkable of these firms are also foreign-based. The vast majority of them are based in İstanbul, Turkey's commercial center. The general labor process in these companies are quite post-industrial. Well educated, white collar employees take the responsibility for customer enterprises. To name a few, LuckyEye, MediaClick, Cheil Worldwide Türkiye, DiversEffect, Dreams&Bytes, Generation M, mvmdigital, synergyistanbul, directComm, MajorWorx are only some of these. Considering the services provided by these companies, our discussion becomes much more valid. These companies offer their customers social media, search engine, banner advertising services and alike. What is meant by these, is that these companies function as an intermediate between companies and global media sources. In other words, they take responsibility to do commercials and campaigns over Google, Facebook, Instagram, Twitter and so on. This is no hidden fact. Actually, it is explicitly stated in the company websites. It is considered a magic stunt for customer firms that want to have a successful advertising campaign. In this sense, Turkey's digital advertising industry doesn't produce new spatialities but only take the burden to spend time on already established media platforms. It is important to note that none of these companies are fully integrated advertisers. What is meant by this is, none of these companies offer the space for advertising, but they function as a medium between the ad

[82]See: http://www.dijitalajanslar.com/dijital-reklam-ajanslari-istanbul/ (Last visit 19.08.2015)

supplier and the distributor. Turkey's internet advertising agencies do not produce advertisements where also they do not run the websites those advertisements are put into. They function as promotion agencies, which is an important sign of inexistence of a real internet industry and the dependency in Turkey.

According to the most recent report of IAB, in 2014 online advertising expenditures increased for an additional 20.5% despite the economical financial instability in Turkey. This corresponds to a total of 1.4 billion dollars of online advertising expenditures. These consist of a salient amount of 733 million dollars of search engine advertising investments, 520 million dollars of display advertising expenditures and 58 millions of mobile advertising expenditures.[83] When we compare it to earlier years, we can see a gradual increase in mobile advertisements yet the total amount is still very slim in online advertising market. The most interesting heading here is search engine advertising's volume. When we dig in further, we can see many important features: Firstly, video advertising is one of the fastest growing categories, which we have mentioned in the previous chapter, that acquisition of YouTube played a crucial role. The same outcome is produced in Turkey and online video advertising in Turkey grows at high pace. The increase in Stream video casting on the internet, online TV broadcasting and online education are also factors that stir up the video advertising business. Secondly, the magnitude of advertising based on display/click corresponds to the internet environment's increasing ad occupation. All users of the internet can experience an intensifying advertising battle in most public websites they visit. As online

[83] See http://www.iabturkiye.org/icerik/digital-ad-investments-in-turkey-grew-by-205-completing-2014-with-1409-million-tl (Last visit on 20.08.2015)

advertising is monopolized it grows larger, attracts more attention by cross promoting and as viable options on the market are less, earnings decrease. As many websites today depend on advertising economically, more and more advertisements cover users' online experiences nowadays. In many commercial websites, it is possible to see display ads on both sides of the page, above the upper heading and usually embedded somewhere inside the content. In many websites, there are pop-up display ads which force you to find and click the little "x" button somewhere around the corner of the ad. Sometimes, this x blinks away when the user brings the cursor on it, which tries to trick the user into clicking the ad. Some advertisements are put inside the text and pops up when user moves the mouse cursor over them. Some advertisements cover the page when user tries to reach the page and there is a countdown before user can skip them. There are so many different types of ads for a normal user in Turkey on the internet, where we can say overall it gets more and more exhausting. Some authors have argued that online advertising has also a declining effectiveness and the term "banner blindness" is coined to explain this unattractiveness of increasing ads on internet's content. (Wolff, 2012: 70; Cho, 2003; Celebi, 2015: 313)

A third important point is the search engine advertising expenditures, it figures at 733 million dollars and constitutes the largest of all categories. Keyword based advertising is what we may find in Google as page rankings, where a website can pay to get to the first pages in the search field. There are reasons why search advertising is so gross. Evans explains the success of online advertising by its ability to " deliver information that is targeted to those consumers who value the information the most and are most likely to act on it." (2009: 3) The huge attention search engine advertising gets is closely

related to the advanced targeting and filtering algorithms today. If a user searches for a product on Google chrome, this information is inscribed into his Google+ profile. In the future, by using the search engine, information will be filtered and ranked according to this information. Let's say, a user searches YouTube for a handsaw and watches some videos on "how to choose the right handsaw for carpentry". This is embedded into the user's Google+ account, since YouTube is owned by Google group. It is highly possible that the user will see advertisements about carpentry next time he uses the search engine. It is also evident that the user will also see carpentry related ads in other web pages, as they are also powered by Google's own advertising network and even on social media platforms its very familiar to see such ads.

As a last item, we can mention that in Turkey in-game advertising(especially for online games), e-mail advertising, classifieds(similar to traditional media) and mobile advertising are relatively small. Mobile advertising is still comparatively less attractive, yet is growing larger rapidly. In 2014, mobile advertising expenditures increased by 57.7%, while video advertising expenditures increased by 44.7%.[84] As Google has acquired Android, Android's application store became Google Play and many applications are provided with the device, promoted through software on the device which comes with Android's own operating system, or presented to many users as promoted software on Play Store. Most of mobile applications today comes with high amounts of advertisements. In most cases, even in basic software, many display ads take place. For the small and medium scale content producer, these ads are the main financial source to run their business. They may

[84] See: http://webrazzi.com/2015/03/30/turkiye-dijital-reklam-pazari-2014-yilinda-14-milyar-lira-buyukluge-ulasti/ (Last visit on 20.08.2015)

promote online products, software, online games, websites or commodities which are shopped online as well as commodities in real life.

These mean that online advertising in Turkey is the main source of profits and running the internet market today for many virtual products. However, when we look at advertising market in Turkey from digital divide and digital inequality point of view, it is possible to conclude that Turkey's online advertising market and global online advertising resembles a symbiotic relationship rather than a mutual one. For one thing, while most advertising companies are foreign oriented in Turkey, they are also operating as intermediary agencies for global advertising market. The global digital inequality becomes obvious at the advertising technology transfer; while accumulated capital in Turkey's national advertising market flows outwards towards U.S and central capitalist countries, advertising software and content flows inwards.

Table 5.1: Turkey online advertising market expenditures in 2014

Category	Millions of Turkish Liras
Total Digital Advertising Investments	**1409**
Display Advertising Investments	**520**
Advertising based on display/click	353
Video	101
Sponsorship	40
Affiliate marketing	27
Search Advertising Investments	**733**
Keyword based advertising	492
Search engine ad network performance advertising	241
Mobile advertising investments	**58**
Mobile display advertising	26
Mobile opt-in SMS- MMS	32
Classified & Directories	**84**
Other	**13**
E-mail marketing	6
In-game advertising	7

Source: IAB 2014 AdEx Report

In our study, we accept online advertising in a separate category than other content. The nature of online advertisement requires us to do so, as online ads has to come together with another content. In this respect, online ads are not content themselves but are extensions of content. Secondly, online advertising constitutes the veins of internet economy and are de facto the encompassing element in many different industries. The value on the internet content is mostly generated by online advertising, which makes it a unique branch which extends beyond being a subcategory of content: "The business model of online advertisement hides the details so that we think services are free of charge; however the maintenance of those online services and the continuity of the free content have a certain cost. The revenues generated from online advertisements cover the cost of these services." (Oger et al., 2015: 1841) In this sense, online advertising realizes the value of content on the internet. Thirdly, online advertising market still is structurally very interconnected with real advertising market.

In the following section, we will look into physical sphere of the internet in Turkey today, under the categories we discussed in the first chapter.

5.2. INFRASTRUCTURE AND THE PHYSICAL SPHERE

Andrew Blum is one of the first writers to emphasize the enormous physical body that constitutes the internet. With a novelish style, he tries to explain the vast infrastructure behind the virtual sphere and tells his story discovering this during his travels to silicon valley, hardware factories and data centers (Blum, 2014) According to him "the internet is public because it is handmade. New networks do not establish themselves with an automatic algorithm; they have

to be created by the agreement of two network engineering companies and then realized by activating a physical line." (Blum, 2014: 123)

We tried to establish a systematic understanding of the physical body of the internet. For this, in the first chapter, we have named 7 different subcategories under the physical sphere of the internet. These are backbone infrastructure, telecommunications operators, internet service providers, commercial data servers, hardware, e-commerce infrastructure and e-bureaucracy infrastructure. In this section, we will analyze how all of these markets are structured in Turkey today.

However, we will exclude backbone infrastructure from our analysis here. In some countries, backbone infrastructure constructor and telecommunications operator are different companies, in some countries, there are multiple backbone networks, some of them are commercial and constructed by private sector. In Turkey though, as we have seen in the previous chapter, privatization process of Türk Telekom, the state monopoly of telecommunications network in Turkey, has produced many results. One of these are, the monopolistic structure of the backbone network.[85] With the privatization of the backbone network in Turkey, a concession agreement has been put into place, which enforces a factual monopoly of the whole backbone network in Turkey by TTNet for a duration of 21 years. During the last decade, a number of concerns about the backbone infrastructure's property being used arbitrary and sold by the company has been raised in the public. [86] [87] Relatively

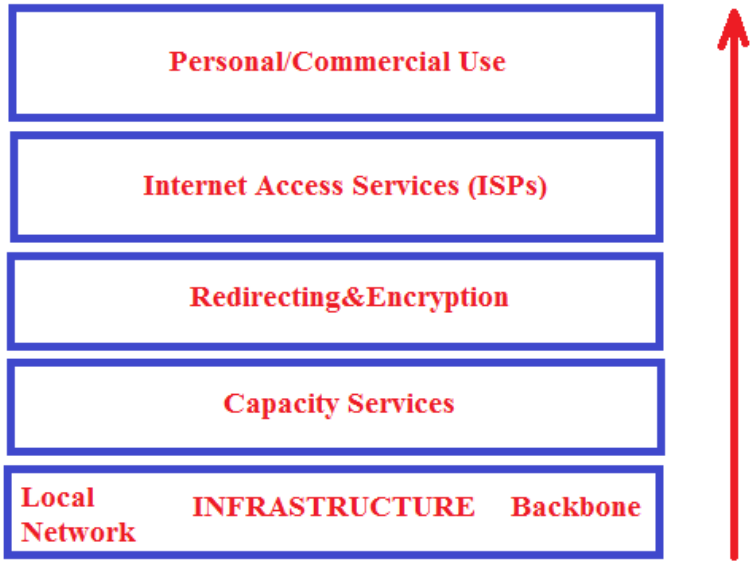
[85]See: http://www.haber7.com/teknoloji/haber/404378-turkiyede-internet-altyapisi-yeterli-mi (Last visit 20.08.2015

[86] See: http://www.telekomculardernegi.org.tr/haber-1675-imtiyaz-sozlesmesinin-feshi.html (Last visit 20.08.2015)

small enterprises tried to establish their own fiber infrastructures, yet today, TTNet's monopoly over the broadband and fixed connection types are still present.

Güngör and Evren schematizes internet's layers before reaching the user from bottom to the top as in Figure 5.2 (2002: 16) According to this , in some countries examples, we can see separate companies for the first, second/third and fourth steps from the bottom. Which means, that there might in some cases be, a separate backbone and telecommunications operator. In Turkey, this is not the case. For this reason, in this chapter, it is not possible to analyze backbone infrastructure as a different category in Turkey.

Figure 5.2. Internet Access Chain



Source: Güngör & Evren (2002: 16)

[87] See: http://www.zaman.com.tr/ekonomi_turk-telekom-kablolardan-sonra-gayrimenkulleri-de-satiyor_2223358.html (Last visit 20.08.2015)

While in Turkey it is now legally possible to construct a backbone network, it is too costly and there are many bureaucratic procedures which caused companies to avoid it.[88] As mobile and satellite internet usage became more and more common, TTNet is now not alone in this schema. However, we should note that in Turkey, telecommunication operators are building their own backbones gradually. There are very few fiber backbone networks constructed but they are very slim. Overall, there is no significant backbone network providers in Turkey except for telecommunication operators. Therefore, we will start by looking at the telecommunication operators directly.

5.2.1. Telecommunication Operators

With the addition of mobile operators to the internet market, today, there are 4 major telecommunication operators in Turkey. These are Turk Telekom(TTNet), Turkcell, Vodafone and Avea. According to the most recent report of BTK, Turk Telekom has made a net sales revenues of 7.299(approx. 2.1 b$) million Turkish liras in 2014, where Turkcell leads by 9.569 million liras(app.3.2 b$), Vodafone has 5.15 million liras and Avea has 4.269 million liras of net sales revenues. (BTK, 2015: 2) This corresponds to a percentage of 27.1% for TTNet, 36.3% for Turkcell, 19.6% for Vodafone and 16.2% for Avea.

[88] See http://www.turk-internet.com/portal/yazigoster.php?yaziid=19325 (Last visit 20.08.2015)

Table 5.2. Net sales revenues (millions of Turkish liras)

Net Sales	2010	2011	2012	2013	2014
Turk Telekom	7.340	7.374	7.253	7.237.	7.299
Turkcell	7.991	8.332	8.828	9.123	9.569
Vodafone	3.349	3.741	4.380	4.773	5.153
Avea	2.497	2.906	3.354	3.808	4.269
Total	21.178	22.354	23.816	24.942	26.291

Source: BTK 2015 First Quarter Report

The apparent increase in total revenues is obvious, yet we can see a small decline in Turk Telekom's revenues, where we can see a large increase in other companies revenues. This is on one hand due to technological advancements in mobile technology and the availability of mobile devices with access to the internet, on the other hand, a result of a spurious market monopoly in the earlier years.

When we look at these companies' annual net profits, we can see an interesting situation. According to this, Avea is at a reasonable net loss over 5 years, where Vodafone has went from a significant loss to slight profits in last two years.

Table 5.3. Net profits of Turk Telekom and mobile operators(millions of Turkish liras)

Net Profits	2010	2011	2012	2013	2014
Turk Telekom	2.956	2.468	2.995	1.277	2.483
Turkcell	2.154	2.262	2.421	2.365	2.300
Vodafone	-239	-696	-91.6	40.9	53.6
Avea	-962	-1054	-752	-726	-793

Source: BTK 2015 First Quarter Report

From these 4 corporations, it is well known that Turk Telekom is currently owned by OGER group, which is a Saudi Arabia origin MNC. With the privatization, we have already discussed that Avea was also sold to OGER group. By 07.08.2015, all 100% of Avea's assets are owned by Turk Telekom. Vodafone is a global telecommunications giant which is based in UK. Turkcell is the only telecommunication company that is Turkey originated, yet it is a multi-national partnership with 37.8% of its assets is owned by Telia Sonera group (Sweden-Finland origin), 13.8% is owned by Cukurova group (founder group), 13.2% is owned by Alfa group(Russia origin) and the other 35.2% is public assets. [89] As complicated as it may seem, we can conclude that in telecommunication operators in Turkey, the market structure is highly foreign-dependent and very highly concentrated.

[89] See http://www.haberturk.com/ekonomi/para/haber/643851-matematigi-altust-eden-ortaklik-yapisi (Last visit 21.08.2015)

5.2.2. Internet Service Providers

Today, according to BTK's official data, there are 42.921.781 internet subscribers in Turkey. 75.46% of all subscriptions are mobile phone internet subscribers, which makes up for a total of 32.391.046 users, in the first quarter of 2015. 1.543.815 users are also subscribed to the internet using a mobile tablet pc. (Table 5.4) Overall, mobile internet subscription dominates the general subscription numbers. The availability and cheaper prices for mobile internet subscription can be claimed to result in a huge leap in the recent years.

Table 5.4. Internet Subscription by type in 2014-2015 (in thousands of subscribers)

Subscription Type	2014-1st Q	2014-4th Q	2015-1st Q	Yearly Growth
xDSL	6.671	6.799	6.802	2.0%
Mobile PC	1.541	1.354	1.543	0.2%
Mobile phones	24.902	31.005	32.391	30.1%
Cable	492	558	575	16.9%
Fiber (Total)	1.277	1.457	1.514	18.5%
Other	112	97	94	-16.0%
Total	34.998	41.272	42.921	22.6%

Source: BTK 2015 First Quarter Report

Mobile subscriptions constitute the majority of all, mobile operators are not used in general as internet service providers. ISPs are companies that operate over the established backbone network and function as an intermediary service provider between the physical network and users.

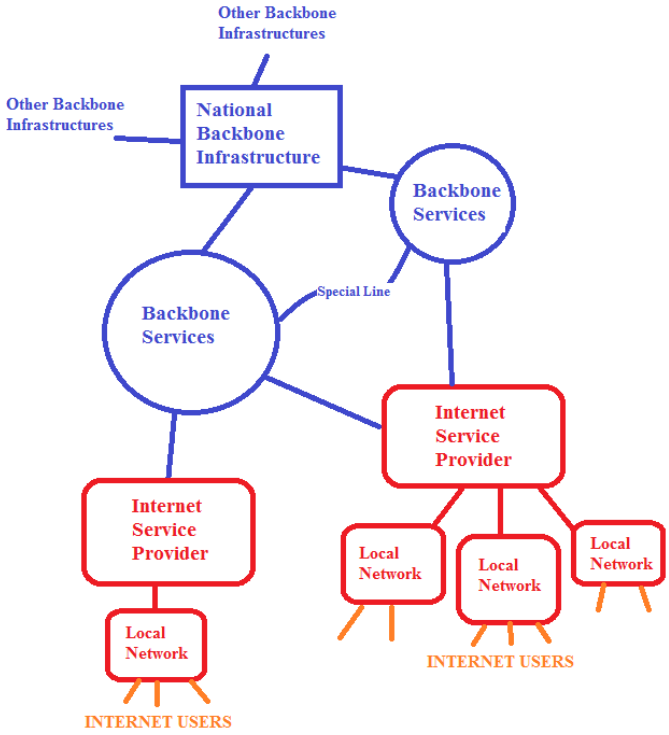


Figure 5.3. Internet Service Providers Topology[90]

When we look into Turkey's ISP market today, similar to early years, we can see a monopolistic market structure. According to BTK's official report, by 2015, 70 to 75 internet service providers are in the market. Turk Telekom's TTNet dominates the market with a market share of 75.3%, Turkcell's Superonline takes the second place with a market share of 15.8% and Dogan Holding's Dogan TV Digital, which is known as D-Smart in public has a market share of 4.4%. Other companies are: Turknet with 1.9% of market shares, Vodafone Net with 1.1% and Millenicom with 1.0%. Other 64 to 69 ISPs share a total market share of 0.5% altogether. When we look at the market, top 2

[90] Also see Güngör & Evren (2002: 7) for a similar schema. We made some adjustments in line with our own theoretical approach to the broader topology.

companies take 91.1% and top 3 companies take 95.5% of all market shares in total. (Table 5.5)

Table 5.5. Internet Service Providers by market share in Turkey 2015-1

ISP	%
TTNet	75.3
Superonline	15.8
Dogan TV Digital	4.4
Turknet	1.9
Vodafone Net	1.1
Millenicom	1.0
Other	0.5

Source: BTK 2015 First Quarter Report

Looking at total annual retail revenues of all ISPs in years 2011-2014, we can find a gradual increase. This figures at 3.305 million Turkish liras in 2011, 4.301 million liras in 2012, 4.186 million liras in 2013 and 4.727 million liras in 2014. While revenues and investments for internet services expand, internet's quality, access network and availability is highly questionable in Turkey. According to Akamai.net's report in 2015, in terms of average download speed, Turkey is ranked 54th worldwide with an average speed of 6.3 megabytes per second, coming behind many underdeveloped countries like Saudi Arabia, Trinidad & Tobago and Madagascar. (Akamai, 2015: 36) This is highly due to the lagging behind for the transition to IPv6 protocol in Turkey and the

inexistence of a highly competitive fiber network by this year. Highly praised privatization of Turk Telekom apparently didn't produce the best services too in Turkey 10 years into privatization.

As the last matter of fact, TTNet is owned by OGER Telecom today, which we have mentioned a few times already. Superonline had been acquired by Turkcell, which we have discussed in terms of its ownership structure. Similar to other categories in our study, on the ISP market in Turkey today, there is high levels of concentration as well as dependency to foreign capital. While it has started so, at the point today, there is very few local companies which has a significant share in the market. In 2011, some ISP companies, among which are other conglomerate corporations has constructed a mutual network (TNAP)[91] with fiber infrastructure to overcome this situation, yet so far the market shares remain similarly highly concentrated.

5.2.3. Hardware market

We have earlier discussed that to be able to reach the internet, the user needs a device, this may be a desktop PC, laptop PC, tablet PC or mobile phone. While there are many different components in all of these, in general, a processor, a storage disk (hard disc drive(HDD), solid disc drive (SDD) etc.), a graphics processor(graphics card), random access memory(RAM) and internet source (modem or mobile) etc. are necessary. These components may be sold separately by retail shops or distributors, or as in many cases, the user may choose to buy them assembled and ready to use. For desktop PCs a separate display device (monitor, TV) as well as other OEM devices like keyboards,

[91] See http://tnap.net.tr/#page-network (Last visit 23.08.2015)

speakers for volume, printers to be able to print out documents etc. might be needed. Whatever is the case, monitoring hardware market data is a fairly impossible as many different producer firms and retailers constitute an intricate portrait. Many intermediary producers may produce different parts of a same components, i.e. a graphics processor includes a fan, which may be produced by a fan producer, a chipset, which may be produced by a different chipset producer. They may also be produced by the same brand, a good example of this is Apple, which produces nearly all the components and software for their devices. Moreover it is very hard to arrive at an accurate map of the industry as many different devices can be included in this schema. Hardware is such a broad area that it is a requirement not only for the user but also for all other participants of the internet. Data servers, ISPs, backbone operators, e-commerce and e-bureaucracy websites, software producers all require hardware to be able to operate. But our intention here is to explain user-oriented hardware, which are devices that enable the user to reach the internet. Also, not many companies share their information with the public. Hardware market is one of the markets with most unknowns in the ICT sector. For this reason, we provide a general overlook of device market in Turkey:

Turkey's hardware market goes very similar and dependent to the global market. Inexistence of competitive local products are a main factor of this. As many undeveloped countries, Turkey has very few high-tech hardware producers. Turkish originated brands like Casper and Exper function as assembly companies, importing high-tech components from peripheral brands like Intel, AMD, Asus etc. According to IDC's quarterly report, in the last quarter of 2014, 80,77 millions of PCs have been shipped worldwide. Lenovo gets the largest share of the market with 16,05 million PCs (19.9%), HP comes

the second with 15,88 million PCs (19.7%), Dell is the third with 10,88 million PCs (13.5%), Acer Group is fourth with 6,22 million PCs (7.7%) and Apple is ranked fifth with 5,75 million PCs (7.1%) shipped globally. All other PC retailers have a total of 25,99 million PCs (32.2%) shipped in the last quarter of 2014. Out of hundreds of PC retailers worldwide, top 5 companies, in this regard, share 67.8% of the global market. Gartner's report provides a similar schema: According to this, total PC shipments globally has reached a total of 315,8 millions in 2014, as in (Table 5.6). This corresponds to a total of 64.3% of all market shares globally being taken by top 5 PC retailers.

Table 5.6. Preliminary Worldwide PC Vendor Unit Shipment Estimates for 2014 (Thousands of Units)

Company	**2014 Shipments**	**2014 Market Share (%)**	**2013 Shipments**	**2013 Market Share (%)**	**2014-2013 Growth (%)**
Lenovo	59,446.6	18.8	53,493.6	16.9	11.1
HP	55,286.8	17.5	51,251.0	16.2	7.9
Dell	40,487.3	12.8	36,825.0	11.6	9.9
Acer Group	24,914.0	7.9	25,309.2	8.0	-1.6
Asus	22,841.6	7.2	20,852.5	6.6	9.5
Others	112,890.1	35.7	128,733.5	40.7	-12.3
Grand Total	**315,866.3**	**100.0**	**316,464.7**	**100.0**	**-0.2**

Source: Gartner, January 2015[92]

[92] See: http://www.gartner.com/newsroom/id/2960125 (Last visit 23.08.2015)

A similar situation exists in Turkey, according to IDC's 2015-Q2 report, Hewlett-Packard headed Turkey's PC market with a share of 24.3%, where Asus holds the second place with 18.1% and Lenovo takes the third place having 12.9% shares of all PC shipments in Turkey. Top three companies constitute 55.3% of all shipments in Turkey.[93]

On mobile devices, we can see an even more interesting situation. According to IAB's gemius ranking data, in the first quarter of 2015, 45.8% of connected mobile devices were produced by Samsung and 32% of them were produced by Apple, where LG appears third with a share of 2.73%. In the second quarter of 2015, Samsung increased its shares to 46.75%, Apple fell down to 30.19% and LG came third with 2.87%. According to this, 2 top mobile producers forms 77.8% of shares in the first quarter, and similarly, 76.94% in the second quarter. These data can provide us a general understanding of how concentrated the market is currently in Turkey even beyond the global market. Statista's data shows us that in 2014, Samsung earned a market share of 24.5%, Apple second with 14.8%, Huawei third with 5.7%, Lenovo fourth with 5.4% and LG fifth with 4.6%. Other companies take up 45.1% of mobile market in 2014. [94]

This situation gets even more crucial when we take into account what is presented in Index's 2013 activity report(2013: 8) and IDC's 2013 annual report, approximately 66% of ICT transactions in Turkey are hardware sales, 12% are software sales and 22% are service transactions. In this respect, most

[93] See: http://www.digitimes.com/news/a20150821PR204.html (Last visit 23.08.2015)

[94] http://www.statista.com/statistics/271492/global-market-share-held-by-leading-smartphone-vendors/

of users' spendings are earned by few global MNCs in Turkey. In the light of all these information, we can spot a striking dependency of Turkey's hardware devices market and inadequacy of a local hardware industry. This validates the discussion we have been going through about digital divide and digital inequality. Money flow is outwards, commodities and services are inwards, which magnifies a global gap.

5.2.4. Commercial Data Servers

All content on the internet are stored on real server machines. In Turkey, there are data servers which are built for certain institutions or organizations, government controlled data servers and also non-commercial private servers and cloud data servers. On another side, there are commercial data servers, which provide hosting services for users, companies and other institutions. These servers use special hardware to keep large amounts of data. Famous global corporations produce the hardware for these servers. Hewlett Packard leads the data hardware market with 26.2% (13.3 billion dollars revenue), IBM is second with 18.4% (9.3 b$), Dell is third with 17.6% (8,98 b$), Cisco is fourth with 5.7%(2.89 b$) in 2014. (IDC's Worldwide Quarterly Server Tracker, March 2015) Top 3 data hardware producers make up for 62.2% of all market shares on their own. When we look into the Turkey market for server hardware, we can see HP with a share of 54.4%, Dell with a share of 22.6% and IBM with a share of 14.25%. (IDC Q3 x86 Server Preliminary Tracker).

However, what we want to focus here is actually not the hardware but the service companies who store data for a price. Various types of storing services can be counted: Such as cloud hosting, co-location, hosting and back-up. Hosting market in Turkey in this case presents a different story. For many

years, small and middle scale hosting companies has been existent in Turkey, which in general are local companies. Hosting services usually also is promoted with domain services, in which the consumer pays they hosting company a monthly or annual fee for a certain amount of online storage service and rental of the desired domain name. In this regard by 2015, a handful of local companies are active, of whom two largest are Natro and Sadecehosting. [95] The market is also less concentrated than other instances discussed earlier (See Table 5.7)

Table 5.7. Top hosting firms in Turkey

Hosting Firm	Shares by client %
Natro	9.85
Sadecehosting	8.46
NetInternet	4.88
DorukNet	3.88
Turhost	3.10
Radore	2.76
Netdirekt	2.33
IHS Telekom	2.06
Kriweb	1.37

Source: Hostadvice 2015

[95] http://tr.hostadvice.com/marketshare/tr/

Hosting market itself is not so much profitable to attract giant corporations. An ordinary person can buy the hosting service from local companies, as well as foreign companies through the internet. Because of this, many medium scale local companies host private clients for more than a decade. In 2013, Sadecehosting has been acquired by Telecity, a well-known European corporation. Still, by its nature and low profile, hosting market remains local.

However, data storing has a much larger scope than hosting. Looking at how vast has the internet become today, data centers around the globe is spreading at a stunning pace. There are many data centers in Turkey, and it is one of the promising investments for big investors. Many large companies, telecom operators, ISPs and some other ICT companies have established middle to large scale data centers, mostly based in Istanbul. Leading data centers are owned by Turk Telekom, Superonline, Vodafone, Vestel, Siemens and Koçsistem. These offer co-location services for big enterprises and operate very professionally, high-tech server devices are kept at good quality facilities, heat is regularly monitored and adjusted. They offer storage for hosting companies as well. DCD Intelligence reports that in 2011 Turkey's data center market shares amounted up to 2,75 billion dollars and this rose to 3,55 billion in 2014. By square meters, this means that 610.000 square meters of data centers are established in Turkey by 2014. (DCD December 2014) Commercial data servers market is a candidate for being a battleground for global media giants in the following period. However, data servers are by their nature unbound with geographical location. Large investors can easily choose better options to build data centers. Still, even with the intensifying data center business, commercial data servers are the least concentrated market of the internet industry today.

5.2.5. E-commerce infrastructure

Another important part of the internet economy today is the explosive e-commerce reality. In Turkey, total e-commerce market value reached up to 18.9 billion Turkish liras in 2014 (approximately 6,4 billion $)[96] according to TUBISAD's report. Turkey has a great potential for e-commerce and this is paying off, in 2014, e-commerce volume increased by 35 percent making it the most one of the interesting markets for global MNCs.[97] Euromarket International forecasts the market to double by 2017. This is a reason why many global retailers entered the Turkish market, such as eBay acquiring famous gittigidiyor.com, Naspers acquiring Markafoni.com and Abraaj group acquiring a 25% stake of hepsiburada.com, Tiger group acquiring Trendyol.com etc. E-commerce websites will be discussed in the following section of this chapter.

When we talk about e-commerce infrastructure, we define a very large category, including the storehouses needed to store goods and products sold online, executive offices, local branches of e-commerce firms, distributor networks, packaging departments and call centers/customer services. All these together mean that e-commerce has a much larger physical corporate body than many people might think. A large scale e-commerce company builds a storehouse of 10.000 square-meters and employs at least a few hundreds of store workers, order specialists and administrative personnel.[98]

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[96] http://ecommercenews.eu/ecommerce-in-turkey-reaches-e6-34-billion/

[97] http://evigo.com/18940-turkish-e-commerce-industry-enjoys-investment-boom/

[98] See http://eticaretmag.com/e-ticaret-sirketleri-depo-buyuklukleri-calisan-sayilari for a few examples in Turkey e-commerce business. (Last visit 22.08.2015)

E-commerce websites include a wide array of services and products sold via the internet. There are those who sell real products and there are websites who function as agencies to provide certain services, like online travel agencies, online betting, online gambling etc. TÜBİSAD's report shows that out of 18.9 billion worth of market, 10 billion are retail vendors and 8.9 are non-retail. See table 5.8.

Table 5.8. E-commerce market segment values in Turkey

Total: 18.9 billion Turkish liras (945 websites)	
Retail vendors: 10.0 b	Non-retail: 8.9 b
Online retail only: 6.5 b (384 websites)	Travel & holiday: 6.8 b (326 websites)
Multi channel retail: 3.5b(272 websites)	Online legal betting: 2.1 b (6 websites)

Source: TUBISAD 2015 June Report

For non-retail services, there seems to be a lesser burden to bear in terms of building a physical infrastructure. Executive offices, local branches and public relations seem to be adequate to run a non-retail e-commerce business. However, retail vendors have a larger physical body. TUBISAD's report also separates two different e-commerce structures: First are multi channel e-commerce websites and second are online-only websites. For us, this is a useful model. Multi channel websites are companies which also operate as normal companies and utilize the internet as an additional medium to reach their customers. We will look into these in detail in the next section of this

chapter, yet a few examples would be helpful: Teknosa, Dominos Pizza, Ikea, Vatan Computer and many other companies offer the option to purchase online. In fact, almost all real stores today are trying to sell their products online as it looks like a marvelous business for them, as they already pay for storage and have an established network. Examples for online-only e-commerce websites can be hepsiburada.com, kitapyurdu.com, gittigidiyor.com etc.

Tekel defines six different types of online commerce: B2B (business to business), B2C (business to customer), C2C (customer to customer) and B2G(business to government), G2G (government to government) and G2C (government to customer). (2014: 26-27) The largest and most common type of e-commerce is B2C, yet C2C should also be mentioned. In Turkey, through websites like Gittigidiyor.com and sahibinden.com, internet users often buy and sell products, unused or used and the website cuts an amount from transaction. This is a unique case where infrastructural necessity for the website is the smallest. What Tekel calls as G2G and G2C are e-government activities. E-government is both structurally and operationally is absolutely different from e-commerce.

5.2.6. E-bureaucracy Infrastructure

The last category for the physical sphere of the internet is the e-government infrastructure. In Turkey, with the exponential growth of internet usage and its benefits many government institutions have completed their projects to establish an e-government network. Expenditures on e-government's infrastructure covers many topics, construction of cable networks, establishing servers and their locations, installing ICT departments within government institutions, public relations offices are some of these.

First attempts to develop e-government in Turkey goes back to the first years of 2000s. European Union's major project to establish a prominent e-government structure eEurope project has started and concluded as an action plan called "eEurope 2002 project. eEurope was broadened to include non-member countries like Turkey, which was called "eEurope+ project."(Aydın, 2005:) In accordance with this, to meet expectations with the EU, TUBITAK and State Planning Organization(DPT) in Turkey have started working on large scale projects to establish e-Government services in Turkey. "e-Türkiye" project was run by TÜBİTAK in years 2001-2002 and a new project has been run by SPO in years 2003-2004 as a nationwide government project. As a result of these, nearly all government institutions, ranging from ministries to local administrations, municipalities, jurisdiction, hospital, military institutions and other state organizations started and finished their own projects to establish their e-government services.

As most of data about these institutions' investments and expenditures remain hidden, it is impossible to make a detailed analysis of how much they spent into building the physical infrastructure for running e-government services. However, it is not hard to estimate that this amount is quite significant. In 2005, government expenditures for only these projects amounted 1.295.725 US dollars. (DPT, 2005: 2) In 2002, 158.8 million $ for 203 projects, in 2003, 208.6 million $ for 204 projects, in 2004, 281.3 million $ for 211 projects and in 2005, 388.4 million $ for 200 projects have been spent by government institutions. When we add up fixed costs for sustaining e-governments services, renovations and fixed wage costs , e-bureaucracy infrastructure is an important element of e-government finance. Bengshir notes that government

investments into ICTs increased from 758 million to 1,08 billion Turkish liras from 2006 to 2010. (Bengshir, 2011) Looking at these data, we can presume that e-Government expenditures for infrastructure are still very substantial. Needless to say, most government expenditures for e-bureaucracy hardware in Turkey goes to global corporations as well as a substantial amount of software are also outsourced. Technology transfer is valid as much as everywhere else in e-government infrastructure.

In the following section, we will discuss the virtual sphere of the internet. As we earlier noted, virtual side of the internet - the content - can be evaluated in two different perspectives: - Economic (market values, revenues, shares, profits etc.) and customer behavior (popularity, click counts, user traffic, data traffic etc.). Websites are presented by only domain names, i.e. www.website.com yet they mean a lot more than that. Today, websites and many online platforms are brands and they are major players on the internet's economy. They bear value, generate value and some of them are used as means of virtual production to create value.

5.3. CONTENT - THE VIRTUAL SPHERE

As we have noted in the first chapter, we again counted 7 different types of content that constitute the virtual sphere to reach, use and spend time on the internet. These are software, search engines, social networks, news portals, e-entertainment, e-commerce websites and e-bureaucracy content. The goal in this part is to produce a general idea about user preferences and behavior, for this reason, we will

5.3.1. Software

All devices that use the internet require certain software to perform. Both offline and online uses of PCs, tablets and mobile devices require software, where online services like surfing the web, playing online games, watching movies online etc. require additional software. In this respect, as a base software, an operating system (OS) needs to be installed on the device to be able to utilize it by using the operating system's interface. There can be counted many known operating systems: Windows (10, 8, 7, XP, Vista, 95), Linux, Linux-based OSs like Ubuntu, Kubuntu, Backtrack, Pardus etc. All these operating systems have different features and strengths, as well as weaknesses, for instance, Linux based OSs are usually known to be more efficient for dedicated servers and programmers. Windows brand is more suitable for most common users, casuals and daily multimedia services. However, all OSs today have very adequate tools to reach the internet.

Which operating systems do users have installed on their systems reaching the internet in Turkey? According to a study by Net Applications, for PCs in June 2015, 51.22% of users reaching the internet had Windows 7, 24.82% had Windows XP, 6.56% had Windows 8.1, 5.92% had Windows 8, 4.12% had Mac OSX 10.9, 3.05% had Windows Vista, 1.68% had Linux and 2.65% had other OS installed. (Figure 5.4) Windows brand itself reaches an amount of 91.57% which is quite striking.

On mobile platforms, there are also few choices. According to StatCounter's metering, from July 2014 to July 2015, 75.29% of all mobile and tablet devices on the internet in Turkey had Android OS installed, while 18.94% had Apple iOS. These 2 companies sum up to 94.23% . Unlike web pages, operating systems do not earn their income from advertisements. They are either sold

separately (for quite astonishing prices) or included in the price of the device purchased. They are in this sense sold as direct commodities. Many free software on the web come with advertisements, set users' default homepage to theirs and sometimes install additional undesired software like toolbars into users' devices.

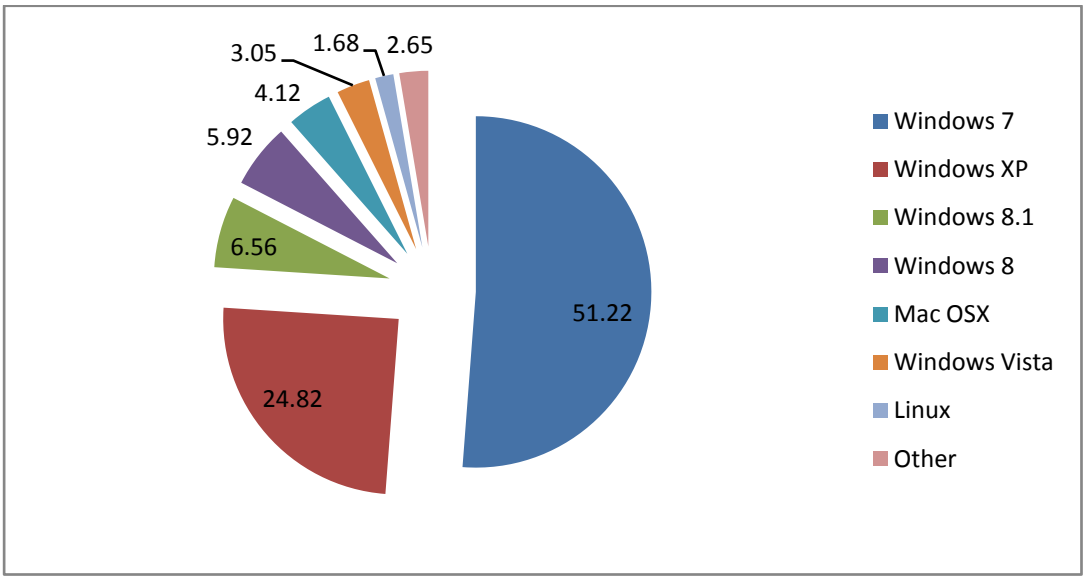


Figure 5.4. Operating Systems on the Internet, June 2015
Source: Net Applications

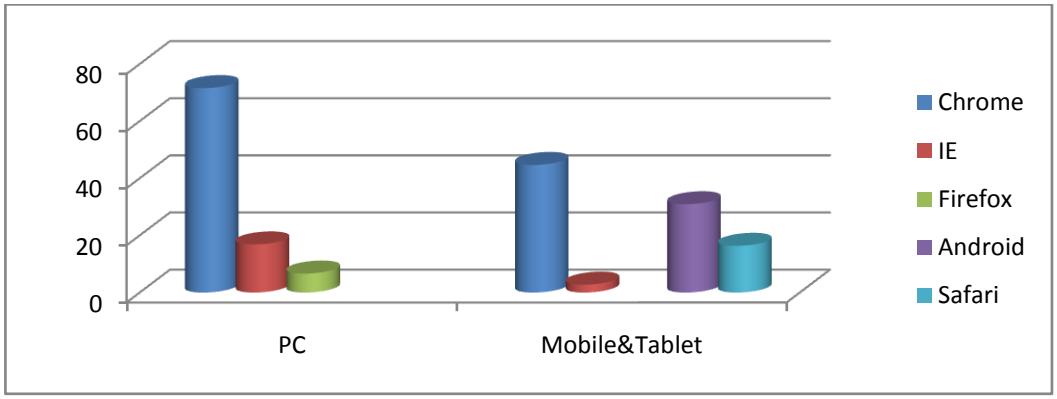
The second obligatory software a user needs to reach websites is a browser. In this particular segment for PCs, from July 2014 to July 2015, Google's Chrome leads with 71.56%, Microsoft's Internet Explorer(IE) 11 comes the second with 9.05% Firefox 5+ is third with 6.65%, IE 8.0 fourth with 3.53, IE 10.0 fifth with 2.41% and IE 9.0 sixth with 1.87%. [99] On mobile and tablet devices, 44.68% of all users used Google Chrome, 30.91% used Android's own

[99] http://gs.statcounter.com/#desktop-browser_version_partially_combined-TR-monthly-201407-201507-bar

browser(which also is produced by Google group), 16.36% used Safari and 2.78% used IE.[100]

There are other software required to reach the internet, such as drivers for wireless adapter, graphics card etc. but these are not covered here as they are either presented by hardware vendor or downloaded online for free. There are internet related software required for certain tasks, for example, to be able to download from a torrent database, user needs a torrent download software or to run videos on the device, user needs a video player software. Sometimes additional software like codecs and extensions needed for certain file formats.

Figure 5.5. Browser software by software, July 2014- July 2015



Source: StatCounter

Browsers seldom come with advertisements and all popular browsers here are available free. However, browsers function as a tool to direct users into these companies own search engines and are highly compatible with other services for products of these corporations. Optional software on the internet can be

[100] http://gs.statcounter.com/#mobile+tablet-browser-TR-monthly-201407-201507-bar

counted many, in order to view flash animations, which are very common as video formats and online games, users need to install Adobe's Flash Player. According to IAB's Gemius Ranking, 87.03% of all devices had Flash Player installed as of December 2013 in Turkey.[101] Similarly, online readers mostly will have to install Adobe's Reader. These are charge free software, yet most of helpful software comes with a price. Antivirus, anti-malware, disc cleaners, video converters, recording software and office software like Microsoft's office are just some of other software helpful for internet use

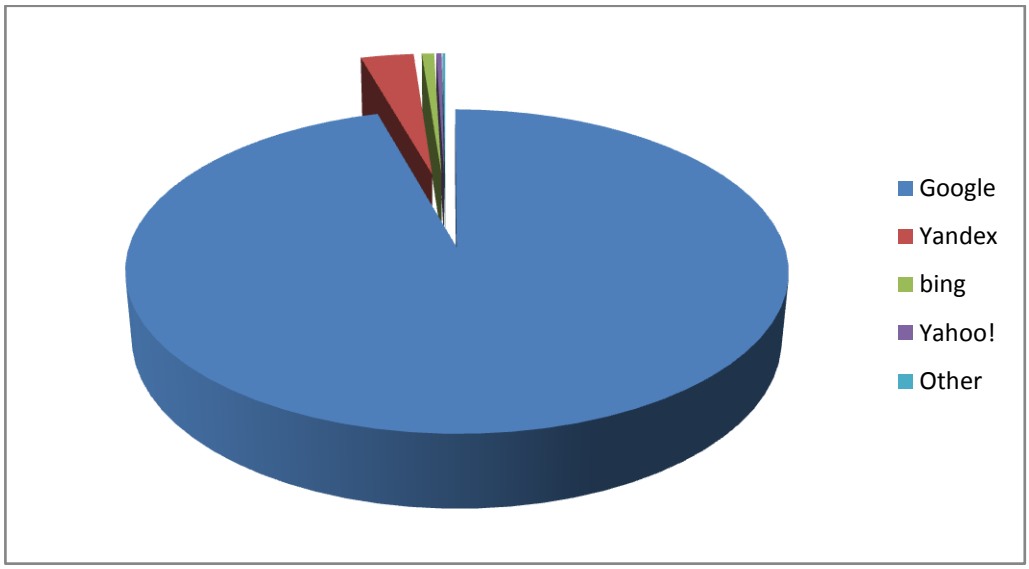
5.3.2. Search Engines

Search Engines have a vital role in most users' internet experiences. As we have seen earlier, search advertising has the highest shares in online advertising and crucial for internet's economical structure. Search engines are also vital for promoting websites, creating demand for websites, software, e-commerce products, social networks, e-entertainment websites and software, news portals and basically everything about the internet. Search engines are gateways to the internet content and function as the hierarchy-creators; a fundamental and natural ranking system on the internet today. Being excluded from first dozen of pages of Google's search engines for an ambitious web page today means being excluded from the vast majority of audience interest as everywhere else in Turkey. Here is why: According to StatCounter's data, from July 2014 to July 2015, 96.51% of all users used Google's search engine in Turkey. Yandex, an investor which is very ambitious for Turkey, comes second with 2.28%, Microsoft's bing comes third with 0.74%. (Figure 5.6) IAB's gemiusRanking also verifies this. Similar to StatCounter, they have

[101] http://www.rankingtr.com/en/rankings/flash-versions.html

metered Google's search engine usage as 95.14% in the first quarter of 2015, while Yandex had 3.01% and Microsoft's bing comes third with 1.22%.The astounding monopoly of Google in search engines field leads us to question if in any branch of traditional media had such dominance in its sector.

Figure 5.6. Search engines total users by percent, July 2014- July 2015



Source: StatCounter

From a digital imperialism point of view, it is possible to say that Turkey's search engine market has no local companies available whatsoever. Yandex is a Russian corporation, while Google, bing, Yahoo! and Ask Jeeves are US origin global companies.

5.3.3. Social Networks

Social networks has been a very hot topic of academic research, in this regard, a huge amount of literature about social media has been produced. Topics include social media habits, its effects on everyday life, virtual communities and

new identities, how to run a really profitable business through social media, social media's psychological effects on youth and much more. Social media has undoubtedly been one of the most astonishing outcomes of the internet and it should be studied from many different disciplines and perspectives. Social media attracts large interest because its ability to create uncontrollable virtual communities, mobilize and inform people, its effects on public health, its effect on youth, its 'viral' characteristics[102], which may look cute at the first glance, but they pave the way to new very effective marketing strategies, spot-on targeting of customers and hegemonic disinformation by governments, interest groups or crime groups. As control mechanisms, archiving and surveillance concerns arise, political or social groups organize on social media, sometimes through religious or racist propaganda. By 2015, there are 2,078 billions of active social media accounts and 1,685 billion are active mobile social media accounts. A lot of studies exist on social networks, but there are very few political economy studies. A detailed political economy of social media should analyze every element of our 3+1 formula: its ownership regime, labor organization, labor processes and conditions and content. However, we will shortly mention some important statistics about social media usage and economy.

In Turkey, social media is an extraordinarily crucial domain. Youth population of Turkey makes it an even more promising area than many other countries, there is a high level of affinity towards social media. According to We Are

[102] When something goes viral on social media, mass culture at its most refined form awakens. Millions of people share similar videos, photos or messages together, which not only forms a cultural whirl across the globe but also uniformistic reflexes reach a peak. Social media virals like ice bucket challenge, planking and many other meaningless activities were imitated by millions of people.

Social (GlobalWebIndex) research, as of January 2015, there were 40 million active social media accounts(52% of all users) in Turkey and 32 million active social media accounts on mobile(41%). On global average, both of these almost half of Turkey (29% and 21% respectively). From January 2014 to 2015, there was a 11% increase in active social media account numbers and 14% increase in mobile active social media account numbers. This is a very dramatic increase for a period of one year. Social media users spend an average of 2 hours and 51 minutes on social media and 2 hours and 56 minutes on mobile social media. When we look at average internet use of 4 hours and 37 minutes on all devices, we can argue that Turkey internet audience spends more than half of their time on social media.[103] (GlobalWebIndex, 2015)

According to Global Web Index's 2014 report[104], 97% of internet users in Turkey had a social media account on one of platforms, and 75% have used it in January 2014. 93% of users had a Facebook account, while 60% used it in the last month. (See Figure 5.7)

[103] See: http://fr.slideshare.net/wearesocialsg/digital-social-mobile-in-2015 (Last visit 23.08.2015)

[104] See: http://fr.slideshare.net/wearesocialsg/social-digital-mobile-around-the-world-january-2014 (Last visit 23.08.2015)

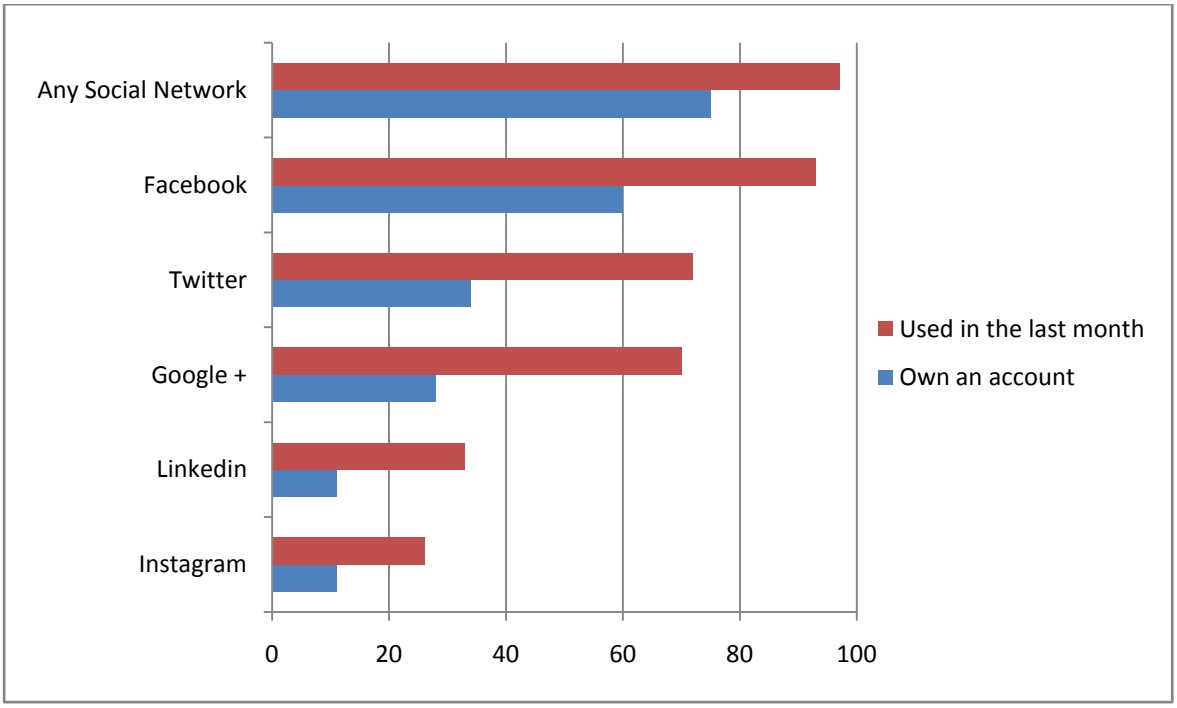


Figure 5.7. Social Media use percentages in Turkey January 2014
Source: We Are Social (GlobalWebIndex)

According to StatCounter's data, on all platforms, Facebook had 81.14% of total page views on social media, Pinterest had 7.29%, Twitter had 6.09% and Tumblr had 2.21% from July 2014 to July 2015. This data might be deceiving as Facebook's working mechanism tends to create high amounts of page views by itself, yet it is still relevant for the effectiveness of social media advertising.

YouTube is arguably not a pure social media platform. However, after its acquisition by Google, YouTube accounts were merged with Google accounts and a Google+ user profile is formed. In the following years, YouTube established other services like live streaming, personal space for photos, personal information, contact groups and online location etc. This strategy didn't work great and it is hard to say that many people use Google+ as a

personal social media platform. With the rapid expansion of mobile usage, other social platforms like WhatsApp and Viber are now very commonly used in Turkey. We Are Social's 2015 survey shows us that 23% of users say that they use WhatsApp, 13% use Skype and 6% use Viber regularly. (2015: 321)

In terms of social media, Turkey has no significant local social media platforms. As most of the countries today, Turkey's internet audience closely follows global corporations new applications and platforms.

5.3.4. News Portals

Another remarkable component of the internet content in Turkey are news portals. As in many other countries, online news portals in Turkey are as a general rule traditional newspapers' online websites. These are websites of Turkish national newspapers such as milliyet.com.tr, hurriyet.com.tr, gazetevatan.com.tr, haberturk.com, radikal.com.tr, birgun.net etc. Websites of certain TV channels also function similarly, like ntvmsnbc.com, showtv.com.tr, kanald.com.tr, atv.com.tr, startv.com.tr etc. There are alternative or non-mainstream news portals which are online-only like sendika.org(it is censored by the court when this is written so a new website sendika1.org is currently being used), bianet.org also reach a certain audience via the internet.

Other than these, there are online-only news portals like diken.com.tr, t24.com.tr, internethaber.com, ensonhaber.com, adilmedya.com. Some news portals focus on gathering news from different media sources, like ensonhaber.com, haberinyeri.net, Mynet news portal etc. but the majority of Turkey's online news portals are actual newspapers, as well as most journalists, columnists are from the same newspapers.

Today, building a website and updating it regularly for a traditional media company is almost a necessity. For this, most media institutions established ICT departments and employ web designers, online media editors, online reporters etc. For a media company, website more than anything else is a showroom in the first place in the internet era. However, as traditional media, online news portals also is run by advertisements, and to an unimaginable extent for a lousy old journalist! There are a number of embedded display and video ads in most websites and they are filtered very carefully. It is quite common that users get advertisements about sports products when they visit the sports page of the news portal. As advertisements are the main economic source of news portals, traffic these web pages get become more important. Again, similar to traditional media, the volume of audience is crucial for the advertisement revenues and as newspapers circulation statistics, advertisers value the user traffic on these news portals. According to IAB's May 2013 report, news portals' user traffic data is as Table 5.9.

Table 5.9. User traffic on online news portals May 2013

Website	General-Monthly Traffic	Average time spent on website(h)	Real users	Access (percent)
Milliyet.com.tr	1.544.501.417	02:43:31	7.970.024	30
Hurriyet.com.tr	1.202.076.483	02:05:42	7.406.016	27
Haberturk.com	653.552.592	01:52:47	4.687.718	17
Gazetevatan.com	455.892.429	01:32:12	2.748.106	10
Sabah.com.tr	365.188.369	01:00:43	4.601.525	17
Haberler.com	252.526.513	00:43:52	3.421.704	13
Haber7.com	164.653.049	01:46:13	2.349.405	9
Ensonhaber.com	136.241.225	01:37:44	2.553.191	9
Posta.com.tr	132.772.143	00:53:00	1.513.958	6
Haber365.com	122.956.272	00:31:23	2.445.722	9
Sozcu.com.tr	95.557.937	01:13:24	1.204.002	4
Ntvmsnbc.com	88.118.505	01:03:28	1.718.204	6

Source: IAB Internet Ölçümleme Araştırması May 2013

Two news portals, milliyet.com.tr and hurriyet.com.tr has a clear lead on news portal market. Again, news portals on the internet in Turkey today carry not only the content of their traditional media but also its ownership regime and corporate structure. When explaining media's ownership structure in Turkey, Kaya names and discusses the dominance of few media groups in Turkey's media industry (Kaya, 2009: 262-293) According to him these media groups are: "Doğan Group, Çukurova Group, Doğuş Group, Turgay Ciner Group, Dinç Bilgin Group, Uzanlar Group, Erol Aksoy Group and İhlas Holding." (Kaya: 248) Doğan Group is the largest media corporation in Turkey(Kaya: 274) and except these groups listed above, there are some other media companies who are supported and refurbished by the government party JDP in the last period. (Kaya: 248)

Bulut makes a similar classification and lists all the media institutions owned by these groups. (Bulut, 2009: 93-94) From this long list, what is deeply related to our discussion is, when we look down this list of online news portals, the situation is more or less the same. milliyet.com.tr, hurriyet.com.tr, gazetevatan.com and posta.com.tr are owned by Doğan Media Group. Haberturk.com is owned by Bilgin Group, sabah.com.tr is owned by Çalık group and ntvmsnbc.com is owned by Doğuş Group. Haberler.com, Haber7.com, ensonhaber.com and haber365.com are different pro-government propaganda medians. Sozcu.com.tr is a pro-kemalist and nationalist newspaper's website, who has been separated from Doğan group in 2007. In this respect, it is important to point that from the free internet news channels of 1990s to corporate dominated, concentrated and conglomerated internet news portals, changes have been taking place on the virtual sphere. And to chase how concentration leads to mainstream content on the internet, news portals can provide an obvious insight.

The last thing to note here about news portals is that unlike most other subcategories we analyzed, news portals are still highly local oriented. In some cases, local capital giants in the media sector form alliances or strategic partnerships with global media giants. CNN's local Turkish branch, CNNTurk is a good example of this. It is a company of Doğan Group and has its own news portal on cnnturk.com.tr. As we mentioned first, the comparatively small profits in news portals market can be one of the most important reasons.

5.3.5. E-entertainment Market Content

E-entertainment includes a variety of different software and a huge and multifarious economical structure. The term is so broad that it is impossible to

cover as a whole in this study. E-entertainment content can be handled in two main types: e-entertainment software and e-entertainment as web content.

There are online games where the user needs to download the game and install it on the device to be able to play, and there are games user can just play through a web browser or social network. There are very popular Facebook games in Turkey, which Hjorth calls "SNS games." (Hjorth, 2011: 127) In Turkey, online games have a large audience: 22 million people in Turkey play online games regularly.[105] In terms of online games' audience behavior, we can see casual games and hardcore games. Hardcore players tend to spend a lot of money for games while casual players don't. This is important since online games place upon a huge economy.

Online games' economy can come from many different sources. Casual games are most commonly F2P(Free to Play) and main source of income for their websites are advertisements. Most of them also sell additional services and advantages in game for certain amounts. P2P (Pay to Play) games are mostly purchased for a fee, and also in some cases have also a monthly subscription fee. There is an in-game economy which players sell items in game for real money. Online games in this respect, carry an intertwined characteristic, they are not only virtual commodities; but also means of production. This proves Hebblewhite that tools of communication today are also means of production. (Hebblewhite, 2014: 214-215)

[105]See: http://www.iabturkiye.org/sunumlar/oyun-ici-reklam-serhat-yikici-netcom (Last visit 24.08.2015)

Hardcore games have high technical details, graphics and programming. In this respect, gaming software in Turkey is largely outsourced. According to Raptr's report, in 2014 market shares of online software games in Turkey is Table 5.10.

Table 5.10. Game time shares software games in 2014

Game	Developer	Game time share (%)
League of Legends	Riot Games (US)	24.81
World of Warcraft	Blizzard Entertainment (US)	16.37
DOTA 2	Valve (US)	6.4
Counter Strike: GO	Valve (US)	5.61
Smite	Hi-Rez Studios (US)	3.81
Dragon Age: Inquisition	BioWare (US)	2.91
Hearthstone	Blizzard Entertainment	2.22

Source: Raptr

There are online social network games which are very popular in Turkey such as Candy Crush Saga, Rummy, Bubble Witch Saga, Online Poker etc. There are lots of browser games popular as well, like Travian, oGame, Legend Online etc. All these games have many display and in-game advertisements.

Online games are not the only category for e-entertainment content. Online movies, online stream TVs, online chat rooms, online TV series and movie websites are also very popular in Turkey. Still, the most popular video source in

Turkey is YouTube. According to IAB's Gemius meter in 2013, YouTube has the most traffic with 2.5 billion videos and 19.4 million real users, while izlesene.com is second with 159 million traffic and 5.5 million real users, Dailymotion is third with 44 million traffic and 4.1 million real users.

As a general overlook, Turkey's online entertainment has a huge potential and this is directly or indirectly absorbed by US oriented content. Unlike some other countries like Japan, in Turkey we can't see a developed digital game industry, and while there are some popular leisure time websites, they come across high-tech restrictions.

5.3.6. E-commerce websites

As we have seen earlier, e-commerce is growing very rapidly in Turkey and it already had international recognition. E-commerce websites and these websites' mobile applications have the major role in this success. It would be a discussion whether or not to include C2C websites as e-commerce websites, as they have a different working mechanism than B2C websites. C2C websites such as sahibinden.com, gittigidiyor.com and n11.com operate as a medium to exhibit products one user wants to sell, and another user buys them through paying a small cut for the website. There are users who established small virtual shops in these, who regularly exhibit and sell products. To become a shop under these websites, an extra fee has to be paid to the website. In this sense, the website sells space and extra promotion to these vendors. Some middle scale shops open their virtual stores on these websites to increase their sales as well. There are some other e-commerce websites who are more specific, such as yemeksepeti.com, which is a medium to order food from

restaurants in users' area or trendyol.com, markafoni.com which is for fashion brands and online fashion shopping.

However, there are other online retail websites which operate much more like the regular mega stores. Hepsiburada.com, kliksa.com, hizlial.com are some examples of this. These stores buy products from producers and sell it for a better price just as in normal stores.

When we take all e-commerce websites, including C2C websites, in terms of user traffic, we come across a weird situation. In 2013 May, sahibinden.com seems to have more than ten times more clicks than the second website on the list, gittigidiyor.com. (Table 5.11) However, this may be misleading at a few points, so we should note that sahibinden.com is structurally a very different case. It functions mainly as a second-hand advert website, but it covers very unique elements, houses and cars on sale by their owners are exhibited on the website and their contact information can be seen by visitors. In this case, a lot of users just surf the page, look at a huge number of different adverts which lead to enormous number of click counts. When we look at the real users' statistics, it starts making sense. Our point is proven also by looking at average time spent by users on these websites., sahibinden.com's users spend twenty times more time on the website, looking at adverts.

Table 5.11. E-commerce websites' traffic and average time spent in Turkey, May 2013

Website	Monthly traffic	Real users	Average time spent
Sahibinden.com	2.746.704.782	7.757.465	02:50:15
Gittigidiyor.com	219.384.346	4.856.231	00:33:52
Hepsiburada.com	74.495.186	3.856.023	00:13:13
Trendyol.com	73.185.790	2.425.848	00:27:23
Markafoni.com	68.109.082	1.792.319	00:29.08
Morhipo.com	26.683.098	1.048.994	00:16:24
Yemeksepeti.com	26.138.034	1.025.724	00:21:06
1v1y.com	23.665.358	867.101	00:13:06
Limango.com.tr	22.263.570	752.391	00:22:06
Sanalpazar.com	20.882.907	1.482.751	00:07:03
Hizlial.com	14.449.575	994.937	00:10:03

Source: IAB Internet Report May 2013

Among these websites, retail store websites make a large amount of their revenues from real sales. When we look at total retail sales, we can see hepsiburada.com dominating the online store segment in 2014. According to statista's data, hepsiburada.com made a total of 924.88 euros of revenues, while second on the list, trendyol.com comes far behind with 145 million euros.

markafoni follows with 110, gold.com.tr with 93, istanbulbilisim.com.tr with 82.1 and Teknosa with 75.04.

Table 5.12. Online retail shops' annual web sales revenues, 2014

Website	Web sales (million euros)
Hepsiburada.com	924.88
Trendyol.com	145
Markafoni.com	110
Gold.com.tr	93
Istanbulbilisim.com.tr	82.1
Teknosa.com.tr	75.04

Source: Statista[106]

Hepsiburada.com is a Doğan Group brand. Online retail shops have the advantage of earning income from both real sales and also advertisements. However, they have a disadvantage to cover costs of storage, extra employee's wages, distribution and logistics etc. Apparently there are some companies doing fairly well in this case. Hepsiburada.com's large corporate support is one of its most important advantages for doing so much better than others.

We have seen in the previous section of this chapter that there are online-only and multi-channel e-commerce websites in terms of type of website. TUBISAD's report develops this further to mention six different categories under both of these: Online only websites include multi-category stores

[106] See: http://www.statista.com/statistics/307727/e-retailers-turkey-annual-web-e-commerce-sales/ (Last visit 25.08.2015

(hepsiburada.com, kliksa.com etc.), private shopping (markafoni, trendyol, morhippo etc.), travel&transportation (tatilsepeti.com, tripsta.com etc.), online market places(gittigidiyor.com, sahibinden.com, n11.com etc.), vertical (kitapyurdu.com, evim.net etc.), legal online betting (bilyoner.com, iddaa.com, nesine.com etc.). On multi-channel online e-commerce websites, there are leisure (biletix.com, mybilet.com, joker.com etc.), home&decoration (ikea.com.tr, dogtas.com.tr, koctas.com.tr, tekzen.com.tr etc.) travel&transportation(kamilkoc.com.tr, onurair.com, flypgs.com.tr etc.), electronics stores (teknosa.com.tr, vatancomputer.com.tr, bimeks.com.tr, gold.com.tr etc.) and other stores (migros.com.tr, dominos.com.tr, burgerking.com.tr, tchibo.com.tr etc.) categories. This is overall an accurate formula according to us.

Turkey's high potential in e-commerce has drawn much attention from global capital. Most of these well-known e-commerce websites have been acquired or partnered with big foreign corporations, a few examples of these would be eBay's acquisition of gittigidiyor.com, Delivery Hero's acquisition of yemeksepeti.com. Also local large corporations are very active in the market, a few examples are, Sabancı Holding's kliksa.com, Doğan Holding's hepsiburada.com, Gold electronics' sanalpazar.com(in addition to gold.com.tr, sanalpazar functions in the category of online market places for C2C sales) and trendyol.com.tr. In this regard, Turkey's e-commerce market has a concentrated but complicated corporate structure.

5.3.7. E-government Content

As a last category of online content in Turkey, we take e-government websites and applications. Today almost every institution has a website, large

government institutions offer users many services through the internet. In terms of online content, as these are government institutions, it is not wise to talk of a market structure in this category. Every institution have costs of staff wages for updating, remaking and designing websites and this costs a relatively small economical activity than what was discussed in other categories. There are government portals like www.turkive.gov.tr which function as a gateway to most institutions and services. There appeared lots of private owned websites who try to trick users into using their websites by buying similar domain names. By ranking high on search engines, they have indeed success doing so. Some of these websites try to charge money from visitors for free government services. In this case, there are many websites that conducts fraud pretending to be e-government websites.

The only thing to be discussed about e-government websites are how successful these websites are in providing services accurately and being user-friendly on the web interface. Durmuş and Çağıltay conducted a field research on 18 different categories that would define an e-government website's adequacy. (2012) According to this, e-government portal, social security institution and presidency websites are the most liked and ministry of finance, national security and agriculture have the least satisfactory. Many government institutions also developed online applications for mobile devices, which try to help users to easily access e-government services on their mobile devices. As a category of online content, e-government websites and applications today play an important role for a majority of people in Turkey today and has become an important component of internet use.

Before we conclude, we would like to make a few final remarks on internet's content. There are many other websites that are not covered under these categories: online banking websites, personal blogs and websites, companies' websites, music and fan groups, online forums are only some of these. These can all be called as other internet content. As our intention was to develop an understanding of the internet's market structure in a political economy approach, we aimed to build the largest scope for categories. When we look at data for all categories, we can see that these websites are very marginal for the general internet in Turkey both for their economic and social activity.

In this regard, while these 7 categories do not cover all websites, which no study can do keeping in mind the unbelievable vastness of the internet today, those who are not covered under these categories remain insignificant in general. According to IAB's latest top 20 report of June 2015, top 20 viewed websites and real user statistics on those websites is as table 5.13. By looking at these, we are happy to cover all of them in our discussion except for wikipedia.org. It is a unique online encyclopedia and is popular for those who want to learn in a quick fashion. It is ad-free, it charges no money and it's a community inclusive median: All members can contribute to the content. It is a glimmer of hope and a last resort for non-corporate internet dreamers like us today. Except for wikipedia, top 20 websites in Turkey includes 4 search engines, 5 social networks, 4 e-entertainment, 4 news portals, 1 e-government and 1 e-commerce websites today.

Table 5.13. Top 20 websites in Turkey by page views and real users.

Website	Total page views	Real users
google.com	4.711.408.419	20.810.650
facebook.com	3.479.569.713	19.060.734
youtube.com	2.425.124.261	16.566.108
yandex.com.tr	1.359.530.805	11.507.698
milliyet.com.tr	944.326.761	8.379.908
meb.gov.tr	778.058.895	7.981.777
outlook.com	480.834.124	7.292.439
hurriyet.com.tr	410.397.274	7.266.626
twitter.com	403.004.214	6.928.068
sahibinden.com	345.680.782	6.863.488
wikipedia.org	319.298.815	5.792.900
instagram.com	292.308.725	5.208.824
aliexpress.com	283.910.038	4.899.629
haberler.com	278.445.706	4.735.751
izlesene.com	247.213.362	4.644.514
oyunskor.com	246.470.834	4.635.279
dailymotion.com	243.949.355	4.510.185
microsoft.com	199.620.895	4.454.673
sabah.com.tr	136.102.477	4.354.016
eksisozluk.com	133.849.050	4.111.325

Source: IAB June 2015[107]

[107] See: http://www.iabturkiye.org/sites/default/files/internet_audience_toplist_06_2015.pdf (Last visit 25.08.2015

5.3.8. Final Assessments

In this chapter, we tried to explain ownership and content of the internet in Turkey and tried to build a connection between the two. Our theoretical discussion in chapter one carried certain assumptions, in order: the internet doesn't represent or exclude capitalist ownership regime, the internet is becoming increasingly concentrated, the internet is not only the virtual universe, but also a very physical one, not only in the sense that has an enormous physical existence behind it but also it inherits economical and social inequalities of the real world. These inequalities may be economical, social and global and we tried to formulate an understanding of digital inequality. Lastly we argued that concentration on internet's ownership also causes the hegemony of a mainstream internet content, user preferences are being uniformed and content that gets excluded from this mainstream body is unseen, ineffective.

In these terms, most of our data, which we gathered from private research agencies who partner with most of these internet giants, prove our points. In almost every category of the internet we have defined in Chapter 2, we saw a similar dominant structure. In Turkey, except for commercial data servers and e-bureaucracy(which is by its nature out of this discussion) under all categories we could see a very concentrated and highly foreign dependent market structure. Internet with all its globalizing features is highly centered and controlled around the United States. Under some categories, we presented real data on how one MNC or brand could reach market shares well beyond 90%. This would be a very ugly utopia in the "less democratic" traditional media, we have to say. Fuchs attacks the perception of the internet as a more democratic

medium than traditional media. (Fuchs, 2011: 20-23) This is proven in Turkey market's increasing exclusivity and high amounts of concentration.

Another point to about Turkey's internet industry resides within the relationship between the government and the capitalist class. As we have discussed, in the current structure of the internet in Turkey, government's decisions played an important role. Not only in the indirect sense which as we have discussed during the privatization process of Turk Telekom and all its assets by the government but also in a very direct manner: The bureaucratic elite and the political government in Turkey directly appears as an actor that controls the private market through legal regulations, privatizations, fiscal policies and coercion on the internet. Especially during the last decade, the JDP government's suppression on oppositional media as a whole also was effective on the internet's content. In this period, many oppositional websites were censured and certainly after many political turmoil, global social media websites were censured and it was thoroughly debated in public.

However, what is not covered in general is Turkish government's efforts to control the internet by using other methods. These include state operations to distain certain media groups and transfer it to a government supporter media group or person through very suspicious government tenders or to make huge amounts of public investments into a market and then privatize it to create a intended monopoly as for Turk Telekom.

In this respect, on political economy of the internet, when we analyze state and media relations, we formulated three different main types of internet market structures today. (Table 5.14) We took examples of US, China and

Turkey, which reflects three significant examples. When we look at China, we can see a huge and open government control on the internet, both on its infrastructure and content. US market is mainly run by companies and both the infrastructure and content of the market is highly private. China's internet market is largely seized by government and government corporations and the content is regulated and censured. Unsurprisingly, China's internet's large success and growth provides a good example for capitalism with an authoritarian spirit. (Gül, 2013)

Table 5.14. Three different types of internet industry structure in terms of state-media relations

Liberal Corporate Concentrated (USA, France etc.)	**Authoritarian Corporate Concentrated (Turkey, Brazil etc.)**	**Authoritarian State Concentrated (China, Iran etc.)**
-Market created monopoly	-State created monopoly for the corporations	- State maintains monopoly
-The user is free to visit most content	-The user is forbidden to reach some of the content	-The user is forbidden to reach
-Few corporations with cross-market ownership	-Connected to central corporations, dealers	-State corporations dominate the market
-Soft censorship, filtering	-Both soft and direct censorship	-Direct censorship

Source: Gül, 2013.

Turkey remains in between. While Turkey's internet and media in general is highly privatized, there is also government intervention. The government functions as a proactive regulator of the market and a sophisticated mutual relation between the capitalist class and bureaucracy is deeply established. In this respect, Turkey's internet content is pressured by both the private sector's endless lust for profits and the government's political ambitions. Oppositional movements in Turkey suffers from both of them and in this respect, censorship mechanisms are even harder to deal with in Turkey.

In the conclusion, we will try to shortly summarize our study and offer some insights for oppositional political movements in the conclusion about surpassing soft and direct censorship.

CHAPTER 6
CONCLUSION

In this study, we did not have the opportunity to develop an analysis that covers labor conditions and processes and labor organization on the political economy of the internet. The topic would be then too broad to make it a viable option, however, for future studies, it may be a great prospect to consider. For such a study, a brief field research would be necessary and it would also be out of the context of our study.

On the bright side, our study provides lots of information about the structure of the new media and its significant characteristics. According to these, we can conclude that the internet does not bring a new life, yet enhances and strengthens capitalism with many new possibilities. The first few years' uncontrolled and unfettered digital atmosphere resulted in an unnecessary appreciation and enthusiasm by many, yet the current tendencies of the market seem to provide us clues so that the internet may actually end up worse than traditional media.

The internet is also not only the 'virtual sphere'. Today, the internet's physical structure is tenfold larger in its economic values and infrastructure than many 'real' industries. Because of this, the internet can only be studied with reference to both its physical and virtual existence. For this reason, the internet studies forces us to reconsider that a healthy critical approach towards media needs to combine political economy with cultural studies, more than ever

today, the industry structure penetrates into content, control and regulation of the internet. In this respect, we tried to represent a model that brings political economy of communications and critical theory together.

According to this approach, this study proved that the internet carries many inequalities. In terms of type of inequality: internet's ownership structure, the means to access the internet, the ability to produce information and use the internet and the capacity to produce information and control the content of the internet can be counted. In terms of its subject, two main categories, national and global inequality exists. In both of these, we can find inequalities between social classes, gender, age, sexual orientation, region etc.

In this respect, the internet globally reappears as a very imbalanced media form today. Unimaginably when compared to traditional corporate media, the internet today is extremely central. The vast majority of all companies are U.S. oriented and unstoppably rich. Most success stories in the majority of countries' internet industries end up being acquired by these global giants.

At this point, when we look at Turkey, we can see a certain level of technological and economical dependency in the internet industry from the very early days. From the establishment of first backbone network, MNCs have been existent in Turkey's internet industry. However, government institutions had the ownership of those networks eventually after being built for a certain amount. Towards the new millennium, Turkey's internet industry had arguably many small and middle scale active firms in many fields. This is where the JDP government comes in. After they've seized the government in 2002, privatization of vital government institutions in terms of the internet started to

be planned of being sold. In this respect, the profitable public institution Türk Telekom was acquired by a Saudi Arabian communications company. The interesting part is, the institution has been made the absolute monopoly in many different sectors on internet and record amounts of public investments to establish a much larger network were made just prior to being privatized. Inevitably, this ended up in an amazingly low tender price of 6,55 billion $ and caused a corporate monopoly in Turkey's local market. In this respect, even still today in Turkey the government has primary responsibility for the monopolistic structure of Turkey's internet infrastructure and services market.

Today, a similar story can be seen in other segments of the industry as well. Highly profitable sectors are very likely to be acquired by global corporations. We have covered many examples of such transactions. Except for the hosting companies, we have also seen that in Turkey's internet market today, even if there are some Turkey-based corporations like Doğan Holding who is still very important, all the markets are very highly concentrated.

Turkey is a double-sided case in terms of state's activities and regulations towards the internet. On the one hand, the government is more than eager to privatize and invite global companies into the industry, yet it is not very tolerant against opposition of any kinds. In this respect, there appears to be a highly mutual relation between the government and the media sector. The government isn't concerned to use its political and legal power to eliminate oppositional internet media and 'undesired' material. In order to regulate the media industry, the government very often uses legal procedures to ban and suspend many websites and this is a very common topic in Turkey's public debates. However, this is not the only way to control media. JDP government

today places its supporters into the media and especially the internet media which its largely important because of its effect and range. These actions by an authoritarian government understanding not only creates its own media groups or seize their opposition, but results in an unhealthy situation which leads to even more pressure on the media and producing mainstream content.

This portrait corners the oppositional and anti-hegemonic media in a double-size pressure. On the one hand, the increasing corporate hegemony and on the other hand, government oppression is a growing problem for Turkey's oppositional political movements.

What we have discussed should not be understood as hopelessness. On the contrary, we believe that an anti-hegemonic and anti-corporate struggle in today's world can't exclude the internet as a frontier of struggle. For this reason, however, we argue, that establishing websites are very weak efforts to struggle with this gigantic conglomerate structure. In this respect, to be able to truly free on the internet today, oppositional movements need to organize on both sides of the equation, which means that a struggle over the new media should be a struggle for both the physical and virtual spheres. Fuchs makes a calls for the same struggle where he adds: "for the creation of non-commercial non-profit alternatives that altogether escape, sublate and struggle against the commodity form." (Fuchs, 2012b: 703) In this respect, the struggle with global capitalism is the struggle with commodity form itself. By this, we obviously propose that an anti-capitalist internet effort today has to be free, collective and participative.

On the physical side of the internet, there are certain elements which require either state authority on the legal side, and there are certain elements which require great amounts of capital accumulation. These are backbone infrastructure, telecommunication operating, hardware and e-bureaucracy. These are for the foreseeable future not viable options for such an effort. However, it is possible build data servers, hosting services, internet service providing(at least for a small network) without any fees and very small running costs. To be able to withstand against the internet giants today will start with disrupting the great cross-market chain and we think this is a very promising start.

Similarly, on the content side of things, again, there is much work to be done, and are certainly easier. Instead of personal blogs, today, oppositional movements should create digital games for the millions of people who spend hours on them every day. Search engines, which do not rank commercial products and featured content in the first page, but really helpful information. Open-source, useful and free software to get rid of the two brands which we are obliged to. The internet today is a great tool for both the few capitalists who run it and those billions of people who use it. A cooperative instead of competitive internet needs to be in place for its great influence of our everyday lives.

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APPENDICES

APPENDIX A: TEZ FOTOKOPİSİ İZİN FORMU

ENSTİTÜ

Fen Bilimleri Enstitüsü ☐

Sosyal Bilimler Enstitüsü ■

Uygulamalı Matematik Enstitüsü ☐

Enformatik Enstitüsü ☐

Deniz Bilimleri Enstitüsü ☐

YAZARIN

Soyadı : Gül

Adı : Serhan

Bölümü : Siyaset Bilimi ve Kamu Yönetimi

TEZİN ADI (İngilizce) : Political Economy of the Internet in Turkey: Digital Divide, Concentration and Content

TEZİN TÜRÜ : Yüksek Lisans ■ Doktora ☐

1. Tezimin tamamından kaynak gösterilmek şartıyla fotokopi alınabilir. ■
2. Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir. ☐
3. Tezimden bir bir (1) yıl süreyle fotokopi alınamaz. ☐

TEZİN KÜTÜPHANEYE TESLİM TARİHİ: 2.10.2015

APPENDIX B: TURKISH SUMMARY

Bu çalışmada, günümüzde internette sayısal uçurum, sayısal bölünme kavramlarının erişim ve kullanım becerileri olarak tanımlanması yerine daha geniş bir çerçevede, mülkiyet ve içerik yoğunlaşması dahil edilerek ele alınması gerektiği savunularak, internetin ekonomi politik bir yaklaşımla tartışılması hedeflenmiştir. Böylece, internete dair niteliklerin kapsamlı ve çok yönlü bir tartışması yapılarak, Türkiye örneği çerçevesinde internette merkezileşme, bağımlılık gibi konular dijital eşitsizlik kapsamında ele alınmış ve örneklendirilmiştir.

1. Kuramsal Çerçeve

İnternetin hayatlarımızda giderek artan ve muazzam bir öneme sahip olduğu bir dönemde yaşamaktayız. İnternet bugün gündelik hayatımızın vazgeçilmez bir parçası olup, yaşama deneyimlerimizi derinden etkileyen bir işleve sahiptir. Ancak bütün bu önemi, günümüzde internetin giderek artan ticarileşmesinin, internetin toplumsal birtakım sonuçlarının ve ekonomik yapısının göz önüne alınarak çalışılmasını daha da gerekli hale getirmektedir. Bu yönüyle, yapılan akademik çalışmalarda birkaç farklı yaklaşımın hakim olduğunu söylemek mümkündür. Olumsuz yaklaşıma göre, internet çoğunlukla toplumsal entegrasyonu zedeleyen, kişisel bilgilerin gizliliğini ihlal eden ve sansür gibi mekanizmaları açısından eleştirilmekte, olumlu yaklaşıma göre ise, internet verimlilik, bilgi akışındaki hızlılık gibi birtakım özellikleriyle tanımlanmaktadır. Bu tartışmanın bir diğer boyutu, internetin başat rol üstlendiği "dijital dönem"in, kapitalist toplumsal dönemin sonuna gelindiği, "enformasyon toplumu, bilgi toplumu/çağı, ağ toplumu, siber-toplum" ve buna bağlı olarak "bilgi ekonomisi,

sanayi sonrası toplum" gibi birçok adlandırmayla tanımlanan, bu dönemin yeni bir biçimi taşıdığı ve kapitalist toplumdan bir kopuşun olduğu iddiasıdır. Bunun karşısında ise, bu dönemin kapitalist toplumsal koşulları sürdürdüğü, bu dönemin bahsedilen kopuşu gerçekleştirmediğini savunan devamlılıkçı yaklaşımı görebiliriz. Fuchs ise, bu yaklaşımları sınıflandırırken açıklamasını ikinci bir eksene genişleterek, bu çerçevede nesnelci ve öznelci olarak ikinci bir ayrımın da yerinde olduğunu savunur. (Fuchs, 2012a: 3) Peki, internetin merkezi bir rolünün bulunduğu bu dönemde, bu yeni toplumsallık internet çerçevesinde bir kopuşu mu, yoksa eşitsiz bir dizi ilişkinin devamını mı sunmaktadır? Bu tezde bu konu işlenerek, internetin ilk ortaya çıktığı on yıllara nazaran giderek bu eşitsizlikleri barındıran ve büyüten bir işlev kazanmaya başladığı iddia edilmektedir. Teknolojik olumlayıcılık indirgemeci bir biçimde hizmet ve malların üretim, dağıtım, bölüşüm ve değişim aşamalarındaki hızlanma ve verimlilik kapsamından çıkamamakta, bu da ekonomi politik bir çerçevede internetin çalışılmasını daha da önemli kılmaktadır.

Yeni medyanın ekonomi politiği çerçevesinde, kapitalist toplumda teknolojik gelişmeye dair sunulan birçok yaklaşımın halen geçerliliğini koruduğunu ifade etmek mümkündür. Buna göre, ilk olarak belirtmek gerekir ki, sermayeyi geliştiren teknoloji değil, teknolojiyi geliştiren sermayedir. Bu, Marx'ın bize önerdiği kapitalizmin gelişme biçimini bugün de internette görmemizi imkanlı kılar: İnternetin ortaya çıkışı ve gelişmesi bunun açık bir örneğini teşkil etmektedir. Öte yandan, yeni medyayı da kapsayan bilişsel kapitalist gelişme, günümüz toplumsallığının yalnızca bir yüzünü ortaya koymaktadır. Küresel bütünselliğiyle kapitalizm bugün, birçok alanda benzer gelişme ve tekelci eğilimleri barındırmaktadır. (Fuchs, 2012a: 7) Zaten, kopuşçu yaklaşımlar da medya ya da yeni medyaya özgü değildir; hemen her tarihsel dönemde,

girdiğimiz bu dönemin "tamamen yeni bir döneme işaret ettiği" gibi iddialar ortaya atılmıştır. Bu, Amin'in belirttiği gibi kapitalizmin niteliksel olarak her zaman genişleyici ve küreselleşici (Amin, 2011: 24-27), Wood'un belirttiği gibi de ulus-aşırı bir niteliği olduğu için geçersizleşen bir yaklaşımdır. Hardt ve Negri, küresel enformasyonel kapitalizmi tanımlayan dönemi "imparatorluk" olarak ele alarak, küresel kapitalizmin, bütünsel bir hakimiyetiyle, merkezci, aynılaştıran karakteriyle, yeni ekonomik yapı, yeni üretim modelleri, yeni proletarya gibi kavramları bir arada ele alarak, rıza üretiminin çok daha etkin olduğu, derin bir hiyerarşiyi sunarlar. (Hardt ve Negri, 2003: 134-211) Bu çaba, oldukça önemlidir, çünkü bu tezin temel hedeflerinden biri de, internet çerçevesinde mülkiyet rejimiyle, içerik ve kullanıcı tercihleri gibi kavramlar arasında bir köprü kurmaya çalışmaktır.

Bu açıdan önemlidir ki, eleştirel yaklaşımlar, ekonomi-politik ve eleştirel teori çerçevesinde iki uçta toplanarak, medyanın ekonomisi ile içeriği kopuk biçimde ele alınmaktadır. İnternete dair yapılan çalışmaların çoğu ya teknik incelemeler, mühendislik alanı gibi konularla sınırlanmakta, ya da internet sitelerinin metinleri, internette kullanıcı sayıları gibi verilerden ibaret kalmaktadır. Bu da çok yönlü ve isabetli bir kavrayışı zora sokmaktadır. Halbuki, iletişimin ekonomi politiği ile eleştirel teori, birbirlerini yadsıyan değil, tamamlayan bir nitelik taşımaktadır. Ekonomi politik yaklaşım, bilişim ürününün niteliğini, içeriğini ve özgünlüğünü dışlamaz, aksine onun ekonomik süreçlerine ışık tutarak bilişim ürününe ışık tutar. Öte yandan, Fuchs, eleştirel teoriye öncülük eden Frankfurt okulu kuramcılarının da her zaman bir taraftan Marx'ın ekonomi politiğin eleştirisini bir yandan taşıdıklarını savunur. (Fuchs, 2012: 695-7) Adorno ve Horkheimer'in kültür endüstrisi kavramı da, kapitalist mekanizmaların ideolojik yönüne dikkati çekmektedir. Bu çerçevede, eleştirel kuramın bireysel özgürlüğe

dair tartışması, bir endüstri olarak kapitalist kültüre karşı bir yön barındırmaktadır. Daha sonraları Smythe'ın bu izlekte sürdürdüğü tartışma da benzer biçimde, kültür endüstrisini kapitalist yapının devamı ve gelişmesi ve sadakat üretme mekanizması olarak ele alır. (Smythe, 1994: 250) Bu çerçevede, Fuchs, önemli bir çıkarım yaparak, bu yaklaşımların birbiriyle zıt değil tamamlayıcı olarak ele alınması gerektiğini ifade eder. (Mosco, 2009) Benzer biçimde Murdock, kapitalist medyayı anlamak için ideolojinin eleştirisi ile ekonomi politiğin bir dengesinin sağlanması gerektiğini savunur. (Murdock, 1978) Bu çerçevede, biz de bu çalışmada, internet özelinde medyanın ekonomik alanı ile kültürel ve metinsel içeriği arasında bir bağ olduğunu savunmayı hedeflemekteyiz. Böylece günümüzde internet endüstrisinin ekonomik yapısını ele alarak, bunun internetteki popüler web siteleri, kullanıcı davranışları vb. ile bağlantılı kavranması gerektiğini söyleyebiliriz.

Bu doğrultuda, medyanın talep yaratma, tanıtım ve promosyon, meta ve hizmetlerin hızlı dolaşımı gibi işlevleri göz önüne alındığında, internetin oldukça etkin bir medya biçimi olarak önümüze çıktığını görebilmek mümkündür. Böylece, günümüzde internet gerek dünyada, gerekse Türkiye'de hem bir üretim aracı işlevi görürken, öte yandan da kimliğin, yeni duyguların, ilişki ve aidiyet biçimlerinin ve ilgi alanlarının şekillendirildiği bir nitelik de taşımaktadır. Bu da tam olarak La Haye'nin genel olarak medya ve iletişimi tanımladığı biçimle örtüşmektedir. (La Haye, 1980: 29) Benzer bir yaklaşımı çok daha önceden Marx'ın ortaya koyduğunu söyleyebiliriz. Marx, toplumun maddi iktidarını elinde bulunduran sınıfın, onun entelektüel iktidarını da yönettiğini, maddi üretime sahip olan sınıfın, kültürel üretime de hakim olduğunu ifade etmiştir. (Marx, 2004: 64) Bu da, bizim tartıştığımız çerçevede internette kullanıma sokulan içerik türlerinin, internetin ekonomik yönü tarafından çok

yönlü olarak etkilendiği iddiasına denk düşer. Böylece, internetin bu niteliği, aslında epey önceden beri var olan bir altyapı-üstyapı tartışmasını da içermektedir. Burada önemli olan nokta, bu ilişkiyi incelerken, Garnham'ın bizi uyardığı iki tuzağa düşmemektir, bunlardan birincisi "ekonomik indirgemecilik", ikincisiyse "ideolojik seviyenin kendiliğindenliği" olarak ifade edilmiştir. (Garnham, 1990: 24-54) Bu çerçevede, internetin altyapı-üstyapı ilişkisinde internetin ekonomik alanı ile kültürel ve ideolojik alanı arasında bir bağlantı kurmak önemlidir.

İletişimin ekonomi politiği altyapı-üstyapı ilişkisi çerçevesinde değerlendirildiğinde, iletişimin eleştirel bir ekonomi politik çözümlemesi 3+1 formülü olarak tanımladığımız alanları ele alır ve tartışır. Bunlar, ekonomik alanda(altyapı) 1. mülkiyet rejimi (iletişimin mülkiyet ve pazar yapısı, kâr, gelir, ciro vb.) 2. Emek örgütlenmesi (emek gücünün hiyerarşik yapılanması, emekçinin metaya karşı konumu, işyerinin ilişkili olduğu alt ve üst yapılanmalar) 3. Emek süreçleri ve koşulları (emek ücretleri, işyerindeki çalışma koşulları, çalışma saatleri, iş güvenliği, sosyal güvenlik ağları vb.); kültürel-ideolojik alanda ise kültür ürününün içeriği (niteliği, ideolojik çerçevesi, ürünün yapısı ve reklam gibi ek içerikler vb.) olarak özetlenebilir. İletişimin eleştirel ekonomi politiği, bu temel başlıkları inceleyip tartışarak, bu alanlardaki eşitsizlik mekanizmalarını ortaya koyar.

Bu çalışmada, tüm bu alanlara değinmek mümkün olmadığından, çalışmamızı internete dair ölçüm ve gözlemin daha mümkün olduğu ve oldukça önemli olan ekonomik alanda mülkiyet rejimi ile internetin içeriği ile sınırlayarak, internette mülkiyet yoğunlaşması, tekelci pazar yapısı ile tektipleşme, ticarileşme gibi endişeler gündeme getirilmektedir. İnternete dair literatürdeki çalışmaların

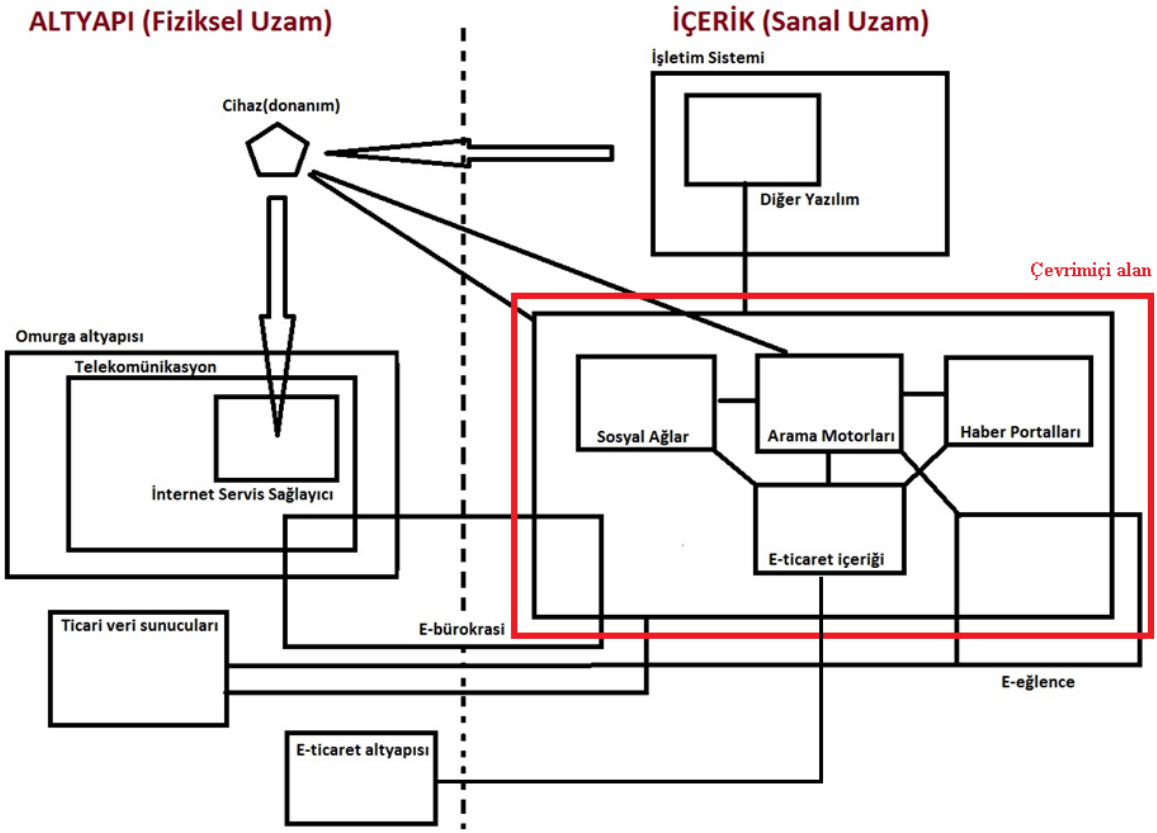
büyük çoğunluğu bilgisayar mühendisliği disiplininde ele alınarak, internetin sosyo-ekonomik yönü yeterince tartışılmamaktadır. Böylece, bu çalışma, internetin sosyal ve ekonomik yönlerine dair bir tartışmayı içererek farklı bir yaklaşım sunmayı hedeflemiştir. Bu çerçevede, çalışmamızın eşitsizlik üzerine yaptığı vurgu, etik endişeleri de barındırmaktadır.

İnternetin teknolojik indirgemeci biçimde yalnızca mühendislik çerçevesine sınırlanması, internete dair varlıksal bir sapmayı da taşır: İnternet, günümüzde, birçok çalışma ve yaklaşımda "sanal alem" olarak tanımlanmaktadır. Halbuki, internetin varoluşuna dair fiziksel uzam, muazzam ölçüde büyüktür. İnternetin üzerine kurulduğu ağ yapılarından, kullanıcıların internete eriştikleri cihazlara, internetteki devasa miktardaki verilerin saklandığı sunuculardan, telekomünikasyon işletmeciliğine kadar birçok fiziksel yanı bu yaklaşımda göz ardı edilmektedir. Bu çerçevede, internetin bir yandan fiziksel uzama bir yandan ise internetin içeriği olarak tanımladığımız sanal uzama sahip olduğunu söyleyebiliriz. Metodolojik olarak, internetin yapısını ortaya koymayı amaçlarken, bu iki uzamı da alt bölümlere ayırdık. Fiziksel uzam; omurga altyapısı, telekomünikasyon, internet servis sağlayıcıları (İSS), ticari veri sunucuları, donanım, e-ticaret altyapısı ve e-devlet altyapısı olarak 7 bölüme ayrılmıştır. Sanal uzam ise, yazılımlar(işletim sistemi(İS), diğer yazılımlar), arama motorları, sosyal ağlar, haber portalları, e-eğlence, e-ticaret siteleri, e-devlet siteleri olarak yine 7 bölüme ayrılmıştır.

Tablo 1. İnternetin fiziksel ve sanal uzamı

Fiziksel	Sanal (İçerik)
Omurga altyapısı	Yazılım (İS, diğer yazılım)
Telekomünikasyon	Arama motorları
İnternet Servis Sağlayıcı (İSS)	Sosyal ağlar
Ticari Veri Sunucuları	Haber portalları
Donanım	E-eğlence
E-ticaret altyapısı	E-ticaret siteleri
E-devlet altyapısı	E-devlet siteleri

İnternete erişmek için, kullanıcı ilk olarak bir cihaza ihtiyaç duyar. Fiziksel bu bileşenleri donanım olarak ele alıyoruz. Cihaz, internete ulaşmak için servis sağlayıcıyla bağlantı kurar. İnternet servis sağlayıcı, bazı durumlarda telekomünikasyon işletmecisinden hizmet alarak hat kiralar. Bütün bu internet ağının üzerine kurulu olduğu bir omurga altyapısı mevcuttur. Kullanıcının cihazını kullanarak internete erişebilmesi için gerekli birçok yazılım vardır. Bunlar, işletim sistemi, tarayıcı, sürücüler vd. olarak özetlenebilir. Kullanıcı bu yazılımları kullanarak, internetteki birçok türde içeriğe ulaşır. Bu içerik, veri sunucularında depolanmaktadır. Yine kullanıcının cihazında, tarayıcı dışında internete bağlı olarak çalışan birçok uygulama bulunabilir. Bunlar arasında günümüzde her türden yazılımı, hatta e-devlet yazılımlarını da görebiliyoruz. Çok basitçe özetlediğimiz bu tabloyu Şekil 1'de gösteriyoruz.



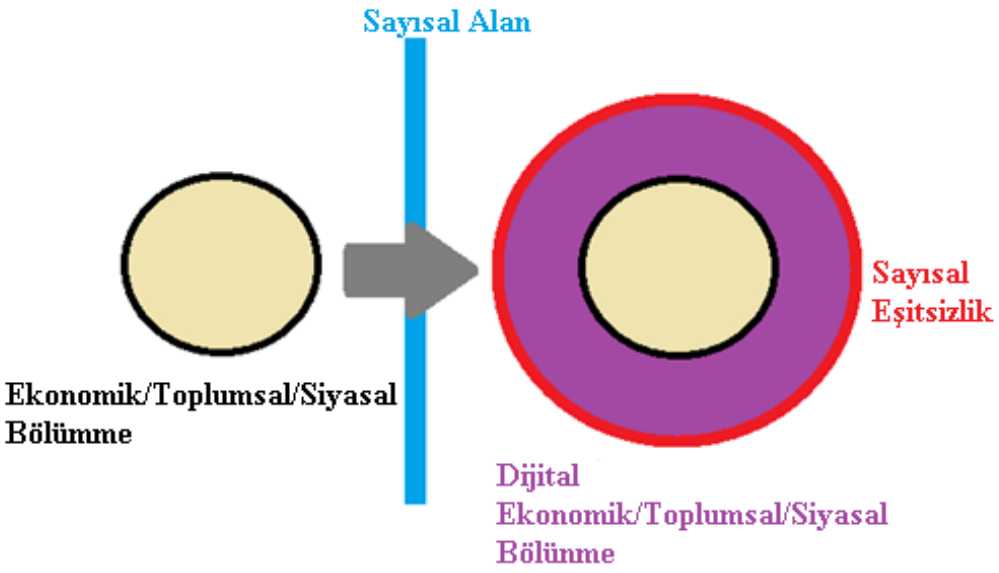
Şekil 1. İnternet şeması

Bu çerçevede, bu çalışmanın temel yöntemsel yaklaşımı, yukarıda sözü edilen kategoriler çerçevesinde Türkiye'de internet pazarını ayrı biçimde incelemektir. Burada sözünü ettiğimiz son husus ise, çalışmanın sorunudur.

İnternetin hayatımıza girdiği ilk yıllardaki iyimserlik, sonradan internete yönelik birtakım endişelere dönüşmüştür. Buna dair yaygın olarak tartışılan başlık ise 'sayısal uçurum', 'sayısal bölünme' kavramıdır. Sayısal uçurum kavramı, daha yaygın olarak ilk dönemde kullanıcıların internete erişim ve becerilerindeki eşitsizlik olarak ele alınsa da (US Department of Commerce, 1999, Castells,

2002, Attewell, 2001, Foster, 2000, van Dijk, 2006), sonraki dönemde internette eşitsizliğin sosyo-ekonomik birçok eşitsizliği içerdiği savunulmaya başlanmıştır. (Guillén ve Suarez, 2005, Hassani, 2006, Fuchs ve Horak, 2008) Bu yaklaşımların öncülü olarak ise, Pippa Norris görülebilir. (Norris, 2001) Tüm bu çalışmalarda, internetin gerçek hayattaki eşitsizlikleri taşıdığı ve yansıttığı savunulmaktadır. Bize göre, bu doğru ancak yetersizdir. İnternet bugün, gerçek hayattaki eşitsizlikleri yansıttığı gibi, ek olarak yeni eşitsizlikler üretmekte, ya da dijital uçurum, gerçek hayata dair uçurumları derinleştirmektedir. Ayrıca, hali hazırda var olan bir eşitsizliğin, dijital uçurum olarak ifadesi, birtakım sorunlar içermektedir. Bunun yerine, gerçek sosyo-ekonomik eşitsizliğe ek olarak, dijital dünyada oluşan bir dijital uçurumdan bahsedebiliriz. Her ikisinin toplamı ise, bizim ele aldığımız sayısal eşitsizliği oluşturmaktadır.

Sayısal eşitsizlik, ve bununla ilintili olarak sayısal bölünme, alanına göre, ulusal veya küresel(ulus-üstü, ulus-aşırı vb.) olarak iki ana alana, ve bunun ekonomik, siyasal, toplumsal gibi alt türlerine ayrılabilir. Söz gelimi, ulusal dijital ekonomik uçurum, ulusal dijital toplumsal uçurum, küresel dijital ekonomik uçurum ya da küresel dijital siyasal uçurum gibi. Böylece, gerek dijital uçurum, gerekse dijital eşitsizlik kavramları, gerçek eşitsizlik ve uçurumla çok daha sağlıklı konumlanarak, bir sorunsal olarak ele alınabilir.



Şekil 2. Sayısal Bölünme, Sayısal Eşitsizlik

Tüm bu çerçevede, akademik tartışmalarda genel bir inceleme yapıldığında internette dört çeşit dijital eşitsizliğin var olduğunu çıkarmak mümkündür. Bunlar:

1. İnternet alanlarının mülkiyetinde eşitsizlik
2. İnternete erişimde eşitsizlik
3. İnterneti kullanım becerileri ve bilgisinde eşitsizlik
4. İnternette bilgi ve veri üretiminde eşitsizlik

Böylece, internette örneğin küresel ekonomik/siyasal eşitsizlik çerçevesinde, merkez kapitalist ülkelerin bu 4 eşitsizliğin her birinde çevre ülkelere göre konumu ayrı ayrı tartışılabilir. Benzer şekilde, ulusal düzeyde, toplumsal sınıflar, etnik, dinsel, cinsel vb. gruplar da yine ele alınabilecektir.

Günümüzde internette her kullanıcının belli ölçüde özgürlüğe, özellikle de bilgi üretme özgürlüğüne sahip olduğu savunulmaktadır. Bu noktada belirtmek gerekir ki, bu doğru olduğu kadar internetin bugünkü durumunda geçersiz bir ifadedir. Bugün internet o denli büyüktür ki, bu çalışma boyunca göreceğimiz şekliyle, internetteki muazzam yoğunlaşma, bir yumuşak sansür mekanizmasının yalın gerçekliğe dönüştüğünü görebiliriz. Örneğin, Google'ın tek başına hakim olduğu arama motorunda ilk sayfalara girememek, devasa internet verisi içinde üretilen bilginin kaybolması anlamına gelir. Böylece, *etkin ve etkin olmayan üretilen bilgi* kavramlarını kullanmaktayız.

Tezin sonraki bölümünde, internetin bu tartışmalar ışığında küresel yapısı ele alınmaktadır.

2. Küresel Pazarda Yoğunlaşma

İnternete dair olumlayıcı yaklaşımların savlarından biri, internetin coğrafi olmayışıdır. Halbuki, internetin günümüzde küresel açıdan oldukça merkezi bir coğrafi durumu beraberinde getirdiği görülebilir. Netcraft'ın verilerine göre, dünyada en popüler 10 internet sitesinin 9 tanesi, 60 internet sitesinin ise 49 tanesi ABD'de bulunmaktadır. Tıklanma oranları, veri akışı gibi parametreler açısından ise durum daha çarpıcıdır. ABD merkezli Facebook, Google gibi web siteleri olağanüstü bir üstünlüğe sahiptir. (Alexa Rankings, 2013) İnternete erişim oranlarına bakıldığında, coğrafi olarak büyük bir uçurumu görmek yine mümkündür. Kuzey Amerika'da nüfusun 79%'u internete doğrudan erişebilirken, Afrika'da bu oran 15.6%'da kalmaktadır. (IWS, 2012) Patelis'e göre internetteki web sitelerinin 80% kadarı İngilizce dilindedir. (Patelis, 2000: 74-75) Özdemir'in sunduğu şekliyle, internetteki veri akışı çok büyük oranda

merkez batı ülkelerinden çevre ülkelere doğru iken, para akışı buna ters yöndedir.

Ekonomik bölüşüm olarak da durumun çok farklı olduğunu söylemek mümkün değildir. OECD verilerine göre, dünyadaki ilk 250 BİT(Bilgi ve İletişim Teknolojileri) firmasının çoğunluğu ABD(82) ve Japonya'da(49) bulunmaktadır. (OECD, 2012) Yine OECD verilerine göre, internet gelirlerinin yüzde 80'e yakını ABD ve Avrupa'ya gitmekte iken, toplam borcun yüzde 60%'tan fazlası gelişmemiş Asya-Pasifik ülkelerine aittir. (OECD, Temmuz 2012)

İnternette etkin olan firmalar açısından bakıldığında, farklı coğrafya ve kültürlerde olmasına karşın, dünyanın hemen her ülkesinde en çok tıklanan web siteleri, Google, Facebook, YouTube ve Amazon gibi ABD merkezli birkaç sitedir. İnternetteki yoğunlaşma muazzam ölçüde artmaktadır. Economist dergisinin ifadesiyle, Apple, Amazon, Facebook, Google ve Yahoo'nun elinde bulunan toplam net nakit para 2008'de 50 milyar dolar iken, 2012'de 200 milyar doları geçmiştir. Bu tablonun arkasında ne olduğunu görmek için bu firmalara biraz daha yakından bakmak faydalı olacaktır. Dikey, yatay ve çapraz mülkleşme yoluyla küresel ÇUŞ (Çok Uluslu Şirket)'lar, pazarda egemenliklerini pekiştirmektedir. Satın alım ve birleşme(acquisitions and mergers) faaliyetleri had safhaya ulaşmış ve her bir ÇUŞ satın alma departmanları oluşturmuştur. Amazon'un dikkat çekici satın alma işlemleri arasında, 1999'da imdb.com dışında, Joyo.com, Zappos.com gibi rakip e-ticaret siteleri görülebilir. Microsoft, 2011'de 8.5 milyar ABD doları karşılığında çevrimiçi iletişim programı Skype'ı ve 2007'de 6.3 milyar dolara bir online reklam firması olan aQuantive'i ve yüzlerce farklı firmayı satın almıştır. Tüm bu ÇUŞ'ler içinde en dikkat çekici olan ise şüphesiz Google'dır. Yalnızca 2010 yılında 48 ve 2011 yılında 79 firmayı satın alan Google'ın bu satın alımları arasında birçok dikkat çekici olandan söz

edilebilir. 2011'de, 12.5 milyar dolara Motorola Mobility'i satın alan Google, mobil telefon ve gözlük dahil birçok pazara da el atmıştır. AdMeld, Admob gibi rakip çevrimiçi reklam sitelerinin çoğunu satın alan Google, yine bir reklam firması olan DoubleClick'in satın alımını 3.1 milyar dolara gerçekleştirmiştir. YouTube gibi son derece önemli medya sitelerini de satın alan firma, bu medya sitelerinde böylece kendi reklamlarını da kullanıcılara sürekli olarak sunabilmektedir.

Küresel ölçekte internetin yeni yıldızı olan Google, kullanıcı başına elde edilen gelirde böylece en yakıp rakip firmaların dahi birkaç mislinden fazla gelir elde etmektedir. (comScore, 2012) Firmanın yıllık bilançosuna göre, 2012'de, 46 milyar dolardan fazla net kâr elde edilmiştir ve bunu 95%'i reklam gelirleridir. [108] Öte yandan ise, Google'ın bu başarısının ardında çok daha çarpıcı bir durum bulunmaktadır: Arama motorları içinde, küresel kullanıcıların 90%'ından fazlası Google kullanmakta, tarayıcılar içinde kullanıcıların önemli çoğunluğu Google Chrome kullanmakta, video siteleri içinde büyük çoğunluğu YouTube kullanmaktadır. (StatCounter, 2012) Böylece, çapraz-tanıtım yoluyla, bu devasa egemenlik giderek genişlemektedir.

ÇUŞ'lerin en önemsediği alanlardan biri olan çevrimiçi reklamcılık, internetin de temel gelir kaynağını oluşturmaktadır. Bunlar arasında, arama motoru reklamları çok önemli bir yer tutmakta, video reklamları giderek önem kazanmakta, mobil reklamcılık büyük bir hızla büyümektedir. Google gibi ÇUŞ'lerin bunu gördükleri açıktır. Çevrimiçi reklamcılık diğer reklam biçimlerine göre her sene en az birkaç misli fazla büyümektedir. Bu tabloda, dijital eşitsizlik çerçevesinde bakıldığında önemli noktalar mevcuttur. IAB 2013 Küresel

[108] http://investor.google.com/financial/2012/tables.html(

Reklamcılık Raporu'na göre, tüm dünyada çevrimiçi reklam gelirlerinin 72%'si ilk 10 firma tarafından paylaşılmaktadır. eMarketer'e göre ise, 2012'de tüm dijital reklam gelirlerinin 31.46%'sı tek başına Google tarafından alınmıştır. Hal böyleyken, çapraz mülkleşen internet deneyimleri de giderek daha çok reklamla dolmaktadır. Google'da cisimleşen yeni internet yapısı, bireysel kullanıcıdan firmalara dek hemen her şeyi kendine daha yoğun biçimde mahkum kılmaktadır. Öte yandan ise, internet hegemonya biçimlerinin en güçlü biçimde yeniden üretildiği ve pekiştirildiği bir alana dönüşmektedir. Küresel anlamda, internet merkezileşmekte, tekelci kapitalizmin rüyasını oldukça önemli ölçülere taşımakta ve yeni bağımlılık ilişkilerini ortaya çıkarmaktadır. Bu da Geray'ın sözünü ettiği şekliyle, bir "masaüstü sömürgecilik" ifadesiyle örtüşür. (Geray, 2005b: 186-187) Bundan sonraki bölümde, Türkiye'de internetin gelişimi ele alınarak, bu tablodaki konumunu detaylı biçimde incelemek için gerekli arka planı oluşturmak hedeflenmektedir.

3. Türkiye'de İnternet'in Gelişimi ve Eğilimleri

Dünyada internetin tarihi, 1960 ve 70'lere kadar uzanırken, esasen bugün bildiğimiz şekliyle 1983 yılında TCP/IP protokolü, 1986 yılında NSF'in altyapı geliştirmeleri, 1991'de Gopher motoru ve 1993'de WWW(World Wide Web) uygulamalarıyla kullanılmaya başlanmıştır. Türkiye, nispeten hızlı şekilde internet sürecine dahil olmuş, 12 Eylül 1980 sonrasında gelen Özal hükümeti dönemlerinde 1986 yılında X.25 hattı oluşturulmuş, 1987 yılında Ege Üniversitesi'nde ilk WAN(Geniş Alan Bağlatısı) oluşturulmak istenmiştir. 1992'de Hollanda ile ilk X.25 protokollü bağlantı gerçekleştirilmiş ve bugünkü anladığımız biçimiyle internet, 1993'de ODTÜ ile DPT ortak çalışmasıyla TCP/IP protokolünü kullanan ilk bağlantı yoluyla kurulmuştur. NSFNet'ten PTT'nin kiraladığı bir kiralık hat yoluyla kurulan bu bağlantıdan sonra, bazı üniversiteler

internet bağlantılarını oluşturmuşlardır. 1996'da, daha geniş bir ulusal ağ olan TURNET, 1997'de ise üniversiteler, resmi ve kurumları içeren ULAKNET oluşturulmuştur. ULAKNET, resmi kuruluşlara ait kullanım görürken, TURNET, yeni bin yıla girilen yıllarda, özel internet servis sağlayıcılar ve bireysel müşterilerce kullanılmaktaydı.

TURNET, 1995 yılında, halen bir devlet kurumu olan Türk Telekom'un ihalesi sonucu GlobalOne, Satko ve ODTÜ üçlüsü tarafından kurulmuş, ancak bu birliktelik bir yıl kadar sonra dağılmıştı. (Wolcott, 1999: 24) 1996 Ekim'inde hizmete açılan TURNET dönemi, Türkiye'de oldukça dikkat çekici bir dönemdir. Bu dönemde, onlarca özel, birçok ölçekli İSS ortaya çıkmış, 1999 yılında bunların sayısı 80'i bulmuştur. (Wolcott, 1999: 24-25) ixir, e-kolay, turk.net, Superonline bunlardan yalnızca birkaçıdır. Yüksek piyasa rekabetiyle anılan dönemde, TV'lerde İSS reklamları, birçok farklı kullanıcı paketi, promosyonlar, kampanyalar ve internet kafelerin hızla çoğaldığı(Gürcan, 2005) birçok gelişme görülmektedir. İnternete rağbet o denli hızla artmıştır ki, kısa sürede altyapı yetersiz kalmış ve 1999'da Türk Telekom birçok altyapı hamlesi yaparak TURNET'i kapatarak, TTNet altyapısına geçmiştir. 1996'dan 2005 yılına kadar devlet tarafından kurulan internet omurgası bu yıllar arasında muazzam sayıda özel müteşebbis tarafından internet hizmetinin sunulduğu bir ortam sunmaktaydı. BTK'ya göre, 2002'de, İSS pazarının 90.8%i özel İSSler tarafından ve yalnızca 9.2%si Türk Telekom tarafından paylaşılmaktaydı. (BTK, 2002) 2002 ile 2005 yılları arasında, çok büyük miktarda devlet bütçesi kullanılarak, genişbant ağ omurgası oluşturulmuş ve çevirmeli(dial-up) bağlantı yerini DSL bağlantıya bırakmıştır. 2002'de 7.8% olan DSL bağlantı, 2003'te 48.2%, 2004'te 89.3% ve 2005'te 96.8% oranlarına ulaşarak bu bağlantı çeşidini sunan tek İSS olan devlete ait Türk Telekom, pazarın mutlak tekeli

haline gelmiştir. DSL bağlantının bir aktif telefon aboneliği gerektirmesi(yalnızca Türk Telekom'a ait bir hizmet), yasal kısıtlamalar, muazzam devlet yatırımları(Çalışma Bakanlığı verilerine göre, 2001'de 1.3, 2002'de 1.8, 2003'te 2.3 ve 2004'te 2.7 milyar dolar) gibi nedenler burada önemli rol oynamaktadır. Tam da bu süreç sonunda, 2003'te Türk Telekom'un özelleştirilmesinin önünü açan bir dizi kanun yürürlüğe sokulmuş, kuruluşun tamamının özelleştirilmesi, yabancılara satışındaki sınırın kaldırılması, birçok vergiden muaf tutulması ve çalışanlarının diğer kuruluşlara geçirilmesi ile özelleştirilmesinin önü açılmıştır. 2004'te özelleştirilme kararı alınarak, kurum 2005'te özelleştirilmiş, hisselerinin 55%i yalnızca 6.55 milyar dolara Suudi Arabistan merkezli OGER Telekom tarafından satın alınmıştır.

Böylece, Türkiye'de devlet, internette kendi eliyle bir tekel oluşturmuş, kâr eden ve yalnızca devlet yatırımları satıs bedelini misliyle geçen bir kuruluşu özelleştirerek, Türkiye'de internet endüstrisindeki tek ve en büyük yerli kuruluşu da yabancı sermayeye teslim etmiştir. Sonraki bölümde, Türkiye'de internet endüstrisinin bugünkü durumunu başta ele aldığımız 14 kategori altında inceleyeceğiz.

5. Günümüzde Türkiye'de İnternet

Diğer her ülkede olduğu gibi, Türkiye'de de internetteki temel ekonomik alan internet reklamcılığıdır. Bu alanda tek tük başarı hikayeleri yakalamak mümkündür ancak bu pazarın genel yapısına dair bir bakışın gereksiz olduğu anlamını taşımaz. Bugün de Türkiye'de gerek internet reklam pazarında, gerekse diğer internet endüstrilerinde, yabancı sermayenin egemen olduğunu söylemek mümkündür.

Bugün internette kullanıcı deneyimleri, giderek artan biçimde reklamlarla dolup taşmaktadır. Burada, her bir tıklanma, reklam geliri üretmektedir, bu nedenle kullanıcı tercihlerinin, ziyaret edilme miktarlarının ve biçimlerinin önemi büyüktür. Reklamlar tıklandıkça hem değer üretmekte, hem de diğer ürünlerin promosyonunu yapmaktadır. IAB'nin raporuna göre, Türkiye'de internet reklamcılığı, çok hızlı biçimde büyümektedir, 2014'te çevrimiçi reklam harcamaları 1.4 milyar doları geçerek 20.5% oranında artmıştır. Reklam türleri açısından da küresel ölçeğe benzer biçimde ancak ondan daha yüksek oranda, video ve mobil reklamlar artmakta, ancak arama motoru reklamcılığı en büyük paya sahip olmaktadır. Türkiye'de çevrimiçi reklamcılık hizmeti veren firmaların tamamına yakını yabancı veya çok ulusludur. Bunların hiçbiri, reklam üreticisi ya da reklamın yayınlandığı kaynakların sahibi değildir. Çoğunlukla bu ajanslar, yerel müşterileriyle küresel reklam kartelleri arasında bir aracı rolü üstlenerek, reklam danışmanlığı gibi hizmetler sunmaktadır. Örneğin, bir müşterinin reklamlarını Facebook üzerinde sunmak ve paylaşmak, Google arama motoru üzerinde yayınlamak ve takip etmek gibi. Reklamları internetin fiziksel ya da sanal uzamı altında bir kategoriye sokmak pek mümkün değildir, çünkü reklamlar, kendiliğinden içerik olarak var olmayıp, diğer bir içerikle birlikte sunulur. Ayrıca, çevrimiçi reklam endüstrisi, birçok yönüyle gerçek reklam endüstrisiyle ilişkili hatta iç içedir.

5.1.Fiziksel uzam

Bir takım ülkelerde, omurga altyapısı ile telekomünikasyon işletmecisi ayrı kurum veya kuruluşlarındır. Gelişmiş ülkelerde, sıklıkla birçok omurga altyapısının özel firmalarca oluşturularak, telekomünikasyon firmalarına hizmet verdiğini görüyoruz. Daha önce belirttiğimiz üzere, Türkiye'de omurga devlet tarafından kurulup bir tekel durumu oluşmuştur. Bugün hala, büyük ölçüde

mutlak bir tekel olan Türk Telekom omurga altyapısını sunmaktadır. Fiber altyapı gibi alanlarda birkaç küçük ölçekli firma mevcuttur. Telekomünikasyon kuruluşlarına bakınca, Türkiye'de 4 adet telekomünikasyon kuruluşunun pazarı paylaştığı görülebilir. Bunlar, Türk Telekom, Turkcell, Vodafone ve Avea'dır. Özellikle 2G/3G ve 4.5G gibi gelişen mobil teknolojilerle, 3 özel firma internet servisi sunmaktadır. Bunlardan ilk ikisi net kâr ederken, Vodafone dengede, Avea ise zarar etmektedir. Avea, zaten Türk Telekom ile birlikte özelleştirildiği için OGER Telekom'a aittir. Turkcell'in büyük çoğunluğu yabancı sermayeye ait karışık bir yapıya sahiptir. Vodafone ise tümüyle yabancı sermayedir.

İSS alanında, pazarın 75.3%ü TTNet, 15.8%i ise Turkcell'e ait olan Superonline tarafından paylaşılmaktadır. Yine İSS pazarında yerli sermayenin neredeyse hiç olmadığını söyleyebiliriz. Dahası, özelleştirme sonrasında internet hizmetlerinin tekelci pazarın da katkısıyla çok da parlak olduğunu söylemek güçtür.

Donanım alanında, Casper, Exper gibi bir iki yerli montaj firması olsa da, pazarda çok küçük paya sahiptirler. Birçok farklı cihaz türü olduğu için ayrı ayrı ele almamız gerekse de, genel fikir vermesi açısından PC alanında, Türkiye'de en çok satılan cihazlar Lenovo 18.8%, HP 17.5% ve Dell 12.8% oranına sahiptir. Pazar neredeyse tamamen yabancı firmalar tarafından paylaşılmaktadır. (Gartner, 2015) Mobil cihazlarda durum daha da çarpıcıdır: IAB'ye göre Türkiye'de internete giren mobil cihazların 45.8%i Samsung, 32%si Apple, 2.73%ü ise LG tarafından üretilmiştir.

Ticari veri sunucularına bakıldığında, farklı olarak yerli sunucuların oldukça fazla olduğunu görüyoruz. Birçok İSS ve büyük yerli marka, veri sunucusu hizmeti sunmakta, ancak pazar yapısı gereği çok büyük oranda kâr etmemektedir. Hosting gibi hizmetler sunan çok sayıda yerli küçük-orta ölçekli firma

bulunmakta, bu pazar yabancı sermayenin dikkatini çekecek ölçüde bulunmamaktadır.

E-ticaret altyapısı'na baktığımızda, birçok mağazanın internet satışı gerçekleştirmesinin yanında, sadece internetten satış yapan hepsiburada.com, kliksa.com, hizlial.com gibi sanal mağazalar büyük depolar ve ağlar kurmuşlardır. E-devlet altyapısı alanında ise, 2002'den beri birçok proje kapsamında çok önemli ölçüde devlet yatırımı yapıldığını söylemek mümkündür. Her kurum kendi projelerini gerçekleştirmiş ve birçok e-devlet hizmetini sunmaktadır.

5.2. Sanal uzam

Yazılım alanında, Türkiye'de yerel yazılım firması çok az sayıda ve küçüktür. İşletim sistemleri açısından, Türkiye'de kullanıcıların 87% kadarı Microsoft Windows, 10.9%u Apple'ın iOS İS'ni kullanmaktadır. Mobil cihazlarda tüm cihazların 75.29%u Android, 18.94%ü ise Apple iOS kullanmaktadır. Tarayıcılarda ise, benzer şekilde Chrome'un tekelini görmekteyiz. (StatCounter, 2015)

Arama motorlarında, çoğulcu olmadığı için eleştirilen geleneksel medyanın rüyasında dahi göremeyeceği bir yoğunlaşma mevcuttur. Türkiye'de kullanıcıların 96.51%i Google arama motorunu kullanırken, ikinci sırada 2.28% ile Yandex gelmektedir. Benzer şekilde pazar tümüyle yabancı bağımlıdır.

Sosyal ağlar alanında, Türkiye bu ağların kullanımının oldukça yoğun ve çok olduğu bir ülkedir. İnternet kullanıcılarının 97%'si sosyal ağlara üyedir.(Global

Web Index) Bunların arasında Facebook, Twitter, Linkedin ve Instagram sayılabilir. Yerli sosyal ağlar pazarda neredeyse bulunmamaktadır.

Haber portallarında, yerli büyük sermayeye ait geleneksel medyanın bir uzantısının hakim olduğu söylenebilir. En çok tıklanan yerli haber portalları milliyet.com.tr, hurriyet.com.tr, haberturk.com, gazetevatan.com'dur. (IAB, 2013) Burada, Doğan medya grubunun yanı sıra, hükümete yakın olduğu için hızla yükselen sabah.com.tr, gibi birtakım siteleri de görebiliriz. Bunlar, geleneksel medyanın devleri olan Doğuş, Çalık ve Bilgin gibi gruplara aittir.

E-eğlence alanında, yazılım biçiminde çevrimiçi e-eğlence ile salt çevrimiçi eğlenceyi ayırabiliriz. Bunların arasında, dijital oyunlar, film, dizi ve müzik uygulamaları ve siteleri sayılabilir. Özellikle oyunlar alanında, benzer biçimde Türkiyeli oyun firmalarının ürettiği oyunlar pazarda oldukça silik kalmaktadır.

E-ticaret alanında en çok tıklanan siteler, sahibinden.com, gittigidiyor.com, hepsiburada.com vs. iken, en çok kâr eden e-ticaret sitesi büyük farkla hepsiburada.com'dur. Birçok Türkiyeli e-ticaret sitesi yabancı sermayenin dikkatini çekmiş ve satın alınmış ya da alınmaktadır. Türkiye e-ticaret pazarı oldukça hızla büyümekte ancak halen yerel firmalar önemli paya sahip kalmaktadır.

E-devlet alanında ise çok sayıda web sitesi mevcut olduğu gibi, birçok kamu kurum ve kuruluşu mobil uygulamalar yoluyla da hizmet vermektedir.

6. Son değerlendirmeler ve sonuç

Türkiye'de en popüler 20 web sitesinin 19 tanesi yöntemsel olarak belirlediğimiz bu 14 kategoriye girmektedir. (IAB,2015) Bu açıdan, Türkiye'de internetin incelenmesi açısından geniş bir alanı bu çalışmada ele almış olduk. Tüm bu yönleriyle, Türkiye'de internet endüstrisinin oldukça yoğun ve yabancı bağımlı bir sermaye yapısı olduğunu görmekteyiz. Buna paralel olarak, ticarileşen ve giderek tektipleşen bir internet içeriğinin de kullanıcının karşısına çıktığını ifade etmemiz yersiz olmaz. Türkiye'de internet alanında devletin aktif rolü yalnızca e-devlet hizmetlerinde kalmaz. Yabancı ülkelerin aksine, devlet internet endüstrilerinin kapitalist sınıfa sunulmasını sağlamış ve devlet bürokrasisi bu konuda birçok yöntemi benimsemiştir. Bu çerçevede, Türkiye'de internette alternatif ve muhalif girişimler çift yönlü bir baskı mekanizmasıyla karşı karşıya kalmaktadırlar. Hem piyasanın yumuşak sansürü, yabancı bağımlılığı gibi yollarla kullanıcıya ulaşmaları zorlaşmakta hem de doğrudan devlet müdahalesi ve sansürüyle zor mekanizmaları işlemektedir. Devletin sansüre eğilimli bu niteliği birçok çalışmada ele alınmıştır.

Bu nedenlerle, Türkiye'de alternatif, paylaşımcı ve toplumcu bir internet alanı, yalnızca web sitesi yaparak çok yol alamayacaktır. Hem içerik alanında her alanda daha etkin olunmalı ve kullanıcılara alternatif bir ürün kümesi sunulmalı, hem de bu baskı ve zor mekanizmalarından nispeten özgürleşmeyi sağlayacak altyapı, depolama gibi imkanların sağlanması hedeflenmelidir. İnternet bir özgürlük alanı haline gelebilir, ancak bu böylesine bir uğraşı ve bilinci gerektiren bir süreci elzem kılar.