

## VIEW / GÖRÜŞ

# Overview of the Information Society and the Informational City in Turkey\*

## *Türkiye’de Bilgi Toplumu ve Enformasyonel Kentlere Bakış*

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In the last fifty years, with the development of computer and communication technology the process of acquisition and dissemination of information easily has accelerated. Especially, in the last decade of the 20th century, the concept of information society has been changed a lot so that a new information era has begun.

Many countries in the world trying to keep up with this new era have made many innovations. Crucial turning points are formed in human life while passing from industrial society to information society.

With the information age, information revolution that will create future cities is creating enormous pressure on community and cities. With the effect of increasing the population social structures of the city have begun to transform as a social, spatial and cultural. As a result, a new concept called informational city is emerging.

Although information technologies underlines the fact of the city life is coming death soon, cities still have entertainment places, parks, workplaces, schools etc. Cities are seen as process rather than a form by scientists.

How cities will be formed in the future is one of the most popular topics recently. All these terms and ideas have revealed concepts such as informational cities, and the forma-

tion of the network city. This paper includes these concepts how it is described in studies which are conducted in the world, and especially in Turkey. The most common research questions about this topic are how Turkey has improved socially with the improvements of technology era? How informational innovations about cities are interpreted in Turkey?

The basic aim of this paper is to investigate deeply the effects of informational city transformation on the society in Turkey. Informational and networking urban city concepts are interpreted with the urban planning discipline approach. At the end of the study, opinions of scientists over the world and Turkey are evaluated and predictions are obtained about the city of the future

## INFORMATION SOCIETY

Several researches shown that the concept of “information society” was put forward before 1900’s. Marshall McLuhan uses fist the concept of “communication era” in 1962. Concepts of information society and communication era mentioned quite a few in world of literature in recent years. Researcher such as McLuhan (1964) Bell (1974), Toffler (1980), Masuda (198-1990), Drucker (1993), Freeman and Soete (1997), Weiner and Brown (1997), Castells (1996-2002), Headrick (2002) Webster (2002), Marshall (2003), Briggs and Burke (2004) argued this concepts in their writings. To mention these researches briefly;

McLuhan (1964:36) suggests in his 1964 work that; communication will be provided by electronic tools in information so-

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ciety and global cities will come up. In addition he emphasizes this new social structure will annihilate the mechanic era.

Daniel Bell (1976:46-49) indicates that, pro-industrial society bases on knowledge. He also thinks past societies limited by time and place and he notes a new structure will come up with a revolution in information and communication technology.

When the information society concept first emerged in fifty years ago: it is seen that scientists quite well depicted today's information age. By the 1980s Alvin Toffler (1981:356) argued that information society which to be show up as a result of the technology. By 1984, the Naisbitt (1984:22) was talking about the importance of computer technology in the information age.

In the 90's Japanese sociologist Yonelji Masuda (1990:4) said that basic dynamics is the material production in industrial society, so he said that the information society is very different from the industrial community. Then, In 1993, Peter Drucker (1993:18) similarly reflected that The basic economic resource was not capital, labor and natural resource in the information society and it was only information and would be information in the future.so what would be the production tool of the new society emerged.

Manuel Castells (1996:17) published in his book described that information was data which along with the new communication technologies organized and spread. As Naisbitt in Castells emphasized which computer was On the basis of the information age. Freeman ve Soete(1997:59) said that ICT was used to improve the quality of social life. According to them information society was participatory and holistic.

In the study Webster (2002) examined in the context of five different perspectives. These perspectives are technological, economic, occupational, spatial and cultural. While he was defining information, Headrick (2002) mentioned to support brain functions such as memory, speech and idea. He said "because our brain is limited, even though it is comprehensive". So information was needed. Headrick also mentioned that it is important to easily access to information.

Briggs and Burke (2004:281) explained information society that to shape society by means of communication. Gordon Marshall(2003:199) discribed information society as a society which uses tools of information and communication technologies commonly in order to facilitate national and international communication and to provide easy access to information.

Consequently,, if we examine the process year by year, researchers were talking about the same definitions. However In the 2000s, easy access to information and dissemination of information was pointed out. Today countries develop several innovations to improve information technologies. It's easy

to see that, the cities that can grow communication network can compete with the others, no matter how big their populations. Turkey shows an immense evolvment in recent years about information age.

## Comments on the Topic by Turkish Academicians

It is known that sharing and accessing information has been slower in developing countries. Although information society is at the global level in some regions of the world, some countries are still the dominance of industrial society or a traditional agricultural society. Turkey is a developing country and over the past decade, usage of information technology has shown a development.

## A Very Short Literature Review on the Topic in Turkey;

This case was started to be talked about at the beginning of the 90s so frequently. Sarıaslan (1992) designated that the driving forces of the information society are information and computer which are functioning information.

According to Ceyhun ve Çağlayan (1997:5) information society has caused to transpire a new class in society, in this sense, it has caused the disappearance of national borders. Following the development of the industrial revolution increasingly gained importance and along with technological knowledge which forms information revolution, information society occurred. As a result of this development, the emergence of the information society occurred.

Erkan, (1997:101) said that as products of the industrial society are produced in the factories, in information society use of information is produced depending on information networks and data banks. Sarıkan (1998:169) mentioned that transition to a knowledge-based economy which is capable of producing constantly, reproducible, and can be shared occurred with the spread of ICT and via the ICT. Also he said that the knowledge production forefront in information society.

At the end of the 90s according to Yılmaz, (1998) information society concept was used without questioning adequately. He mentioned that when the main problems like health, education, food, social security are evaluated with a true approach, it is difficult to say that we get into a new age in Turkey in aspects of information society.

In 2002, Tekeli (2002) argued information society and he said that in pre-industrial societies of people provided as using a very small amount of energy which was providing muscle power. In industrial society energy to spend on fossil fuels and machines are used so this greatly increased the amount of energy. In the information society the capability of people is developed with computer technology at the new area.

Dura and Atik (2002:176) explained that information society of infrastructure parameters of information collection, processing and distribution facilitating elements.

In 2003, Aktel (2003:239) said that realization of the information society had a central location. However, information society technologies are not produced adequately in Turkey. Kocacık (2003:6) said that Turkey was a country which started late the process of industrialization so it did not get benefited much from the development of the infrastructure of the information society. Also when we look at the process of industrialization in Turkey, it is easily observed that it is a semi-industrialized society. he also said that "Today's When Looking at entered into or about to enter into an information society, it seems that they can all produce technology"

According to Uçkan (2003:2) transition to the knowledge economy and information society in Turkey was a vital priority. He underlines that Turkey should quickly strengthen the competitive advantages and should increase national income and should provide a fair division. Also it should create sustainable employment and should improve the national education and training systems because however information which circulated freely and fairly shared created value.

In 2004, Rukancı ve Anameriç (2004) explained information society in which information was one of the elements of capital, raw materials, energy and man power of illustrate production. Also they said that information is used as raw materials and products in the economy and is shared. He described information society as information and communication technologies in all areas started to used.

In study Ökmen (2005: 544) talked about information society and globalization was intertwined at the same time they was an integral part of each other. Öztürk and Bayraktar (2009:1283) like lots of researcher said that the driving force of information society become computers. Aydoğdu (2013) argued that information society was based on rapid growth of knowledge and it included changes and developments which covering all aspects of urban life. So it was quite important for spatial and cultural structure of cities.

## INFORMATIONAL CITY IN TURKEY AND THE WORLD

Cities are being transformed with information age. This transformation affects the city as spatial, social and cultural. Castells(2008) said that this transformation was not a form, it was a process. Webber(1963) mentioned that developments in transportation and communication technology would manufacture urban settlements which would need much more space than in the past, varied and much more scattered. He also emphasized that communication was a key factor in the restructuring of urban form communication leeded to increase in the distribution of physical space and movement of persons. nevertheless important of Traditional urban pattern

work and residential areas was declining. Webber's idea was placeless urban areas has been built on.

Gordon ve Richardson (1997) argued that Advances in ICT increases the spread of urban areas. As a result they emphasized that physical proximity becomed unnecessary. Luithlen (1998) said that However, the city planning to be given a relatively slow response to this issue.because traditional planning focused physical dimension of urban form. So according to Levy(1990) Planners should be addressed much more perspective local developments.

What will happen to physically We live in a real city which include roads, building blocks, squares, business areas, subway, commuter? According to the theories regarding urban and urban planning, city was familiar the idea network.

Aydoğdu,(2013) mentioned that informational city was easily access to information for its citizens. in this context, using infirmation an communication tecnology People who living in this city can be easily access large libraries, cultural and social activities. Castells (2008:532) information age informed a new urban form which was a process.

Dvir (2005:2) depicted that informational city was planned to support the development and growth of knowledge. Accordin to Meşhur (2012) with information age occurred new urban area such as electronic bank, tele-city parts of the city, digital spaces and aerotopolis. Ojalvo(2008) said that cities was places which opened inside the virtual windows. Every moment; Along With the virtual window was changing the meaning and changing. Consequently Cities transformed place where the virtual and the physical so closely intertwined that they can not be distinguished .Along with the emergence of the information society, this time cities converted into the structure which we can not hold and can not dominated .So we increasingly locked a limited life and a limited environment provided sense of ownership and security.

## RATHER THAN RESULTS

In conclusion Information-based network systems are the main part of the production. Along with the development it was occurred which urban space inevitably transformed to network space. This transformation is expected to disrupt democracy and it is anticipated that polarize as a the information rich and the information poor. Along with Transition from industrial society to information society the cities convert into the network society. So with this transformation it is seen that will occur identity problems and social movements will increase, urban form and the culture of the society will change and perception will change. If we look in the context of City people still continue to live in places. However, all activities in the new network society organized around space of flows (Castells,2008) This ,places which have meaning completely change.Created new network occur cultural codes, less sharing new places and space.

Passes to the information society is being redefined the role of the city. Industrial mode of production based on the following in the information society Cities no longer produces and distributes information centers have become. Cities which to be effective Social and personal service in work and social life, propound values of the information society both cultural and lifestyle in the structural transformation. Along with Industrial production based on knowledge-based production followed by transition to a knowledge-based forms of production, cities remove from feature of being industry center.

## REFERENCES

1. Aydoğdu İ.B. (2013). Bilgi Kenti: Bir Değişimin Anatomisi. Bilgi Ekonomisi ve Yönetimi Dergisi / 2013 Cilt: VIII Sayı: II.
2. Bell, D. (1974). The Coming of Post-Industrial Society. London: Heinemann.
3. Briggs, A. and Burke, P. (2004). Medyanın toplumsal tarihi. İbrahim Sener (Çev.), izdüşüm Yayınları, Ankara.
4. Castells, M. (2002). The Information Age. Economy, Society and Culture. Vol I: The Rise of the Network Society, Cornwall: Blackwell.T.J.Ltd.
5. Castells, M. (2008). Enformasyon Çağı: Ekonomi, Toplum ve Kültür, Ağ Toplumunun Yükselişi, Çev.
6. Ceyhan Y. ve Çağlayan U. (1997). Bilgi teknolojileri Türkiye için nasıl bir gelecek hazırlamaktadır?. Türkiye İş Bankası Kültür yay. no361 dizi 10,5
7. Çukurçayır M.A ve Çelebi E. (2009). Bilgi Toplumu ve E-Devletleşme Sürecinde Türkiye. ZKÜ Sosyal Bilimler Dergisi, Cilt 5 Sayı 9, 2009, ss. 59–82
8. Dura, C. ve Atik H. (2002). Bilgi Toplumu-Bilgi Ekonomisi ve Türkiye.
9. Drucker F. Peter (1993). Kapitalist Ötesi Toplum. Belkıs Çorakçı (Çev.), İnkılap Kitabevi, İstanbul.
10. Dvir, R. (2005). Knowledge City, seen as a Collage of Human Knowledge Moments Knowledge Cities: Approaches, Experiences, and Perspectives. (ed) F. K. Carillo, London: Elsevier, pp. 245-272.
11. Erkan, H. (1997). Bilgi Toplumu ve Ekonomik Gelişme. Türkiye İş Bankası Yayını, Ankara.
12. Graham, S. & Marvin, S. (1997). Cities in the Real-Time Age: Telecommunications as a Paradigm Challenge to the Conception and Planning of Urban Space, Environment and Planning. A, 29, 105–127.
13. Headrick, D.R. (2002). Enformasyon çağı. Kitap Yayınevi, 1. baskı, İstanbul.
14. Luithlen, L. (1998). The Gravity of Information: A New Order of Cities and the Role of the Urban Planners, Journal of Urban Technology, 5(2), 61–77.
15. Masuda, Y. (1981). The Information Society as Post-industrial Society, USA: World Future Society.
16. Masuda, Y. (1990). Managing in the information society. Cambridge: Blackwell.
17. Manuel C. (2008). Enformasyon Çağı: Ekonomi, Toplum ve Kültür. Birinci Cilt, Ağ Toplumunun Yükselişi, çev. Ebru Kılıç, 2. Baskı, İstanbul Bilgi Üniversitesi Yayınları, İstanbul.
18. Marshall G. (2003). Sosyoloji Sözlüğü. Osman Akınhay ve Derya Kömürçü (Çev.), Bilim ve Sanat Yayınları, Ankara.
19. McLuhan M. (1964). Understanding Media: The Extensions of Man, Routledge and Kegan Paul, London.
20. Meşhur Alkan, H. F. (2012). Bilgi ve iletişim teknolojilerinin (BİT) mekânsal değişime olan etkisinin kent ve bölge planlama disiplini açısından irdelenmesi. International Journal of Human Sciences [Online]. (9)2,30-60.
21. Naisbitt, J. (1984). Megatrends. New York: Warner Books.
22. Webber, M. (1964). The Urban Place and the Nonplace Urban Realm. in: J. M. Dyckman, D. L. Foley, A. Z. Guttenberg, W.L.C. Wheaton, and C. B. Wurster (Ed.), Explorations into Urban Structure. Philadelphia.
23. Ojalvo, R. (2008). Enformasyon toplumunda kentte olmanın yeni biçimleri ve kent anlayışının dönüşümü. Yüksek Lisans Tezi, İTÜ Mimarlık F. Kütüphanesi.
24. Tekman, E. (2002). Enformatik sistemler ve Bilgi Toplumu” Bilgi Toplumu Geçiş: Sorunsallar/görüşler/yorumlar/eleştiriler ve tartışmalar. Türkiye Bilimler Akademisi Yayınları.
25. Öktem, MK. (2004). Bilgi Teknolojileri ve Kamu Yönetimi, Kamu Yönetimi Gelişimi ve Güncel Sorunları. (Ed., M. Kemal Öktem - Uğur Ömürgönülşen), İmaj Yayınevi, Ankara.
26. Rukancı, F. ve Anameriç H. (2004). Bilgi Toplumu ve Toplumun Bilgilenmesine Kütüphanelerin Rolü. Kütüphaneciliğin Destanı Uluslararası Sempozyumu Bildiriler.
27. Sarıkan H. (1998). Teknoloji yönetimi. Desnet yay.
28. Tekeli İ. (2002). Bilgi toplumuna geçerken farklılaşan bilgiye ilişkin kavram alanı üzerinde bazı saptamalar Bilgi Toplumu Geçiş: Sorunlar Görüşler Yorumlar Eleştiriler ve Tartışmalar. Türkiye Bilimler Akademisi Yayınları.
29. Toffler, A. (1980). The Third Wave. USA: Collins.
30. Uçkan, Ö. (2000). 21. Yüzyılın ilk dünya gösterisi: Expo 2000. Domus m, s: 6, Ağustos-Eylül, sf. 96.
31. Webster, F. (2002). Theories of the Information Society. London: Routledge.
32. Weiner, E. & Brown, A. (1997). Insider's Guide to the Future. USA: Boardroom.