

## **Diffusion of Twitter in Turkey**

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#### ABSTRACT

Since its penetration in people's lives, Web 2.0 has become a rapid success in terms of diffusion. Social networking, which is among what Web 2.0 offers, is one of the top activities of millions of people on the Internet. Twitter is one of the most used microblogging platforms. It was first founded in 2006; however, was introduced in Turkey in 2011 after the addition of Turkish language support. It became one of the most used platforms in Turkey in a relatively short time. The aim of this study is to explain how Twitter has diffused and become a success in Turkey using Rogers's diffusion theory (2010). The diffusion of Twitter in Turkey is carefully analyzed using the four main elements of Rogers's theory which are the innovation, communication channels, time, and social system.

KEYWORDS: diffusion; Twitter; Turkey; social media; Web 2.0

### **A BRIEF HISTORY OF TWITTER**

Twitter is a microblogging platform allowing its users to send and receive information from/to the people who are on their 'follower' and 'followee' lists. In most online social networking sites like MySpace and Facebook, when people follow a friend, they are automatically followed by them. However, in the case of Twitter, a follower isn't necessarily followed by the followee in return (Kwak, Lee, Park, & Moon, 2010). It has 140 characters limit on its posts so the information in the posts should be neat and more carefully written to be brief and not to exceed the limit. Users can also post images, videos and external links apart from just sharing texts. About Twitter's history, no official information from the company itself could be reached. However; the following lines were excerpted from Nicholas Carlson's interview (2011) with the founders and the former stakeholders of the company Odeo on Business Insider magazine. It was first launched in 2006 by a group of friends in an apartment. They first set a podcasting platform called Odeo. However, later Apple announced his famous iTunes, which is also a kind of podcasting platform, to its users and this caused the friends to find other innovative ideas. The original idea of Twitter, as everyone agrees, belongs to Noah Glass; however, what made Twitter a reality, and what made it a big success is the Evan Williams's passion and faith in it. Williams was so passionate on it that he, later, bought all the shares of the investors who first put their money on the company Odeo and were reluctant to go on with the new company called Twitter. After two months of its launch, Twitter had only 5.000 users worldwide, nowadays it is measured by hundreds of millions.

Number of Twitter users, although sometimes decreased, has followed a rising trend from 2010 to 2017 worldwide (Figure 1).





**Figure 1:** Number of monthly active Twitter users worldwide from 1<sup>st</sup> quarter 2010 to 3<sup>rd</sup> quarter 2017 (in *millions*) (Statista, 2017a).

# SOCIAL NETWORKING SITES IN TURKEY

Although there is no certain definition to 'social media' because every different networking site has its own unique specifications and content, the most accepted one is from Kaplan and Haenlein (2010): "Social media is a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user generated content." (p. 61). Among social media technologies are social networking sites, wikis, blogs, and online photo and video sharing sites. The most distinct feature of social media sites is the opportunity for the users to share and contribute with their own ideas and experiences.

After the foundation of Web 2.0, Internet users weren't satisfied with the traditional media and sought ways to express their existence. Social networking sites are one of the solutions to this seeking. In Turkey, the situation is not different compared to the rest of the world. Interactive, and user-generated social networking sites like Wikipedia, Myspace, Facebook, Frendster, Flickr, Twitter, Friendfeed and YouTube have become popular in a very short time period in the world and also in Turkey (Büyükşener, 2010, p. 3). Users of such social networking sites have enjoyed and gratified the features like sharing their experiences, photos, videos, status updates, and following the latest updates on their web of friends and acquaintances.

According to Turkish Statistical Institute (TurkStat) (2017a), which is an official governmental institute responsible for collecting and analyzing data regarding a wide range of social and economical topics, households with access to the Internet has risen from 7% in 2004 to 42.9% in 2011, and to 80.7% in 2017. In the same statistics report, it is explained that Internet usage has risen from 18.8% in 2004 to 45% in 2011, and to 66.8% in 2017. The data show us that Turkish people adopted the Internet rapidly in a very short time span. In another statistics report published by TurkStat (2017b) the individual activities of users are listed in Table 1 below:

Table 1: Internet activities	of individuals	s who	have accessed	l the Internet in th	e last 3 months (June, July,
		A 1	• ,	0017	

Individual Purposes of Internet Use		
Participating in social networks (creating user profile, posting messages or other contributions)		
Seeking health-related information (e.g. injury, disease, nutrition, improving health, etc.)		
Reading online news / newspapers / news magazines		
Finding information about goods or services		
Telephoning over the Internet / video calls (via webcam) over the Internet		
Uploading self-created content (text, photos, music, videos, software etc.) to any website to be		
shared		
Sending / receiving e-mails		
Internet banking	35,4	



Selling of goods or services, e.g. via auctions (e.g. eBay)		
Posting opinions on civic or political issues via websites (e.g. blogs, social networks, etc.)		
Using services related to travel or travel related accommodation		
Looking for a job or sending a job application		
Taking part in on-line consultations or voting to define civic or political issues (e.g. urban planning, signing a petition)	7,3	
Participating in professional networks (LinkedIn, Xing, etc.)		

As can be understood from the chart above, Internet users in Turkey prefer to 'participate in social networks such as creating user profile, posting messages or other contributions' with a percentage of 83.7 which surpasses everything on the list. However; bearing in mind that social media platforms give the opportunity to their users to seek information on a wide range of topics, have voice and/or video calls; find information on goods or services through the pages of corporations on the network; read the news on the pages of news organizations; upload contents like videos, photographs, status updates; and participate in political and civic discussions, Internet users don't need any other platforms to fulfill their needs online in Turkey.

### **Twitter in Turkey**

In this part, we are going to explain the diffusion of Twitter in Turkey using Rogers's diffusion theory. According to Rogers (2010, p. 10), "diffusion is a process in which an innovation is communicated through certain channels over time among the members of a social system.". The diffusion of Twitter in Turkey is explained below under the subtopics of the elements of the diffusion of innovations. The four main elements are as follows:

- 1. The innovation
- 2. Communication channels
- 3. Time
- 4. Social system

### The Innovation of Twitter

Though it is not possible to find out exactly when Web 2.0 started, it sure has changed the lifestyles and Internet habits of the users. Web 2.0 is a user-generated, collective, collaborative, easy-to-use, cost-effective, interactive platform online (Kamel Boulos & Wheeler, 2007; O'reilly, 2005). After the foundation of Web 2.0 innovation, wikis, instant messaging platforms such as Icq., torrent platforms letting the users to share files over the net of personal computers, and blogging platforms quickly gained popularity on the Internet (Kamel Boulos & Wheeler, 2007; O'reilly, 2005; Ugurlu & Ozutku, 2014). Among all the opportunities that Web 2.0 has offered, one is the most popular in Turkey together with the world: 'online social networking'. Social networking has always been around since the very beginning of the history of humankind for the purposes of communicating; sharing ideas, thoughts and feelings about daily life; building trust; and education (Safko, 2012, p. 10). However, in our age the tools to have social networking have changed: we use the Internet and the required hardware such as computers, smart phones, modems to access it.

"Micro-blogging refers to the activity that users broadcast brief text updates about small little things happening in their daily life and work activities, such as what they are reading, thinking, and experiencing" (Zhao & Rosson, 2009, p. 243). It quickly gained popularity among social networking platforms. Twitter is one of the most used social networking platforms in Turkey. Although it was not the first social networking platform in Turkey, what it promised to its users were new and innovative. According to Rogers (2010, p. 11), "An innovation is an idea, practice, or object that is perceived as new by an individual or other unit of adoption.". Twitter allows its users to instantaneously share information with a 140-character limitation on a person-toperson, specified group or global basis (Williams, Terras, & Warwick, 2013, p. 3), and in this type of communication RT stands for retweet, '@' followed by a user identifier address the user, and '#' followed by a word represents a hashtag (Kwak et al., 2010). The aforementioned features of this innovative microblogging platform were different and relatively advantageous for the prospective users in Turkey; however, the overall logic and control mechanism were similar to its precedents such as Facebook, which was introduced five years earlier in 2006 in Turkey. Apparently, micro-blogging users in Turkey accepted Twitter as an innovation and were searching for different platforms with new features to express themselves, so they gradually started to become members and active users of it. Twitter's being similar to precedents, easy-to-use interface, and relatively new features such as the use of 'hashtags (#)', 'retweet (RT)' and '@' for sharing made it an innovation in the eyes of the users in Turkey.



#### **Communication Channels for Twitter's Diffusion**

For an element to be diffused in a social system, it should be communicated through certain channels (Rogers, 2010). In the core of the diffusion process is the communication in which a certain user of the innovation shares his/her ideas on the innovation to others using some channels. These include mass communication channels like television, radio, newspapers and magazines, the Internet; interpersonal networks, papers delivered in national and international conferences (Isman & Dabaj, 2005, p. 62).

Among the communication channels, mass media, especially television, play a great role in the diffusion process of Twitter in Turkey. In every television series, news programmes, reality shows, and live broadcasts, the producers put hashtags (#) on the screen to make the viewers more interactive and passionate while watching. While watching the series on television or on the Internet, the viewers post their comments and ideas on Twitter using the hashtags supplied by the producers on the screen. Several studies (Akınerdem, 2012; Kazaz & Özkent, 2016; Ünür, 2016) have revealed the driving force of Twitter use while watching television series. At the same time, the official Twitter accounts of the television series announce the starting date and time and the relevant hashtags that are used or will be used during the series. Furthermore, the producers collect the comments and critiques of the viewers about the plot, characters, scenario and the language used (Ünür, 2016) and use them to enhance their productions. This method is effective because television series are the main prime time productions in Turkey, and 86,2% of the television viewers' main activity (Radio and Television Supreme Council, 2012, p. 26). Also, hashtag method is used in news programmes on television for the same purposes. As 93,7% of the viewers watch news programmes on television (Radio and Television Supreme Council, 2012, p. 26), the people feel a need to be part of the community as followers of the television programmes and eventually they create an account on Twitter, and the adoption process accelerates.

Although mass media channels are effective in diffusing the ideas to masses, the importance and effectiveness of interpersonal communication cannot be denied. Interpersonal communication is a face-to-face opinion or experience exchange between two or more individuals which supplies the prospective adopters with clarification and additional information from another individual who already adopted the idea (Rogers, 2010, p. 198). An adopter always has influence, depending on his/her social status and personality, on the people who are on their social networks, e.g. peers, colleagues, friends, neighbors, acquaintances. The increase in adoption is exponential, like a snowball.

In a study conducted by Jackson and Yariv (2006), the importance of interpersonal communication was revealed. They introduced some people with a new idea and followed the diffusion process among their neighbors. They found out that there is a threshold or 'tipping point' after which the adoption rate increases remarkably. It is best to describe with their words: "If a large enough initial group is selected then the behavior grows and spreads to a significant portion of the population, while otherwise the behavior collapses so that no one in the population chooses to adopt the behavior." (p. 3). Apparently, the diffusion of Twitter exceeded the threshold in Turkey, otherwise, it would not have been used by the 44% of the population (Figure 2).





**Figure 2:** Penetration of leading social networks in Turkey as of 3rd and 4th quarter 2016, by platform (Statista, 2017b).

## Time for Twitter's Diffusion

Every activity in human life takes time as the diffusion of innovations. "Time does not exist independently on events, but it is an aspect of every activity." (Rogers, 2010, p. 20). After Twitter was introduced in Turkey, the adopters have experienced an innovation-decision process which takes time to fully accept an innovation. The stages of this process are 1)knowledge, 2)persuasion 3)decision, and 4)implementation (Rogers, 2010, p. 163). The knowledge stage is the first stage of diffusion process where people are exposed to the innovation's existence and gains information on how it functions. Although it is not certain whether people need an innovation and adopt it or they adopt it just because they are aware of it, it is not our focus here (Rogers, 2010, p. 164). As in the case of adopting Twitter, people in Turkey started to become aware of the existence of it in 2011 when it introduced Turkish language support. Day-by-day, they gathered information on it through certain channels as aforementioned in the communication channels part. Generally, in a diffusion process, at the beginning, most people are reluctant to adopt the new idea because there is an uncertainty about how it functions and what the benefits and consequences are. However, as the number of adopters rises, lack of information and uncertainty decreases. Eventually, this leads to an even faster adoption rate.

In the persuasion stage, the individual actively seeks information and forms a positive and negative attitude towards the innovation. The relative advantage, compatibility, and complexity are important factors for the individual to accept the innovation (Rogers, 2010, p. 170). Twitter's being free, compatible, and easy-to-use interface and specifications have made the individuals to have a positive attitude towards it.

The decision stage occurs when an individual decides whether to adopt or to reject an innovation. After gathering the required information and lowering the uncertainty, the individuals pass to this stage. Innovations that can be trialed are more probable to be adopted. Most individuals having the chance to try an innovation chooses to adopt the innovation. Again, individuals have quickly adopted Twitter in Turkey mostly since it is free and trailable, so there is nothing to lose for the users.

In the implementation stage, the individual puts the innovation into use (Rogers, 2010, p. 174). In the implementation stage, the individual can still search for information on how to solve the operational problems he/she may have. The implementation period finishes when the new idea becomes an institutionalized and regularized part of the adopter's ongoing operations (Rogers, 2010, p. 175).

### Social System for Twitter's Diffusion

The idea of Twitter was created and introduced to world in 2006 and to Turkey in 2011 officially after the Turkish language support. Although Twitter has been open to access from Turkey since the day it was launched, the popularity of it in Turkey has skyrocketed from the day, 25.04.2011, it released Turkish language support. It can be said here that the release date of Twitter in Turkey is 2011 because for an innovation to be diffused



properly to any social system, it is important to take into account the values, norms, and lifestyles of the people in that system (Rogers, 2010). The first and maybe the biggest step for the diffusion of Twitter in Turkey was the language support.

The role of change agents in diffusion of innovations is very important. "A change agent is an individual who influences clients' innovation decisions in a direction deemed desirable by a change agency." (Rogers, 2010, p. 312). Change agents are responsible for the communication link between the change agency (Twitter Inc. in our case) and the potential adopters. Change agents can be teachers, public health workers, ministers, consultants and so on. However; in our case there is no change agency. As Rogers (2010) explains purely:

"Change agents would not be needed in the diffusion of innovations were there no social and technical chasm between the change agency and the client system. The change agency system is usually composed of individuals who possess a high degree of expertise regarding the innovations that are being diffused; change agency personnel may be Ph.Ds. in agriculture, medicine, or other technical fields." (p. 313)

The reason why there is no change agency in our case is because using Twitter does not require technical or academic expertise. Indeed, the main reason of Twitter's high rate of adoption lies under its simplicity.

There is a concept; however, that is confused with change agency: opinion leadership. While change agents undertake the duty of being professional information sources and problem solvers that have a direct relationship (most of the time they are paid for their efforts) with the resource system, opinion leaders are the individuals who are able to influence other people's opinions and attitudes informally (Rogers, 2010, p. 331). Opinion leaders are socially respected people, or sometimes institutions. Celebrities and politicians are the biggest opinion leaders in our case. As Jacobs and Spierings (2016, p. 2), having a Twitter account is considered as being modern by the voters and the politicians themselves. The most followed people on Twitter in Turkey are either politicians or celebrities. To illustrate, Recep Tayyip Erdoğan, President of Republic of Turkey, (<u>https://twitter.com/RT\_Erdogan?lang=tr</u> - accessed on 25.12.2017) has 12.1 million followers, and Cem Yılmaz, a comedian in Turkey, (<u>https://twitter.com/CMYLMZ?lang=tr</u> - accessed on 25.12.2017 ) has 13.7 million followers. In some cases, opinion leaders can be institutions. As mentioned before, the main activity of the people in Turkey on the Internet or in front of the television is following the news. In our case news institutions can be counted as opinion leaders. NTV, a Turkish news channel, (<u>https://twitter.com/ntv?lang=tr</u> - accessed on 25.12.2017) has 7,07 million followers on Twitter. Opinion leaders have a driving force on individuals to adopt Twitter use in order to follow the latest updates and not to fall behind the agenda.

### CONCLUSION

Diffusion is a process of spreading an innovation over time to members of a social system using certain communication channels. After the penetration of Web 2.0 in our lives, one of the main activities of people has become microblogging on the Internet. Microblogging sites offer people a self-expression using certain features of the available platform such as status updates, video and/or photograph sharing, and following and/or commenting on the latest updates of their friends and/or acquaintances on their personal social network. Twitter is one of the most used microblogging platforms in Turkey and worldwide.

Since it was introduced in Turkey in 2011, the adoption of Twitter has risen. Nowadays, 44% of the population of Turkey has Twitter accounts. In this study, the diffusion of Twitter in Turkey was explained using Rogers's diffusion of innovations theory. The diffusion process was analyzed in terms of four elements of Rogers's theory which are 1) innovation, 2) communication channels, 3) time, and 4) social system.

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