

The success factors of the Social Network Sites “Twitter”

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Abstract

The history of social network sites (SNSs) goes back to 1997 when the first SNS called Sixdegrees.com arose. A few years later, many other SNSs such as Myspace, Facebook and Hyves could attract millions of users. The most recent example is Twitter which could attract 105 million users in less than four years. Twitter's success triggers curiosity: what factors influenced Twitter's success? What motivates people to use Twitter? How can Twitter remain successful?

In this research, the success factors of Twitter are investigated from two perspectives: one from the business perspective and one from the user's perspective. In the business perspective, the factors which influence Twitter's success as a (business) organization are discussed. The organization evolution theory and the STOF model are applied as a theoretical framework for the business perspective. In the user's perspective, the influential factors which motivate people to use Twitter are addressed. In this part, the UTAUT model and the Tiger pleasure framework are used as the theoretical framework for the influential factors.

In the business perspective, experts' views are used for discovering the influential factors on Twitter's success in growing and the stabilized phase of its life cycle. The influential factors on the Twitter's success in the growing phase are: being the first mover, focusing on short messaging, faster way of communication, Twitter's usage by important people, openness, simplicity, being a new trend, satisfying a niche need.

There are several factors which will influence Twitter's stabilized phase of its life cycle. These factors are as follows: continuing PR activities, preventing technical problems and preparing technical structure for higher users volume, satisfying new demands by users, paying attention to the monetizing strategy.

Three generic processes of the evolution (variation, selection, retention) affected Twitter's success in its growing phase. In variation phase, Twitter tried, firstly, to differentiate itself as an SNS for various purposes. Users can apply Twitter for socializing, networking and navigation purposes. Secondly, Twitter used strategies such as simplicity, focus and openness in its variation phase to distinguish itself from other SNSs. In selection phase, Twitter responded to a certain niche need (the need for a faster way of communication) in the market by establishing an SNS based on the short messaging. In retention phase, Twitter selected the created features by its users (such as Tweet@ and Retweet) and its predecessors (options such as: Home, Profile, Finding people and etc) in online social networking.

Several factors from the STOF model influenced Twitter's success in its growing phase. Twitter targeted a group of people who are eager to communicate with their social networks through short messaging. Twitter created value proposition by providing its users both web-based and mobile

platform SNS. This increases the accessibility of Twitter. The ability to communicate in short messaging is also a value proposition which distinguishes Twitter's service from other SNSs. The easiness in the integration of Twitter with other services for various purposes also influenced Twitter's success in its growing phase. For instance, Twitter's option on the online newspapers sites make it easier for their readers to send the articles (news) to their social network(s).

In the user's perspective, several influential factors are discovered that influence Twitter's adoption by its users. These factors are related to the UTAUT model and the Tiger pleasure framework. A questionnaire is conducted among the SNSs' users to see which of the factors are the determinant elements in Twitter's usage. Based on the results from the questionnaire, the following factors are the most influential factors on Twitter's adoption by its users: effort expectancy, facilitating condition, playfulness, status updates (short messaging) and open culture.

In the monetizing strategy Twitter can use membership fee and advertising for revenue generation. According to the research results, the majority of the users do not oppose to a small amount of membership fee and a short one-off advertisement on their screens during their visit.

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Preface

During my study, I became interested in marketing communication. I decided to choose a research subject on how organizations and companies can be more successful using social media in their marketing communication strategies. When I was informed about a research project on social media in the Crossmedialab by Kees Winkel, I saw it as an opportunity to understand more about social media. Moreover, I had enjoyed working with the Crossmedialab in a previous research program called JUMP¹. Crossmedialab is as an ideal place for students like me to improve their academic research skills.

The proposed research subject was: what are the success factors of social media? After discussing the issue with Kees Winkel in a few sessions, we decided to narrow down the research subject into the success factors of a social network sites. We agreed to choose Twitter as the case study. The social media are a vast research area which cannot be included in a single research project. In fact, if we consider social media as a country, social network site are a province of the country and Twitter is one of the cities in the province. The novelty of the research subject appealed to me the most.

This research project was made less difficult because of the friends and colleagues who helped me in different ways. I would like to thank everyone who helped me with comments, discussions and tips to finish this research project. First of all, I would like to thank Dr. Harry van Vliet and Kees Winkel for giving me the opportunity to do this research in Crossmedialab and for their direct supervision and assistance in the content of this research. I also would like to thank Dr. Rogier Brussee for his input and assistance for the questionnaire and Ad Franzen for helping me with the SPSS program.

I would like to thank all Crossmedialab members who helped me by their critical insights and views, especially Erik Hekman, Jelke de Boer, Mathijs Rotte and Niniane Veldhoen who helped me with their views on the research and all small and big questions. Hanneke Ponten, my supervisor from HU, thank you for your comments and input. Nicole, thanks for being such a great friend.

Finally, René and Ton, thank you so much.

¹ A research program on various subjects for exchange and HU students

Introduction

Social network sites are one of the facilitators of social networks. They provide a platform by creating opportunities for interaction among the members of social networks. For example, Facebook is a social network site that facilitates its users to form networks and interact with one another. Despite the failure of social network sites such as Sixdegrees.com and Friendster, some of the social network sites are still growing very rapidly. For example, Facebook has reached more than 400² million users and LinkedIn³ has reached 66 million users. Another successful example is Twitter. Around four years ago, almost nobody was aware of the existence of a social network site called Twitter. Twitter is a mix of a social network site and a micro blogging service that enables its users to post short messages called Tweets, which consist of a maximum of 140 characters. Twitter has become an unprecedented success.

Twitter's co-founder Biz Stone, during his opening remarks in the Twitter chirp developer conference in San Francisco (April, 2010), showed that Twitter has reached 105,779,710 registered users (Figure 1). Twitter is in its growing stage; 300,000⁴ users are signing up per day. Therefore, one cannot claim that Twitter has reached the stabilized stage of its life cycle.



Figure 1: Twitter has 105 million registered users (<http://mashable.com/2010/04/14/Twitter-registered-users/>)

Research question

There are many parameters for a social network site to be called successful. In this research, the number of users is the parameter for the success of a social network site. In fact, it is important to know why so many people become a member of a social network site.

The main research question is: what factors influence the success of a social network site, specifically, Twitter?

Social network sites are a service for their users. At the same time, they are also a business that must follow specific business rules to be successful. That is why the influential factors behind the success of social network sites (e.g. Twitter) have been sought from two perspectives. In the first perspective, social network sites have been considered as a business. For this purpose, two subquestions will be answered by using the experts' view.

² <http://www.linkedin.com/>

³ <http://www.linkedin.com/>

⁴ <http://mashable.com/2010/04/14/Twitter-registered-users/>

The business perspective subquestions:

1. What business factors influenced Twitter's rapid growth?
2. What business factors will help Twitter to keep its stabilized position, if it is reached?

In the second perspective, the success factors of social network sites (e.g. Twitter) will be analyzed from users' (consumers) perspective. In this part, several influential factors on social network sites' (e.g. Twitter) usage have been formulated in subquestions. A questionnaire has been designed to answer the subquestions.

The following user's perspective subquestions are based on the UTAUT model:

1. Is there a relation between higher performance expectancy and the higher usage frequency of Twitter's users?
2. Is there a relation between higher effort expectancy and the higher usage frequency of Twitter's users?
3. Is there a relation between higher social influence and the higher usage frequency of Twitter's users?
4. Is there a relation between higher facilitating condition and the higher usage frequency of Twitter's users?
5. Is there a relation between higher entertaining character and the higher usage frequency of Twitter's users?
6. Is there a relation between higher expression and the higher usage frequency of Twitter's users?
7. Is there a relation between instant messaging and the higher usage frequency of Twitter's users?
8. Is there a relation between higher playfulness and the higher usage frequency of Twitter's users?
9. Is there a relation between higher assurance of privacy issue and the higher usage frequency of Twitter's users?
10. Is there a relation between higher constant contact and the higher usage frequency of Twitter's users?
11. Is there a relation between status updates (short messaging) and the higher usage frequency of Twitter's users?
12. Is there a relation between open culture (following and being followed by everyone) and the higher usage frequency of Twitter's users?
13. Is there a relation between online-offline relationship and the higher usage frequency of Twitter's users?
14. Is there a relation between mobile platform and higher usage frequency of Twitter's users?
15. Will the users leave Twitter, if they are charged for the service?
16. Are the users prepared to pay for the extra features provided by Twitter?
17. Do users oppose to a short and one-time presence of advertising on their screens during usage?

Research outline

This research comprises six main chapters. In the first chapter, the background of social networks of human being, social network sites and different categories of social network sites is briefly addressed. Thereafter, the definition of a social network site along with a section about Twitter will be presented.

In the second chapter the theoretical framework in this research will be addressed. The theoretical framework is divided into two sections: one from the business perspective and one from the user's perspective .

In the business perspective, firstly, social network sites' life cycle and the organizations evolution theory will be described. Secondly, the critical success factors of the STOF model will be discussed. The STOF model claims that there are several critical success factors for businesses to be successful. All the mentioned theories will be discussed in a theoretical framework and will be applied to the Twitter case in the result and analysis section of this research.

In the user's perspective section, the Unified Theory of Acceptance and Usage of technology (UTAUT) and the Tiger pleasure framework is presented. These theories have been applied to introduce several influential factors of the success of social network site from user's perspective . Based on the introduced influential success factors, several subquestions are posed to discover the motivations behind the users adoption of a social network site (e.g. Twitter). To answer the mentioned subquestions, social network sites' users completed a questionnaire.

The third chapter includes the main research question and the relevant subquestions for both business perspective and the user's perspective .

The fourth chapter will be allocated to the research methodology. In the first part, the research methodology will be explained for the business perspective (desk research and expert's view). In the second part, the research methodology for the user's perspective (questionnaire) will be explained in detail.

In the fifth chapter, the results from both business view (desk research and interviews) and user's view (questionnaire) will be analyzed and presented.

The sixth chapter will discuss the findings about Twitter's success factors. This chapter will also contain a reflection on what can be done to improve the quality of the future research in the same field, by mentioning restrictions and suggestions for future research.

1. Background: social network sites in a glance

1.1 History of social networks

Human beings have evolved as a social species and have consequently developed highly sophisticated social signaling and enforcement mechanisms that reward and enforce complex forms of cooperative behaviors (Clippinger, 2000, p. 9). Our ancestors, the primates, are the evidence of our social character. You might have seen them on discovery channel living in groups. We are social animals, as the sociologists say. There are other instances that reveal the sociality of human beings. Our family, group of friends, the city and the country where we live in and all other groupings show that we want to be in a social context. In fact, by living in a certain region, city and country, we form networks. Human beings want to live in networks of people. A research on world population (Population Bulletin, 2007) shows that more than 60% of the world's population will live in cities by 2030. There are many reasons behind this phenomenon, including the need to be in a social context.

Social networks are the grouping of people into the same community or groups on the basis of similar interests. People always try to form their own social networks. We go to pubs to meet and see our friends with whom we want to have quality time or to school where there is an educational social network in which we exchange new ideas and learn from our network. In fact, we live in different social networks depending on time and space. We are naturally interested in being in contact with our social networks. To form social networks, we need accommodations which make our social interactions possible. For instance, a pub provides a place for us to socialize with our social network or a bulletin at school allows students and teachers to interact within their educational social network. Online social network sites do the same by providing a platform without time and place restrictions for online social networking.

In fact, online social network sites are virtual platforms for our social networking. One of the main reasons behind the use of online social network sites such as Facebook, is that people tend to use them for their social interactions in a virtual world. The process begins by becoming a member of social network site and making a profile. The profile is the starting point for forming a network which mostly involves the real world contacts or inviting the contacts from other networks with the same interest to share thoughts and interact with each other. Social network sites try to be useful and help the members with different services to expand their networks.

1.2 A brief history of social network sites

Boyd and Ellison (2007) mention SixDegrees.com which arose in 1997, as the first site with social networking features in the history of social network sites (SNSs). In SixDegrees.com people could create a profile, list their friends and surf the friends list. There were already some sites which used these features such as profiles on dating sites and online communities and supported list of friends in AIM and ICQ buddy lists, but friends were not visible to others. SixDegrees.com, however, was the first one which integrated these features in a web-based social network.

SixDegrees.com tried to be a platform on which people could connect with each other and send messages. In spite of having millions of users, SixDegrees.com failed to have a sustainable business. Some believe that its pioneer position was its weakness since there were not enough people online at the time for online friends networks to be established (Boyd & Ellison, 2007). SixDegrees.com was

followed by other SNSs such as LiveJournal, AsianAvenue, BlackPlanet, LunarStorm and many other SNSs in the following years.

The emergence of Asian Avenue and BlackPlanet marked the beginning of the goal-oriented SNSs (Figure 2). That is, the SNSs tried to specialize themselves in specific areas. For example, BlackPlanet was set up to connect people and strengthen black community. By this strategy, BlackPlanet tried to belong to the both socializing and networking SNSs in the SNSs' categories. AsianAvenue shares the same story as the BlackPlanet. Community identity and connecting people were the main emphasis of the AsianAvenue.

Korean Cyworld, a general-purpose SNS, emerged in 2001. Korean Cyworld established itself as a successful SNS by targeting mass users. Friendster was the next successful general-purpose SNS which emerged in 2002. However, Friendster failed due to different technical and social factors which will be discussed later in this research. MySpace took advantage of Friendster's failure by attracting those users who were interested in music and social networking. Afterwards, many other SNSs emerged from which considerable numbers of them focused on specializing in specific areas. For example, Ryaz and LinkedIn focused on establishing business network among professionals. Fotolog and Flickr established themselves as the photo-sharing platform. YouTube has the same story but instead of photo videos were used.

The year 2003 was the start of an explosion of the emergence of various SNSs. The number of new SNSs increased very rapidly. These SNSs provide users diverse communication and involvement features. Users are provided with more options for various functions such as:

- profile: profile editor, custom skins, personalized URL, photos, post comments, blog/journal;
- security: settings, block users, report spam, report abuse, safety tips;
- network features: chat rooms, instant messaging, tags bulletins, create groups, forums, mail, grab/copy/share photos, mobile, music, videos, personal videos, games, events, books;
- search: by name, by email address, by school, by city/ Zip Code, by interests, by keyword, browse without membership.

By comparison of the features in the second wave of SNSs' emergence with their former generation (primitive), this group can be called a sophisticated version of the previous SNSs. The primitive version of SNSs only facilitated the users to have a platform and surf the friends list and send messages to each other. Besides these features, the sophisticated versions of SNSs try to facilitate interactive information sharing by providing different applications. For instance, Facebook is a good example of the sophisticated version of SNSs. Facebook and Twitter are the most successful SNSs in recent years. The idea which was once developed by Friendster in early 1997, made so many triumphant successors. However, Friendster is called "one of the biggest disappointments in Internet history" (Chafkin, 2007, p. 1).

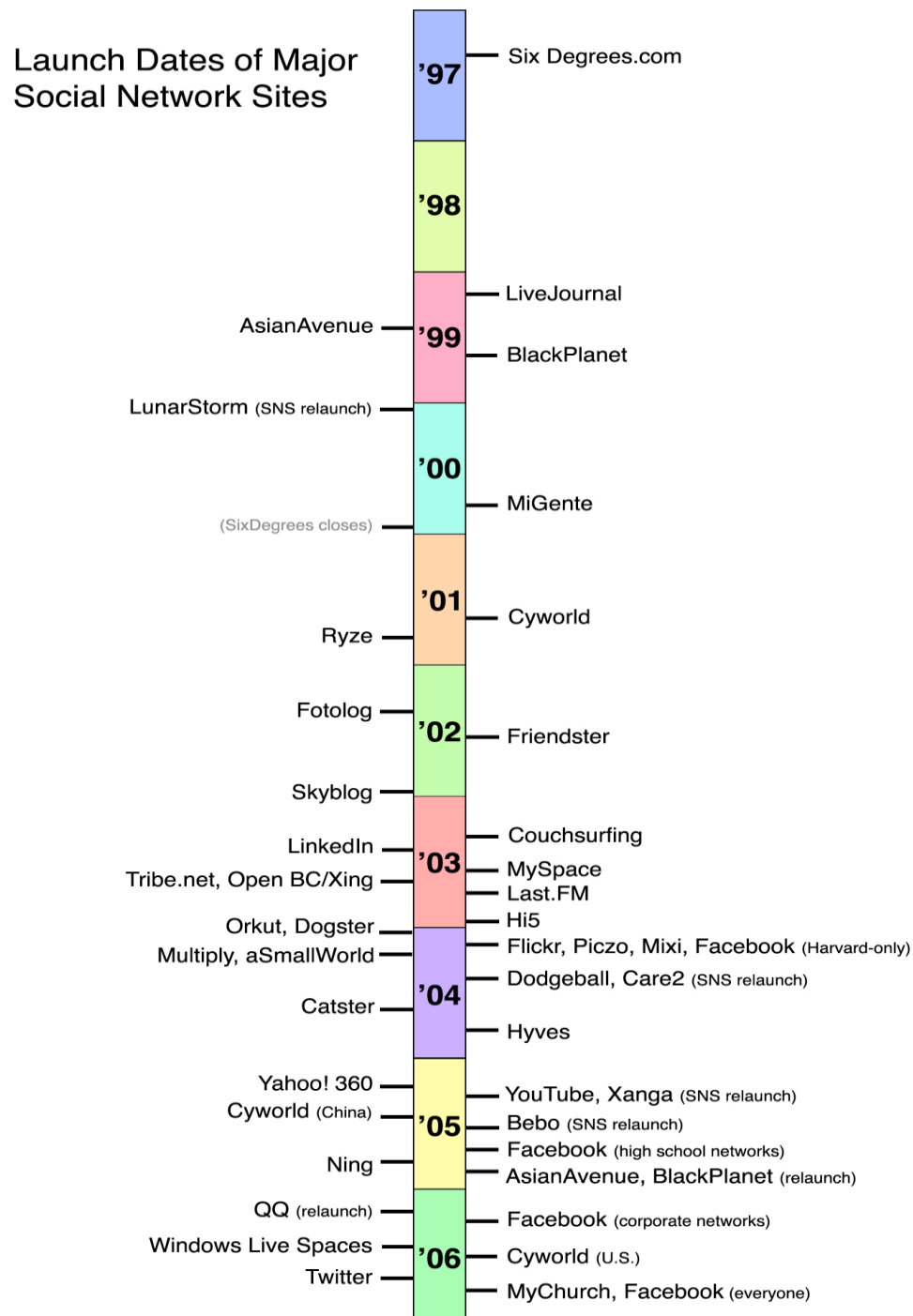


Figure 2: Timeline of the launch dates of many major SNSs and dates when community sites re-launched with SNS features (<http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.htm>)

1.3 Definition of social network sites

The history of social network sites shows us an evolution in the process of growing of SNSs from a primitive form to present sophisticated forms. SNSs are one of the many forms of social media. Therefore, it is important to know the definition of social media before defining the SNS.

Social media are the Web 2.0 applications which facilitate the interactive and two-way communication among users (Figure 3). “In contrast to Web 1.0, where webmasters ruled the Internet by one way communication, in the Web 2.0 the range of communication changes from: one-to-one a-synchronic; many to many a-synchronous; one-to-one or one-to-few synchronous; to one-to-many a-synchronous” (Brussee & Hekman, 2009). The advent of social media in the virtual world was the beginning of emergence of new applications, which allow users to generate content and distribute information in an interactive way. Social media became highly accessible due to two main technological changes. The first change was increasingly affordable bandwidth and the second one was increasingly affordable and faster computer equipment which happened around 2006.

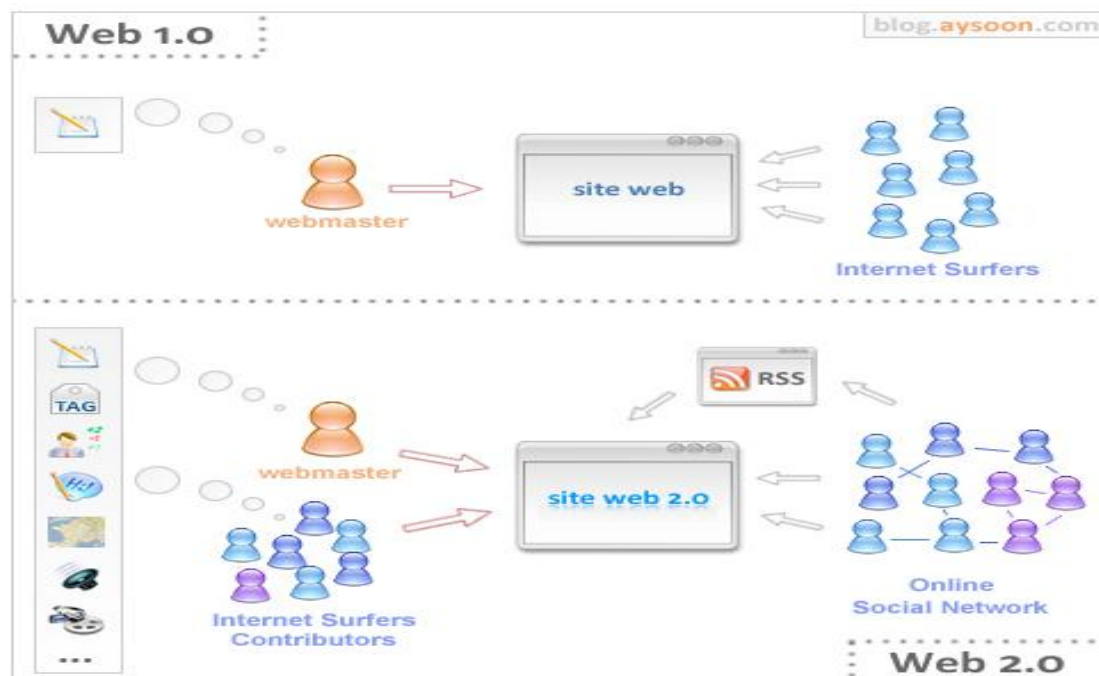


Figure 3: Web 2.0 versus Web 1.0 (<http://www.sizlopedia.com/2007/08/18/web-10-vs-web-20-the-visual-difference/>)

According to Brussee & Hekman (2009, p. 3) “social media are highly accessible media which allow large groups of users to create and share thoughts and stories (Blogger and Twitter), share information and links (Delicious, Digg and Twin), share multimedia (YouTube and Flickr), create and share knowledge (Wikipedia, Yahoo! Answers and SlideShare), and create and share relations (Facebook, Myspace and LinkedIn)”.

The easy accessibility of social media has brought about a significant change in people’s social networks. In fact, the physical relations and networks have been digitized into a new virtual world. Social network sites such as Facebook with more than 400 million users and Hyves with 9 million out of the total population of around 16.5 million of the Netherlands are good examples of the digitization of people’s social networks.

Boyd and Ellison (2007) define social network sites "as web-based services that allow individuals to: construct a public or semi-public profile within a bounded system; articulate a list of other users with whom they share a connection; view and traverse their list of connections and those made by others within the system".

As stated before, SNSs are one of the forms of social media. Based on Brussee & Hekman's description of social media and Boyd and Ellison's definition of SNS, I define a SNS as: a web-based service or application, which facilitates users by technical features to create their own public or semi-public profile that is open for interaction with others.

1.4 Categories of social network sites

When you think of social network sites, popular SNSs such as Facebook, MySpace or Hyves likely come to mind. The membership is free, and you can have your profile page and post your photograph and some personal information. You can also join other friends' network lists or invite them to be in your network list. In addition to the list of comments, there are links which contain videos, blogs, journals and diaries of members.

In spite of having the core set of social networking features, there are some distinguishing elements which differentiate SNSs from each other. Each SNS has its own emphasis and capabilities. For instance, MySpace has an emphasis on music, while Facebook tries to be a social networking platform. According to Mike Thewall (2009, p. 23-26), SNSs can be divided into three main categories on the basis of the purposes of friendship and connections in different SNSs (Figure 4):

The first category is the socializing SNS that is created for recreational social communication between members. A friends list mostly contains the existing offline friends and will be used to find friends among the existing offline friends. Facebook, Hyves, Hi5 are the vivid examples of these kinds of SNSs.

The second category is the networking SNS which is designed for non-social (the main focus is on the networking rather than the socializing) interpersonal communication. The main target for the members of these SNSs is finding new contacts. The best example of this kind of SNS is LinkedIn.

The third category is the (social) navigation SNS in which friends are an instrument by which a certain type of information or resources can be found. Friends are the bridge to new resources and information. For example, in digg.com friends recommend news stories to each other that can be navigated to by friends of a friend too.

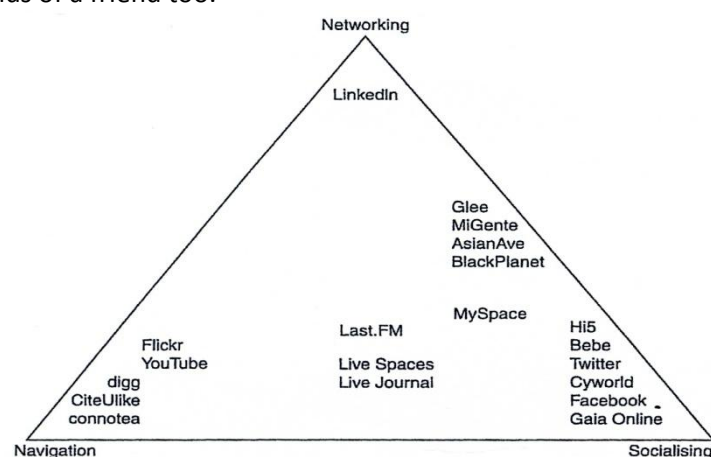


Figure 4: Examples of sites with various purposes for SNS friendship (Thelwall, 2007, p. 26)

1.5 Twitter

The founders of Twitter might never have thought of such a success, when they released the system on the Internet in 2006. In response to the Charlie Rose's question about why Twitter has grown so fast and became popular, Evan Williams, the co founder of Twitter, declared "It's something to tell you the truth that I can't fully explain" (Evan Williams' interview with Charlie Rose, 2010). Firstly, what is Twitter?

Twitter is a web based service where users are able to post short messages called Tweets with a maximum of 140 characters. Some consider Twitter a micro-blogging platform (Bake, 2009) and others consider it an SNS (Jefferson, 2008). Micro-blogging is a web based service which allows its users to post short messages to other subscribers of the service. In fact, micro-blogging has its roots in instant relay chat (IRC), instant messaging (IM) and mobile phones (SMS). This view is more focused on the technical aspects of Twitter.

In this research, Twitter is considered an SNS which uses micro-blogging techniques. As before mentioned, an SNS is defined as: a web-based service or application, which facilitates users by technical features to create their own public or semi-public profile that is open for interaction with others, Twitter provides its users various services similar to the SNS. As in other SNSs, Twitter also provides its users a web-based service where users are allowed to make their own public or semi-public profiles by adjusting their privacy settings to interact with others.

There are also several indicators which reveal the social networking character of Twitter. For example, items such as profile, find people, followers, following and listed (contains both followers and following) also show that Twitter uses the same basic function as other SNSs. Users are also allowed to upload a profile picture for their profile page. However, in Twitter the traditional contact list is divided into two areas such as Followers and Following.

Mike Thelwall (2007, p. 26) has put Twitter in the category of socializing SNSs in his categorization of the SNSs for different purposes. However, Twitter not only belongs to the socializing category, but it also belongs to both the networking and navigation categories.

Socializing

Twitter is a socializing platform. For instance, Twitter's users can communicate with each other via short messages. This function is already being used in other socializing SNSs such as Facebook and Hyves via status updates by which people communicate with each other in short texts.

Networking

Twitter is also an appropriate platform for networking purposes. People who seek for a platform to share their idea with others and want to form specific networks can use Twitter easier than an SNS such as Facebook. In fact, the open character of the Twitter platform makes it a distinctive place to share ideas and create networks even with unknown people.

Navigation

Twitter can also be used for navigation purposes. Just as friends are an instrument to find a certain type of information or resources on YouTube, Twitter also allows its users (and non users) to navigate different kinds of information.

2. Theoretical framework

The theoretical framework is divided into the 1) business perspective and the 2) user's perspective on the influential factors of the success of the SNSs, specifically Twitter. In the business perspective, the organizations evolution theory and the STOF model are employed to discover the success factors of the SNSs.

2.1 Business perspective

As mentioned before, SNSs are not only a service for users that must satisfy their demands, but also a business which different factors can affect its success. For this purpose, social network sites' life cycle and the organizations evolution theory have been applied to elucidate the success factors of SNSs, in this case Twitter. For the same purpose, the STOF model and its critical success factors will also be discussed.

2.1.1 Social network sites' life cycle and evolution process

According to the product life cycle, from marketing perspective (Kotler, et al. 2005. P. 604). Products go through four stages in their life cycle after the development stage of the product (Figure 5). Introduction is the first stage in which the product is introduced to the market. The second one is the growth stage, in which product volume grows rapidly. The third stage is the maturity stage in which product volume has reached its peak and does not grow as in the previous stage. The last stage is decline stage, in which depending on the product profitability, a company can decide to continue production or stop it.

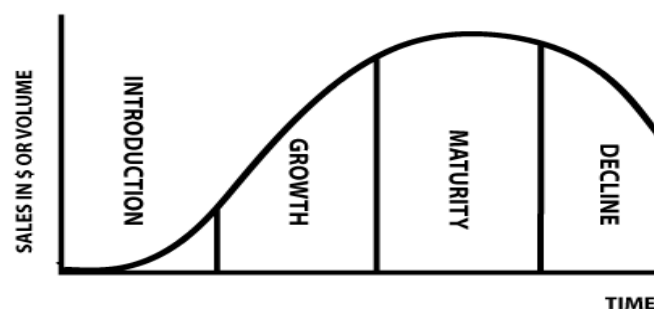


Figure 5: The product life cycle (<http://artisanwork.org/learn/product-development/the-product-life-cycle>)

Similar to products, organizations and services have also a life cycle. They all have a starting phase and terminate in a final point. Ichak Adizes (1988), the founder of the Adizes Institute in Santa Monica, California, explains the life cycle of an organization in his book as a baby that grows and reaches maturity and dies at the end (Figure 6). He explains the whole process of an organization's evolution in detail. Interestingly, the life cycle of the organization is summarized in three main stages including the growing stage, stabilizing stage and aging or down stage.



Figure 6: Adizes organizational lifecycles (Adizes, 1988)

Based on the mentioned life cycles, we can assume that SNSs also go through the same stages of life cycle (Figure 7). Similar to an organization's, products life cycle, the life cycle of the SNS can be divided into three main phases: growing, stabilized, declining. The SNSs' life cycle structure and elements of the organizational evolution process (variation, selection, retention, struggle) can be combined for a better understanding of what factors influence the life cycle of the SNSs in different phases. Based on the mentioned reasoning, the following SNS life cycle has been developed which contains the influential factors in different stages.

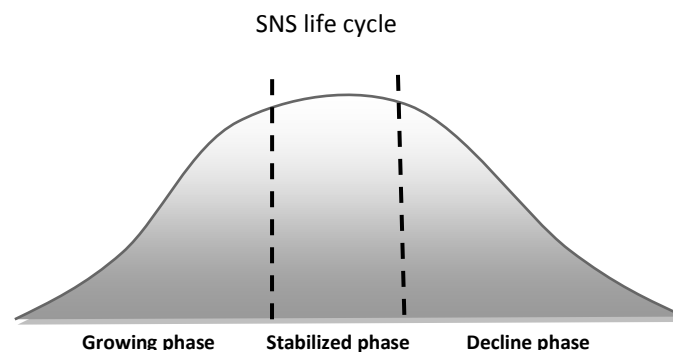


Figure 7: Social network sites lifecycle

According to Aldrich and Ruef (2006, p. 16), the evolutionary processes through which new organizations, populations, and communities emerge are the result of four generic processes: variation, selection, retention, and struggle over scarce resources.

Although SNSs are seen as a service for their users, they can also be considered as organizations which use a monolithic identity structure (in which the SNSs' organization and their service to their users have the same corporate name). The mentioned generic processes can be applied to the SNSs' evolution. If organizations are considered as social entities with specific purposes (Aldrich & Ruef, 2006, p.4), SNSs can also be considered organizations. They both are a social entity with a purpose, in other words, SNSs are goal-oriented social entity (their basic goal is providing a social networking for the users). Firstly, SNSs facilitate large groups of people (users) to use their platforms. Secondly, their goal is to be a social networking platform for public with different interests. Therefore the four generic processes of the evolution of the organizations or communities can also be applied to SNSs.

Variation

Variation is the beginning of the evolution process. Variation is, escaping from routine and tradition which can be planned or unplanned. For instance, when organizations attempt to predict and react to different situations by using advice from outsiders (e.g. consultants), the result will be a planned variation. In unplanned variation, in contrast, there are no intentional responses to the problems. Instead The responses are by chances or luck. The organizations try to benefit from a sudden created opportunity. For instance, MySpace's evolution began by getting out of routine by specializing in a music driven SNS, a form of SNS which is mostly for music bands and music lovers. In fact, MySpace evolved by a planned (intentional) variation by which they chose a specific area of social networking.

For SNSs, the first sign of the variation phase is the categorization of SNSs. SNSs attempt to specialize in various fields to attract specific targets. Mike Thelwall (2009) categorization of SNSs in three main categories of socializing, networking and navigation can be seen as the variation phase in an SNS's evolution process. SNSs attempt to differentiate themselves by focusing on one of the mentioned categories. For example, LinkedIn tries to connect all professionals in a business area.

Selection

Selection in evolution process is the stage in which certain types of variations will be selected or eliminated. For example, market forces and competitive pressures can influence the variations of organizations.

Categorization of the SNSs for different purposes (e.g. socializing, networking, navigation) created an opportunity for new emerging SNSs to chose a specific (selection) category(ies) for their target audience. For instance, Youtube tried to specialize itself navigation purpose. People are enabled to share and search video's to each other.

Changes in technical features of SNSs can also be seen as the sign of the selection phase. There are significant changes in the SNSs technical features in different periods of its history. For example, 'the main reason behind SixDegrees's failure was that the site provided its early adopters nothing more than a simple way of connecting and communicating with others'(Boyd & Ellison, 2007). This taught a lesson to other SNSs that they must provide different features rather than only being a traditional communications mean. Therefore, the market needs and competitiveness advantages force the SNSs to select specific variations in the selection phase.

Retention

Retention is the third evolutionary process in which the positively selected variations are retained. Retention occurs when variations are preserved, duplicated, or otherwise reproduced so that the selected activities are repeated on future occasions or selected structure appears again in a future generation (Aldrich & Ruef, 2006, p. 23). The first example of the retention of the positively selected variation is the friends list. For the first time, Sixdegrees created the friend's list on its site. Afterwards all SNSs replicated this variation and have a friend's lists. In fact, SNSs realized that the friend's list is the essential part of the social networking. Therefore they duplicated this positive variation from the previous SNSs. Nowadays features such as link sharing, status updates, video sharing and photo sharing are the essential parts of the SNSs' features. Most of these mentioned features have also been replicated by SNSs.

Struggle

Organizations struggle with the Scarcity of resources within organizations, between organizations, and between populations (Aldrich & Ruef, 2006, p. 25). For example, when an SNS such as LinkedIn

targets professionals, its developers face the challenge of a restricted target group with a specific profile. They do not aim at all SNSs'-users; instead, they focus on a specific segment of the market called a network of professionals. This results in a competition with similar SNSs such as Ryze and other networks of professionals. This is an example of a scarce resource of population for a specific network.

2.1.2 STOF business model

The history of business models goes back to the 1970s, when they were used to describe and map the business processes and information patterns within companies, for the purpose of building information technology systems (Bouwman & De Vos & Haaker, 2008, p. 31). Nowadays every business use a specific business model, a system by which companies attempt to generate revenue and profit. The STOF business model (STOF model) mentions that business models have to focus on four domains (Figure 8): service, technology, organization and finance. Within these domains different components play a role which will be discussed in the following part (Bouwman & De Vos & Haaker, 2008, p. 36). According to the STOF model, all business models have a common starting point called customer value, which refers to the value of a product or service that a company or organization offers and satisfies the customers' demand.

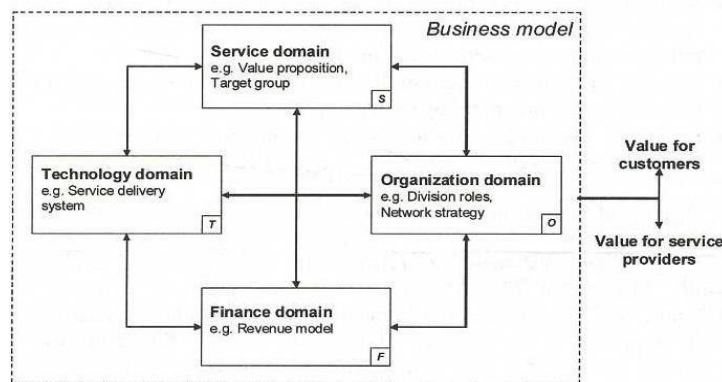


Fig. 2.1. STOF business model domains

Figure 8: STOF business model domains (Bouwman & De Vos & Haaker, 2008, p. 36)

Service domain

In this part, different components of the service domain of the STOF business model will be highlighted. Customer value is one of the central points for conceptualizing the services. Customers always try to compare the perceived benefits of ownership of a product or service with the total costs. If a company's product's perceived benefits are better than the competitor's perceived benefits, then the value proposition of the company is better than the competitor's. Perceived value is the difference between delivered value and expected value. Expected value is the value which is expected by a customer based on the previous experience with similar (or older version of) a service or product. The intended customer value cannot always be delivered to the customer. This is due to different organizational, technical and operational barriers. Even if a company succeeds to deliver the intended value to the customer, this does not mean that customer will experience the same value. All services are always consumed within a specific context. Therefore contextual factors such as, social-cultural contexts can also influence the customers' value. For example, the usage of a service in public or private sphere can affect the customer value. Customer effort (non-financial) to use a specific service and the tariff (price) also affect the customer value. In consumer service the customer and the end user are the same market segment, but in business service customers might

be the decision making unit but the end users are the employees of an organization. Therefore the market segment is divided into the consumer market and the business market.

Technology domain

The technical requirements are the second important factor in STOF model. The advent of Internet has enhanced the role of technical architecture for delivering the service and the customer value. For example, in mobile services, the authentication (authenticating the users), management of users profile and security (level of security perceived by customers such as privacy issue), technical architecture, backbone infrastructure (network infrastructure), access networks (first and second mile infrastructure), service platforms, devices, applications, data, and technical functionality are all important parts of the technology domain in designing a business model.

Organizational domain

Organizations depend on resources and capabilities, which can be financial, social, organizational and technical in nature, within and outside of the organization to create service. This is done by a network value, the cooperation among organizations or organizational units for offering a new service. The following items are the main factors in organizational design: actors, value network, interactions and relations, strategies and goals, organizational arrangements, value activities, resources and capabilities.

The power of actors is determined by the provided resources and capabilities in value network. Each actor follows a specific goal by collaboration. Collaboration requires the sharing of information. Some actors might not share information due to their strategic interests. Therefore legal contracts are a good solution for this problem. This is done by formal and informal agreements. An organizational arrangement is a strategy to ensure how the actors divide and coordinate their value activities. These activities are those that an actor is supposed to do so that the network value can deliver the service.

The numbers of actors, frequency and types of interactions can determine the complexity of the value network. The reciprocal interactions cause relations, which are really important to value network. If the relationships are strong, then it can boost the trust and commitment in network value.

Finance domain

Finance domain discusses the financial arrangement of different actors in the value network. The resource of income (revenue), costs of activities and the involved risks are important issues that must be determined in a business model. This domain of the STOF business model contains different elements: investment resources, cost resources, revenue resources, risk resources, pricing and financial arrangements.

2.1.3 Critical design issues in business models

According to the STOF business model, there are several success factors which influence the success of each domain in the STOF model (service, technological, organizational, and financial). A large number of case studies were conducted to identify the critical design issues (CDIs). The CDIs were extracted for every domain and clustered systematically.

Service domain

Critical design issues which influence the success of the service domain are as follow: targeting,

creating value elements, branding and customer retention (Bouwman & De Vos & Haaker, 2008, p. 73).

Targeting is an important factor. The service or product must be designed to satisfy the need of a specific target group(s). According to the STOF model the business must choose a profitable target group. The target can be both business and consumers (Bouwman & De Vos & Haaker, 2008, p. 73). This is the same for the SNSs. For instance, LinkedIn has incorporated profitable targeting in its business model by choosing professionals with income as the main target group.

The second critical success factor in designing is the creating value proposition. The value proposition must satisfy the demands of the end-users of a service. 'The added value of a service can be based on value elements such as fun, efficiency, accuracy, speed, personalization, trust, etcetera' (Bouwman & De Vos & Haaker, 2008, p. 74). In SNSs, each of the mentioned factors in users' (consumers) perspective in the following chapter can be used as a added value for their service.

Branding is another issue which helps the service to reach the targeted customers. Customers always remember a service with a brand in mind. Branding can help the service to be more visible and remain in customers' mind. In SNSs' case, for instance, even the name of the Facebook implies the function of the service. Or in another example, Myspace has branded itself as an SNS for music lovers. This is again a kind of branding in which the SNS tries to distinguish its platform from the competitors'. PR and marketing communications can be used as the main instruments for the branding of the SNSs.

Customer retention has been mentioned as the last critical success factor of designing a business model in service domain (Bouwman & De Vos & Haaker, 2008, p. 75). It is very important for services to retain their customers and keep them satisfied and loyal to the product and services. This is completely true about the SNSs. Users are free to move from one to another SNS. Therefore, not only must SNSs try to attract new members, but they must also focus on satisfying and preserving the current users. The current users help SNSs to increase the SNSs' members by expanding their networks.

Technology domain

There are several factors that influence the success of the Technology domain: security, quality of service, system integration, accessibility for customers and management of users profiles (Bouwman & De Vos & Haaker, 2008, p. 75).

Security can partially determine the trust of the end-users in the service (Bouwman & De Vos & Haaker, 2008, p. 76). The way the security has been managed in technology architecture affects the security perception of the end-users. This is done in SNSs by providing different privacy settings. This means that users are allowed to choose their needed privacy level. It is also important that the SNSs have an image of respecting their privacy. The privacy, in fact, is a perception in the users' minds. If the trust is damaged, it would be very difficult to regain it.

Quality of service, especially in technical architecture, is very important. "Performance of the technical architecture and the technical functionality has profound impact on the service offering the and the perceived value" (Bouwman & De Vos & Haaker, 2008, p. 76). This is also very important in SNSs. SNSs are in essence a technical service. The whole user's experience occurs via technical features. This makes the technical aspect of the quality of their service more important.

System integration is also important for the success of the business model in the technology domain. The new service must be able to be integrated with the existing technical features (Bouwman & De Vos & Haaker, 2008, p. 76). Suppose the SNSs were built in such a technology structure that they needed Internet with higher speed. Could everyone have access to the SNSs as they have now? This would work against them because the service could not be integrated with the current technology and it could be used by a small group who would have Internet with higher speed. Most of the online newspapers have incorporated SNSs such as Facebook, Twitter, etc on their sites to enable readers to spread the news via SNSs. This is also an example of the system integration of the SNSs.

Accessibility for customers means that the service should be available to the target group. This is influenced by the choice of the platform (Bouwman & De Vos & Haaker, 2008, p. 77). SNSs are a web-based service which use Internet as a platform to offer their services to the end-users. Lately, SNSs have understood the importance of the accessibility by enabling their users to reach their profiles via their mobile phones. Or in Twitter' case, the mobile platform has been used both as an added value for a new service and to facilitate the accessibility by a mobile platform method.

Management of user profiles is the last mentioned element as a critical success factor. The user's profile which contains user's preferences, interests and behavior must be maintained carefully. SNSs must pay more attention to this part. On one hand, they must maintain the users profile without any error. On the other hand, they can save the user's profile categorized based on different characteristics, in a database for different marketing purposes such as advertising.

Organizational domain

Critical design issues that influence the success of the organizational domain include: partner selection, network openness, network governance, network complexity (Bouwman & De Vos & Haaker, 2008, p. 78).

Partner selection means that "firms need to decide whether to outsource certain activities or perform them in-house" (Bouwman & De Vos & Haaker, 2008, p. 78). Resources and capabilities are always needed to provide a service to the users.

Network openness refers to the level of openness. The level of openness indicates the degree to which new business actors can join the network and provide services to the customers. An example of such an openness of an SNS to an actor is the integration of the Hyves (2/3 of the Netherlands have a profile in this SNS) in Sony Ericsson (Service 2media, 2010) mobile (Xperia).

Network governance refers to the identification of the dominant actor in the value network (Bouwman & De Vos & Haaker, 2008, p. 79). The dominant actor is often the one with access to the customers and end-users or the one that developed the offered service. This factor cannot be applied to the SNSs. Firstly, SNSs themselves have direct access to the end-users of their service via their profiles. Secondly, they have offered the service to the end-users.

Network complexity "arises from the number of relationships a focal business actor need to manage in a value network and from the effort needed to connect the actors' IT applications and systems" (Bouwman & De Vos & Haaker, 2008, p. 79). In SNSs, this complex situation is related to the maintenance of the technical infrastructure. For instance, the integration of a particular SNS into a mobile phone requires lots of effort to combine all IT applications and systems.

Finance domain

Several factors influence the success of the financial domain such as: pricing, division of investment, division of costs and revenues and valuation of contribution and benefits.

In Pricing the perceived customer value must at least equal or more than the price of the service that end-users receive. At the moment, the memberships of the most well-known SNSs are free of charge. However, SNSs such as Hyves and LinkedIn try to provide different services to charge the users. Hyves offers gold membership which enables users to see who visited their profile and LinkedIn charges users for accessing the premium tools.

Division of investment and risks is a strategy to reduce the financial risks involved in introducing a new service because it is not certain if the service will succeed and return on the investment (Bouwman & De Vos & Haaker, 2008, p. 81). Phased approach is one of the strategies to reduce the uncertainty of the success of the service. For instance, Facebook bought Friendfeed for \$50 million (Vascellaro 2009). However, they paid \$15 million in cash and the rest was paid in Facebook' stock. Facebook cannot predict the success or the failure of the Friendfeed. Therefore the phased payment approach has been used as a strategy to reduce the risks of an investment.

Valuation of contribution and benefits refers to 'valuation of the contribution of each partner to the service offering and the (intangible) benefits each partner receives' (Bouwman & De Vos & Haaker, 2008, p. 81). Division of costs and revenues can be different for each service provider.

2.1.4 Critical success factors in designing business models

Bouwma & Faber, et al. (2008) have determined the critical success factors (CSFs) based on the mentioned critical design issues in previous part. Critical success factors refer to "the limited number of areas in which satisfactory results will ensure the business model creates value for the customer and the business network" (Bouwman & De Vos & Haaker, 2008, p. 83).

The CSFs have been divided into two parts: those for the creating customer value and those for creating network value.

In the first part, compelling value proposition (service domain) is an influential factor for the viability of the business model. The second CSF is the clearly defined target group (service domain). This means that the service provider can stay focused on a specific target groups. Compelling value proposition and clearly defined target group are interrelated (Bouwman & De Vos & Haaker, 2008, p. 84). It means that value proposition is determined based on the target group. For example, consumer market needs a different value proposition than the business market.

Unobtrusive customer retention (service domain) is another CSF. Unobtrusive customer retention supported by the user profile management (technology domain) helps the business to offer a personalized service to the target groups. The quality of the service (technology domain) has also been mentioned as a CSF. The quality of the service can be supported by the functional and technical quality.

In the second part, an acceptable profitability (finance domain) which refers to "positive financial results matching companies risks/returns" (Bouwman & De Vos & Haaker, 2008, p. 86) is considered as a CSF. An acceptable risk (finance domain) is another CSF. It means that the uncertainty in the market must be considered for accepting the risks. Sustainable network strategy (organization

domain) which refers to the access to the resources and capabilities is also mentioned as a CSF. An acceptable division of roles (organization domain) 'helps the business to distribute the roles among firms and the integration of the roles within the firms that participate in the business network has been mentioned as the CSFs (Bouwman & De Vos & Haaker, 2008, p. 86).

2.1.5 SNSs and the STOF model

One of the main challenges that the current SNSs are facing is generating revenue to be able to continue their business. From the beginning, SNSs have attempted to provide free service to their users. The most well-known SNSs such as Facebook, Myspace, Hyves, Twitter, Youtube etcetera are still providing a free membership service. The users do not need to pay for their membership. However, some of them are trying to generate revenue from users by applying strategies such as premium membership; a membership by which users are provided with privileges such as extra functions. The main focus for revenue generation is still on advertising. The financial resources and revenue generation are important issues for the SNSs survival. For this reason, special attention will be paid to the finance domain of the STOF business of the SNSs.

In the SNSs history, Friendster pioneered different methods to generate revenue by advertising strategy such as (Jcmiras. 2006):

- pop up ads and image ads;
- contextual ads from Google;
- sponsored links in the web search;
- and upgrade in Friendster blog (one of the product selling service of Friendster)
- were the main revenue generators.

Advertising (mostly display ads on SNSs) is still the main instrument of generation of revenue for SNSs. The leaders of social media, however, foresee a wider range of opportunities for generation of revenue by SNSs. According to Abrams research (Abrams Research, 2009), a questionnaire which was conducted among over 200 social media leaders from across the US and Canada during social media week 2009- including founders, bloggers, journalists, entrepreneurs, and members of Twiterati to see what they thought about the future of social media, Freemium and targeted ads are the best way of monetizing of SNSs (Figure 9).

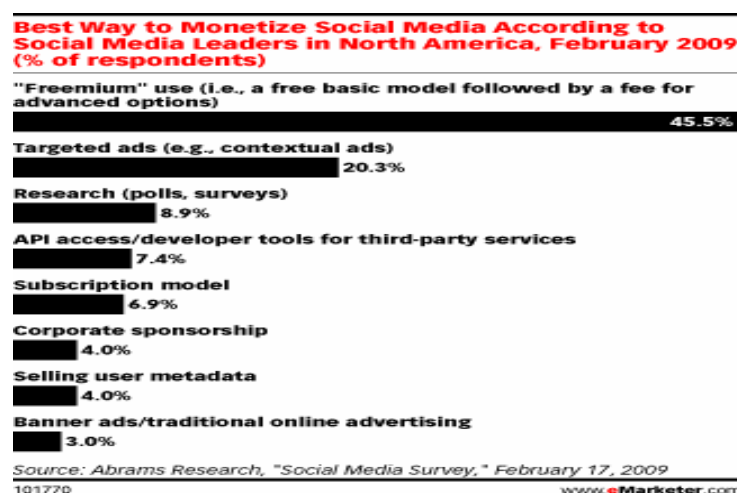


Figure 9: Best way to monetize social media according to social media leaders in North America, Feb 2009 (Abrams Research. 2009)

The Twitter business model is still unknown. It seems the oldest method of venture capital is still the main financial resource for Twitter. According to the last interview with the co-founder of Twitter (Evan Williams' interview with Charlie Rose, 2010), Evan Williams, charging users (e.g. subscriptions), charging for extra features and implementing advertising are the future strategies to monetize Twitter. However, the latest action taken by Twitter is the promoted Tweets (Claire, 2010), an ad in 140 characters which will show up based on the user's search keywords, to generate revenue.

On one hand, Twitter creates a value proposition for its users by providing them a free platform. On the other hand, Twitter can also create a value proposition for the advertisers by providing a platform for their targeted ads through different strategies such as current promoted tweets.

The usage of SNSs is growing every day. That is why SNSs are becoming more important for advertisers. Another trigger for advertisers is the target-oriented information provided by SNSs. They provide advertising professionals (or marketers) information based on different target-group categories such as demographic, geographic, psychographic and economic categories which is essential for effective marketing. Furthermore social networks help the marketers to build a relationship with target audiences. Target audiences are providing an opportunity to communicate with each other about their favorite brand among their social networks. Twitter is also an attractive SNS for the marketers. Moreover, charging users for subscription, providing them some extra features to create revenue can also be used as revenue stream strategies.

The users are, however, the determining factor in the finance domain. If they do not want to pay for the subscriptions and watch all the ads, such a business model will have serious negative effects on the service domain. Firstly, it will affect the value proposition of Twitter in service domain negatively. Secondly, this will have negative effect on the customer retention strategy in the service domain. Despite providing high service quality in the service domain, the end-users of the Twitter's service might leave Twitter due to these kinds of policies. Therefore, it is very important to discover the users' ideas about the monetizing and advertising strategies for revenue generation before implementing such strategies.

The monetizing strategies can also influence the stabilized stage of an SNS's life cycle significantly. Twitter has attracted around 105 million users. A wrong monetizing strategy will have serious negative influence on the stabilized phase of its life cycle. This issue will be analyzed in the results and analysis section of this research based on the subquestions aimed at users' ideas about the monetization strategies.

2.2 User's perspective

User's satisfaction and their desires influence the success of the SNSs significantly. In this view, SNSs are seen as a service which facilitates and satisfies the users' (consumers) needs and demands. Unified theory of acceptance of the new technology and the Tiger pleasure framework will be applied for a better understanding of the success factors of SNSs from users' (consumers) perspective. These theories have been employed to introduce several influential factors of the success of the SNSs from (Twitter) user's perspective s. Based on these theories, several hypotheses have been introduced to verify the validity of the influential factors. The hypotheses will be presented in the following chapter.

2.2.1 Unified theory of acceptance and use of new technology

There are numbers of reasons behind the SNSs' adoption by their users. The Unified theory of acceptance and use of technology (UTAUT theory) and Tiger's pleasure framework are employed to understand the users' motivations behind their adoption of SNSs.

In the 1980s people started using a new technological instrument called "personal computers" in their daily life. The same users of computers adapted Internet into their daily lives in the 1990s. Nowadays, mobile computers (smart phones) are becoming a new phenomenon that people are adapting to them. The new phenomenon is the adoption of SNSs on the web. Therefore, it is very important to discover the attributes that contribute to the adoption of new technologies.

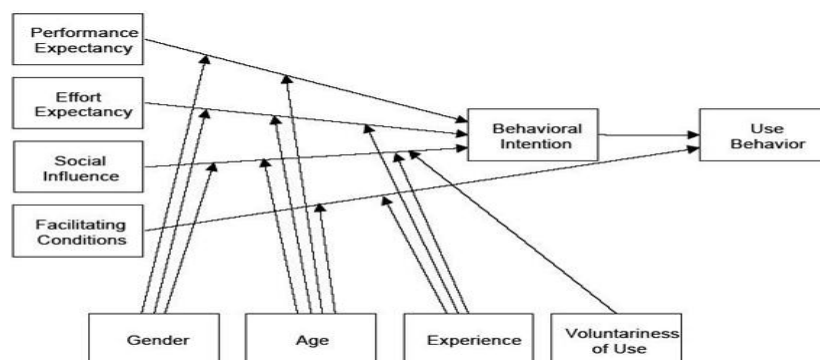


Figure 10: The technology acceptance model (Venkatesh, Morris, Davis et al., 2003)

Unified theory of acceptance and use of technology (UTAUT), which originally stems from the theory of reasoned action, provides an answer to this question. Fishbein & Ajzen developed theory of reasoned action (TRA) on basis of social psychology in 1975. According to TRA, users' behavior can be predicted to a certain extent through behavior intention (BI) (Figure 11 – why don't you switch 10 and 11?). If an individual intends to do a behavior, then it is likely that the person will do it. The behavior intention is also determined by two factors called attitude toward act or behavior and subjective norm. Attitude (A) is determined by individuals' beliefs about the consequences of performing a behavior. Subjective norm (SN) is the group and social environment influence on behavior intention of the individuals. In other words, "the person's perception that most people who are important to him or her think he should or should not perform the behavior in question" (Ajzen & Fishbein, 1975). Later on, Fred Davis proposed a theory of acceptance model (Figure 10). He argued that the user's intent of use and behavior to use a new technology depends on the user's perceived ease of use (PEU) and perceived usefulness (PU). PU indicates that the use of a new technology will

enhance his/her job performance. PEU refers to the degree which a person would think that using a new technology would be free from effort. According to TAM, usefulness and ease of use influence the behavior intention that results in doing a particular behavior.

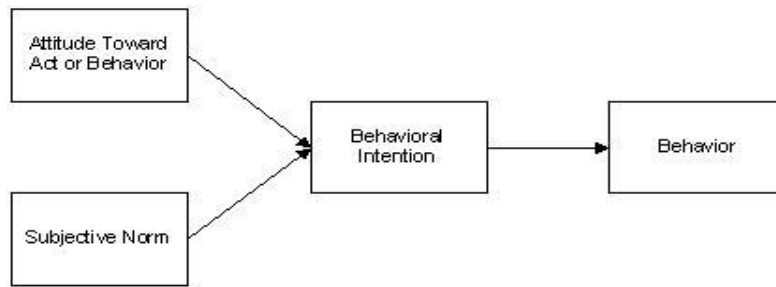


Figure 11: Theory of reasoned action (TRA) (Venkatesh & Morris & Davis et al., 2003, p. 445)

TRA and Tam were followed by different complementary theories. Motivational model (MM) emphasized the extrinsic motivation and intrinsic motivation. Theory of planned behavior (TPB) which is comprised of the attitude toward behavior, subjective norm and perceived behavior control, which refers to the perceived ease or difficulty of performing the behavior (Venkatesh & Morris & Davis et al., 2003). C-TAM-TBP, a combination of TAM and TBP discusses the influential role of attitude toward behavior, subjective norm, perceived behavior and perceived usefulness. The Model of PC utilization (MPCU) is another theory that its core constructs consists of factors such as job-fit, complexity, long-term consequences, affect towards use (feeling of joy, pleasure, depression, disgust, etc), social factors, and facilitating conditions (objective factors in the environment that observers agree make and act easy to accomplish). Innovation diffusion theory (IDT) grounded in sociology discusses factors such as relative advantage, ease of use, image, visibility, compatibility, results demonstrability (tangibility of the results of using the innovation), and voluntariness of the use. The last theory is about human behavior, the social cognitive theory (SCT). It contains the factors such as outcome–expectations performance (performance-related consequences of behavior), outcome–expectations personal (the personal consequence of behavior), self-efficacy, affect (individual liking for a particular behavior), and anxiety (which is evoked when a behavior is performed).

Finally, by integration of the mentioned theories, Venkatesh developed the Unified theory of acceptance and use of technology (UTAUT). In UTAUT, the factors affecting behavioral intention include performance expectancy, effort expectancy, social influence, and facilitating conditions.

Performance expectancy

Performance expectancy refers to “the degree to which an individual believes that using the system will help him or her to attain gains in job performance”(Venkatesh & Morris & Davis et al., 2003, p. 446). This is similar to the five constructs of the above-mentioned models such as (Figures 12 and 13):

- perceived usefulness (TAM, C-TAM-TPB);
- extrinsic motivation (MM), job-fit (MPCU);
- relative advantage (IDT);
- outcome expectation (SCT).

Table 9. Performance Expectancy: Root Constructs, Definitions, and Scales		
Construct	Definition	Items
Perceived Usefulness (Davis 1989; Davis et al. 1989)	The degree to which a person believes that using a particular system would enhance his or her job performance.	<ol style="list-style-type: none"> 1. Using the system in my job would enable me to accomplish tasks more quickly. 2. Using the system would improve my job performance. 3. Using the system in my job would increase my productivity. 4. Using the system would enhance my effectiveness on the job. 5. Using the system would make it easier to do my job. 6. I would find the system useful in my job.
Extrinsic Motivation (Davis et al. 1992)	The perception that users will want to perform an activity because it is perceived to be instrumental in achieving valued outcomes that are distinct from the activity itself, such as improved job performance, pay, or promotions	Extrinsic motivation is operationalized using the same items as perceived usefulness from TAM (items 1 through 6 above).
Job-fit (Thompson et al. 1991)	How the capabilities of a system enhance an individual's job performance.	<ol style="list-style-type: none"> 1. Use of the system will have no effect on the performance of my job (reverse scored). 2. Use of the system can decrease the time needed for my important job responsibilities. 3. Use of the system can significantly increase the quality of output on my job. 4. Use of the system can increase the effectiveness of performing job tasks. 5. Use can increase the quantity of output for the same amount of effort. 6. Considering all tasks, the general extent to which use of the system could assist on the job. (different scale used for this item).

Figure 12: Table 9. Performance Expectancy: Root Constructs, Definitions, and Scales (Venkatesh & Morris & Davis et al., 2003, p. 448)

Table 9. Performance Expectancy: Root Constructs, Definitions, and Scales (Continued)		
Construct	Definition	Items
Relative Advantage (Moore and Benbasat 1991)	The degree to which using an innovation is perceived as being better than using its precursor.	<ol style="list-style-type: none"> 1. Using the system enables me to accomplish tasks more quickly. 2. Using the system improves the quality of the work I do. 3. Using the system makes it easier to do my job. 4. Using the system enhances my effectiveness on the job. 5. Using the system increases my productivity.
Outcome Expectations (Compeau and Higgins 1995b; Compeau et al. 1999)	Outcome expectations relate to the consequences of the behavior. Based on empirical evidence, they were separated into performance expectations (job-related) and personal expectations (individual goals). For pragmatic reasons, four of the highest loading items from the performance expectations and three of the highest loading items from the personal expectations were chosen from Compeau and Higgins (1995b) and Compeau et al. (1999) for inclusion in the current research. However, our factor analysis showed the two dimensions to load on a single factor.	<p>If I use the system...</p> <ol style="list-style-type: none"> 1. I will increase my effectiveness on the job. 2. I will spend less time on routine job tasks. 3. I will increase the quality of output of my job. 4. I will increase the quantity of output for the same amount of effort. 5. My coworkers will perceive me as competent. 6. I will increase my chances of obtaining a promotion. 7. I will increase my chances of getting a raise.

Figure 13: Table 9. Performance Expectancy: Root Constructs, Definitions, and Scales (Continued) (Venkatesh & Morris & Davis et al., 2003, p. 449)

Effort expectancy

Effort expectancy refers to "the degree of ease associated with the use of the system" (Venkatesh & Morris & Davis et al., 2003, p. 450). The roots of the effort expectancy lie in different constructs of the mentioned models such as (Figure 14):

- perceived ease of use (TAM);
- complexity (MPCU);
- ease of use (IDT).

Table 10. Effort Expectancy: Root Constructs, Definitions, and Scales		
Construct	Definition	Items
Perceived Ease of Use (Davis 1989; Davis et al. 1989)	The degree to which a person believes that using a system would be free of effort.	<ol style="list-style-type: none"> 1. Learning to operate the system would be easy for me. 2. I would find it easy to get the system to do what I want it to do. 3. My interaction with the system would be clear and understandable. 4. I would find the system to be flexible to interact with. 5. It would be easy for me to become skillful at using the system. 6. I would find the system easy to use.
Complexity (Thompson et al. 1991)	The degree to which a system is perceived as relatively difficult to understand and use.	<ol style="list-style-type: none"> 1. Using the system takes too much time from my normal duties. 2. Working with the system is so complicated, it is difficult to understand what is going on. 3. Using the system involves too much time doing mechanical operations (e.g., data input). 4. It takes too long to learn how to use the system to make it worth the effort.
Ease of Use (Moore and Benbasat 1991)	The degree to which using an innovation is perceived as being difficult to use.	<ol style="list-style-type: none"> 1. My interaction with the system is clear and understandable. 2. I believe that it is easy to get the system to do what I want it to do. 3. Overall, I believe that the system is easy to use. 4. Learning to operate the system is easy for me.

Figure 14: Table 10. Effort Expectancy: Root Constructs, Definitions, and Scales (Venkatesh & Morris & Davis et al., 2003, p. 451)

Social influence

Social influence refers to "the degree to which an individual perceives that important others believe he or she should use the new system" (Venkatesh & Morris & Davis et al., 2003, p. 451). This is similar to (Figure 15):

- subjective norm in TRA, TPB/DTPB, C-TAM-TPB;
- social factors(MPCU); and
- image (IDT)

which indicate the direct determinacy of social influence as a factor on the behavioral intention.

Table 11. Social Influence: Root Constructs, Definitions, and Scales

Construct	Definition	Items
Subjective Norm (Ajzen 1991; Davis et al. 1989; Fishbein and Azjen 1975; Mathieson 1991; Taylor and Todd 1995a, 1995b)	The person's perception that most people who are important to him think he should or should not perform the behavior in question.	<ol style="list-style-type: none"> 1. People who influence my behavior think that I should use the system. 2. People who are important to me think that I should use the system.
Social Factors (Thompson et al. 1991)	The individual's internalization of the reference group's subjective culture, and specific interpersonal agreements that the individual has made with others, in specific social situations.	<ol style="list-style-type: none"> 1. I use the system because of the proportion of coworkers who use the system. 2. The senior management of this business has been helpful in the use of the system. 3. My supervisor is very supportive of the use of the system for my job. 4. In general, the organization has supported the use of the system.
Image (Moore and Benbasat 1991)	The degree to which use of an innovation is perceived to enhance one's image or status in one's social system.	<ol style="list-style-type: none"> 1. People in my organization who use the system have more prestige than those who do not. 2. People in my organization who use the system have a high profile. 3. Having the system is a status symbol in my organization.

Figure 15: Table 11. Social Influence: Root Constructs, Definitions, and Scales (Venkatesh & Morris & Davis et al., 2003, p. 452)

Facilitating conditions

Facilitating conditions refers to "the degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system" (Venkatesh & Morris & Davis et al., 2003, p. 453). This definition comprises three different constructs from the previous models (Figure 16):

- perceived behavioral control (TPB/DTPB, C-TAM-TPB),
- facilitating condition (MPCU), and
- compatibility (IDT).

Table 12. Facilitating Conditions: Root Constructs, Definitions, and Scales		
Construct	Definition	Items
Perceived Behavioral Control (Ajzen 1991; Taylor and Todd 1995a, 1995b)	Reflects perceptions of internal and external constraints on behavior and encompasses self-efficacy, resource facilitating conditions, and technology facilitating conditions.	<ol style="list-style-type: none"> 1. I have control over using the system. 2. I have the resources necessary to use the system. 3. I have the knowledge necessary to use the system. 4. Given the resources, opportunities and knowledge it takes to use the system, it would be easy for me to use the system. 5. The system is not compatible with other systems I use.
Facilitating Conditions (Thompson et al. 1991)	Objective factors in the environment that observers agree make an act easy to do, including the provision of computer support.	<ol style="list-style-type: none"> 1. Guidance was available to me in the selection of the system. 2. Specialized instruction concerning the system was available to me. 3. A specific person (or group) is available for assistance with system difficulties.
Compatibility (Moore and Benbasat 1991)	The degree to which an innovation is perceived as being consistent with existing values, needs, and experiences of potential adopters.	<ol style="list-style-type: none"> 1. Using the system is compatible with all aspects of my work. 2. I think that using the system fits well with the way I like to work. 3. Using the system fits into my work style.

Figure 16: Table 12. Facilitating Conditions: Root Constructs, Definitions, and Scales (Venkatesh & Morris & Davis et al., 2003, p. 454)

Not only did Venkatesh provide an integrated version of the previous models, but he also added moderating factors such as gender, age, experience and voluntariness (Figure 1). These moderators result in more variables and more reliable information. Using these moderators helps the researchers to discover the behavioral differences of different groups of people.

Performance expectancy, effort expectancy, social influence and facilitating conditions from the UTAUT model can be considered the influential factors behind SNSs' usage. UTAUT has been tested in a utilitarian context in which the users were either obliged to use the system or volunteer to use it. In both conditions, performance expectancy was the strongest predictor and the facilitating condition was the least important factor. SNSs are Web-based services which facilitate the interactions among their users. This indicates the utilitarian function of SNSs. Therefore, components of the UTAUT model can be seen as influential factors of SNSs' usage in an utilitarian context.

2.2.2 Tiger's pleasure framework

SNSs can be considered a utilitarian system because they provide their users a platform to make profile and interact with their social network (e.g. friends). This shows the utilitarian aspect of SNSs' service for their users. Another aspect of SNSs' service is the psychological dimension of their service. This means that SNSs are not only used for utilitarian purposes, but also for hedonic and emotional reasons (Hart & Ridley & Taher, et al., 2008). For this reason, several new influential factors on SNSs' usage have been introduced (Figure 19). Tiger's pleasure framework was employed to support the introduction of the mentioned factors.

Lionel Tiger, after an extensive study of pleasure, developed a framework for a better understanding of the ways humans feel pleasure. According to the Oxford definition, "pleasure is a feeling of happy satisfaction and enjoyment or an event or activity from which one derives enjoyment" (Definition, Oxford dictionary). However, Lionel Tiger believes that the enjoyment in pleasure stems from various elements. For example, enjoyment of having a chocolate on your tongue or touching your pet is a physical matter. Pleasure (enjoyment) can also stem from ideas. For example, someone has real financial problems and his partner (wife) informs him of winning last month's lottery by phone. At that moment, the idea of winning the lottery will give him pleasure. He gets happy and might laugh or even scream because his physiology has been affected. The only thing that happened here was the introduction of an idea that influenced his body. Therefore ideas also influence the way people experience pleasure. Humans can experience pleasure through various ways such as body or mind. This was the reason that Lionel Tiger tried to create very simple and straightforward categories of pleasure for a better understanding of the ways humans feel it.

According to Tiger, humans feel pleasure through four ways: physiologically (physio-pleasure), psychologically (psycho-pleasure), sociologically (socio-pleasure), and ideologically (ideo-pleasure).

Physio-pleasure is related to body and originates from the sensory organs. The pleasures are connected to touching, smelling, tasting, and feeling a sensual pleasure (Jordan, 2000, p. 13). Socio-pleasure refers to the "fun people have when they are with other people" (Jordan, 2000, p. 54). Maybe this is why there are so many people in the cities and their numbers are growing every day. People generally like and enjoy being among others (such as friends, families, etc). Tiger (1992) also mentions that there are few religious and political groups that believe in the value of absolute aloneness. This is another sign of the need for socio-pleasure (Jordan, 2000, p. 54).

Psycho-pleasure principally stems from the activities done by individuals that create emotional reactions. For example, giving some money to charity will create this kind of pleasure. Unlike the physio and socio-pleasure, it is independently motivated and enjoyed. It does not need the other person's body to touch or to watch a movie together. However, it depends on the existence of other people and the real world.

Ideo-pleasure is "mental, aesthetic and often intensely private" (Tiger, 1992, p. 59). According to Tiger, ideo-pleasure can be divided into two kinds. "The first kind of ideo-pleasure stems from experiencing and creating theoretical entities such as movies, buildings, plays, music, art objects and books" (Tiger, 1992, p. 59). The second kind of ideo-pleasure refers to the enjoyment of nature, landscapes, and the look and smell of animals. For example, many people enjoy having plants and pets at home when they live in an industrial city.

There are some interconnections between the mentioned categories. For example, kissing one's girlfriend does not only involve the physio-pleasure produced by one's lips, but also the pleasure of having fantasies created by the kiss. As Tiger mentions (1992, p. 54), there is at least a physical sensation here. Of course, these two can happen at the same time. Although it makes this category imperfect, it can still be seen as a useful category. This has been shown by Patrick Jordan.

Patrick Jordan claims that these categories can be employed to understand more about the products' usage. According to P. W. Jordan (Toledo, 2006), the Tiger's pleasure framework can be employed to comprehend how users gain pleasure from products. In fact, he relates each of the components of the Tiger's pleasure framework to the products. He believes that the Tiger's framework for pleasure can be applied to understand why people choose a specific product. Jordan believes that:

Physio-pleasure "is related to body and originates from the sensory organs. It is the pleasures connected to touching, smelling, tasting, feeling a sensual pleasure which creates the physio-pleasure" (Jordan, 2000, p. 13). According to Jordan Patrick, a physical contact such as holding and touching a product produce this kind of pleasure. For example, when people hold a mobile phone or remote control of a TV, they experience a physical pleasure of using those products. The enjoyment of the softness of a shirt, is also a physio-pleasure.

Socio-pleasure "derives from the enjoyment of relationship with others" (Jordan, 2000, p. 13). There are two kinds of relationships. The first kind are the individual relationships such as those with friends, loved ones, colleagues, etc. The second kind are the relationships in a bigger context such as the relationship with the society as a whole. In the second kind, status and image may play a role. For example, a coffee-maker can be the focal point for a small gathering for morning coffee. Living in a specific part of the city where the average inhabitants are richer than the other parts of the city creates a socio-pleasure of belonging to a special group.

Psycho-pleasure "depends on the person's cognitive and emotional reaction to the situation or objects" (Jordan, 2000, p. 13). The emotional reactions through experiencing an object or situation cause the psycho-pleasure. For example, on a website which is easy to use, navigating and uploading information creates a higher level of psycho-pleasure than one with many difficulties in the usage.

Ideo-pleasure "is related to the person's value" (Jordan, 2000, p. 14). For products (services), it is related to the value a product brings to its users. For example, for some consumers, the issue of being green and environmental friendly is an important factor to choose a product. Therefore, companies try to create the ideo-pleasure by providing environmental friendly products to a specific consumer segment. The issue of corporate social responsibility, which is mostly used as a tool for the projection of social responsibility of companies and organizations, can also be a tool to create an ideo-pleasure for the consumers of a company's products.

2.2.3 Jordan's application of Pleasure framework and the SNSs' case

According to Patrick (2000) Tiger's pleasure framework can be applied to understand why users choose and buy a specific product. Tiger's pleasure framework can also be related to the motivations behind SNSs usage. Firstly, although SNSs are seen as a service rather than a product, they are still being used by the same consumers who seeks pleasure. Secondly, Tiger's pleasure framework explains the ways humans feel pleasure in a holistic view and it is not restricted to a specific situation or product. Therefore his framework can be applied to the situations where humans are engaged.

The category of physio-pleasure cannot be applied to the SNSs' services. At the moment SNSs do not provide physio-pleasure.

Physio-pleasure is not applicable to SNSs. At the moment, SNSs do not provide their users specific physio-pleasure. However, they create socio-pleasure for their users, because products (services) that facilitate social interactions create socio-pleasure. Since their existence, SNSs have primarily tried to provide a platform for their users to connect with their friends, create online social networks and search for new friends. This function creates socio-pleasure from enjoyment of relationship with others for SNSs users. SNSs also create psycho-pleasure in their users' minds by means of playfulness and self expression. Ideo-pleasure can be experienced by the users through the privacy issue. SNSs apply different policies and measurements to show their respect for the privacy of their users. However, this concern cannot be removed by these measurements and policies. It is related to the users' minds. Users must feel the trust and respect for the privacy. That is why small issues in disrespecting privacy can remain in users mind for a long time. The Privacy issue can be seen as a value in users' eyes. Therefore, this is somehow related to the ideo-pleasure experienced by SNSs' users.

2.2.4 UTAUT and Tiger's pleasure framework

There are some interconnections between the elements from the UTAUT model and the Tiger pleasure framework. According to the definitions of the performance expectancy (the degree to which an individual believes that using the system will help him or her to attain gains in job performance), effort expectancy (the degree of ease associated with the use of the system) and facilitating condition (the degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system), they all are related to the person's perception of using a new system. In fact, this refers to the psycho-pleasure attained from using a new technology. However, social influence refers to the effect of the social atmosphere on the individual's decision making process. Individuals try to use a system or do an action to please others. This is somehow related to the socio-pleasure gained from using a new technology.

Several influential factors on Twitter's usage are based on the socio-pleasure, psycho-pleasure and ideo-pleasure categories of Tiger's pleasure framework (Figure 17):

- socio-pleasure: online-offline relationship, constant contact, instant messaging and status updates in SNSs, openness, mobile platform;
- psycho-pleasure: playfulness (enjoyment), expression;
- ideo-pleasure: privacy issue;

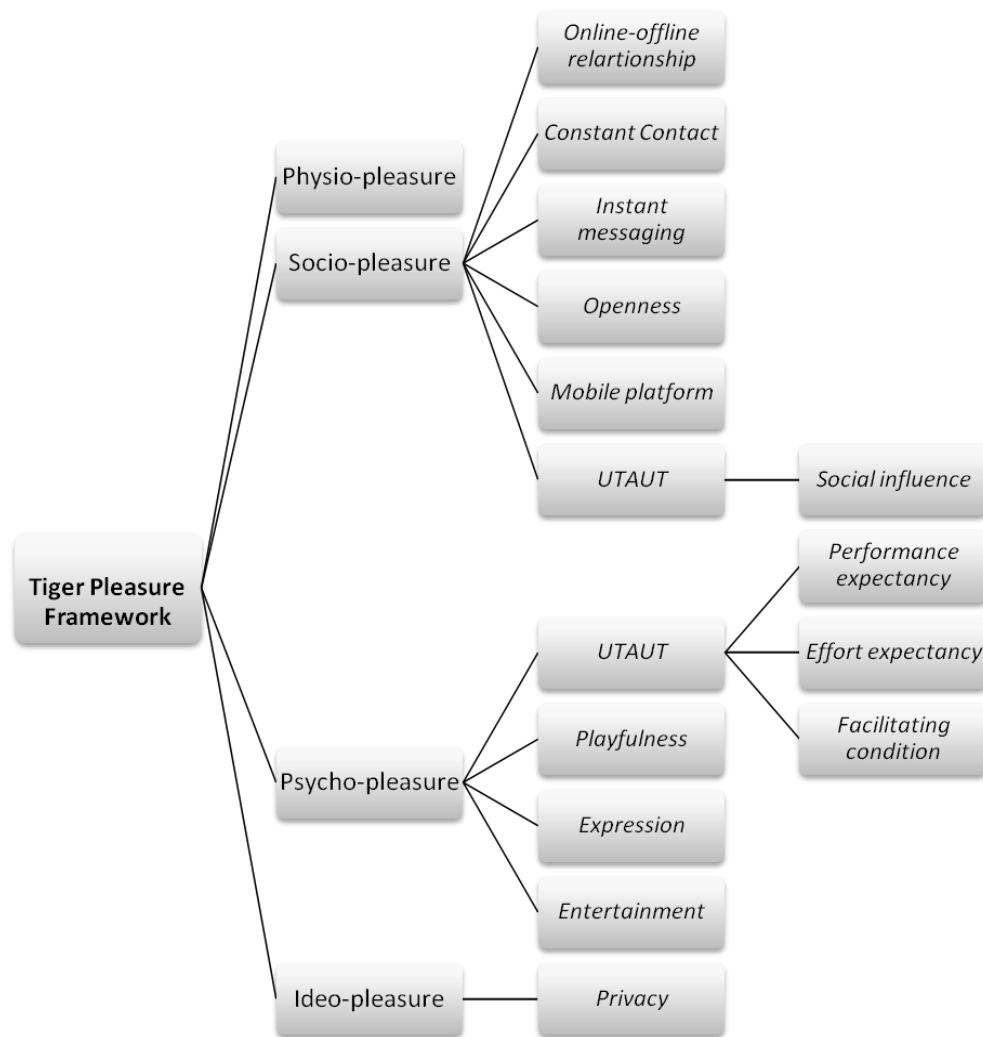


Figure 17: Influential factors on Twitter's usage

Online-offline relationship

SNSs create socio-pleasure for their users by transferring offline relationships into online relationships. One of the earliest SNS called Classmates.com shows that the bridging online and offline relationship is a motivational instrument to make people eager to use SNSs. For instance, Classmates.com provided a platform to the users to affiliate with their high school and college friends and surf the network for others who were also affiliated.

SNSs are platforms that connect and bridge the online and offline relationships. Contrary to dating sites, SNSs try to reconnect those who have an offline relationship. Another example is Facebook, which is one of the most successful SNSs with more than 400 million users, that is mostly used to reconnect with the existing offline relationships (Ellison & Steinfield & Lampe, 2007).

In fact, most of the connections on SNSs originate from a pre-existing relationship, even with weak ties. This has also been proven by Sixdegrees.com's failure. According to Boyd & Ellison (2007), disinterest in meeting strangers affected Sixdegrees.com's failure. For this reason, most of the SNSs try to apply various methods to connect the friends who might have a relationship. This is mostly done by suggesting potential friends from email lists or from other friends' contacts. In this way SNSs attempt to create the socio-pleasure by reconnecting friends in a virtual world.

Constant contact

SNSs facilitate their users to be able to communicate with their contacts constantly. This creates the socio-pleasure for SNSs' users. Constant contact with social networks and the environment is one of the reasons behind the use of SNSs. Human beings are always in need of being in contact with their environment and social networks. People meet friends, watch TV, and use various online and offline communication channels to be updated about their social networks and their environment. SNSs are also a medium through which users receive information about their social networks. Depending on situations, the frequency of the contacts differs from person to person. Everyone needs constant contact to get their needed information. For example, looking at news is a sign of being interested in knowing about what is going on in our environment. In spite of daily busyness, people arrange appointments to socialize with friends and use SNSs to see what others say or do. In the past, people were living in small communities and cities and they could see each other more often. Face to face communication was one of the main communication channels by which they could interact with their social network.

Nowadays, computer mediated communication means and mobile phones have replaced this function and accommodate users to communicate with their social networks regardless of time and place. According to Mischaud's analysis of 3.371 postings on Twitter (2007), the majority of Twitter's users use this SNS to be in contact with their social networks (family and friends 32%) and express something about themselves (personal 23%) (Figure 18). The presence of Twitter updates (or Facebook updates, Hyves updates) can be a sign of using SNSs by users for being in constant contact with their social networks.

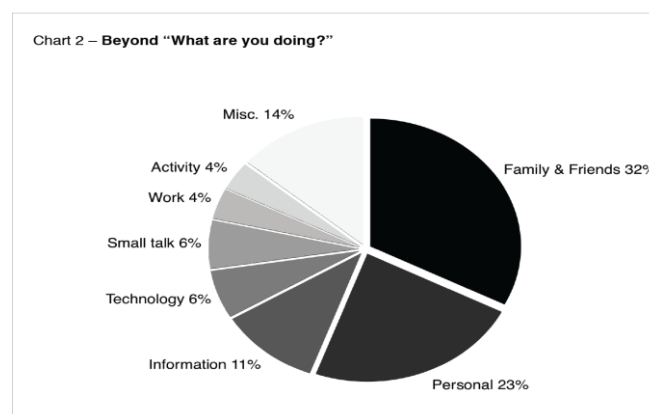


Figure 18: Beyond "What are you doing?" (Mischaud, 2007, p. 23)

Instant messaging and status update

Instant messaging and status updates enable SNS users to interact with one another on a real time basis. They reinforce the enjoyment of relationship with the user's social networks (e.g. friends). Therefore they create a latent socio-pleasure for the SNS users by enabling them to contact their social network on real time basis.

Instant messaging, a computer mediated communication mean, emerged before SNSs. Instant messaging allows users to communicate with each other simultaneously. Instant messengers such as Yahoo, MSN, AOL, ICQ and many other instant messengers facilitate their users to communicate through text chatting, voice chatting, pictures, and webcam videos. The basic functions of instant messaging which are still popular and have been integrated in online social networking are the video and text chatting. Most of the current SNSs have integrated this function in their online platform.

On SNSs, instant messaging is being used in two ways. Its first function is the traditional chatting option in SNSs' platforms. Users can see their contacts and contact those who are online. In this form of communication, users can communicate with each other individually. The second function of the instant messaging has been transformed into status updates. Unlike the traditional instant messaging, members of SNS can send real time messages to a group of people through status updates. SNSs' members use status update to tell something to their network in a short message. The growth in the number of the contacts of a user creates the need for a faster mode of communication with the whole network. Status updates are the solution. Twitter understood this need for a new communication method and based its business on this single function of SNSs. In Twitter, users tell something to their network in 140 characters. Not only can users post messages from the Internet, but they also are allowed to do it via their mobile phones (SMS or mobile Internet). The combination of versatility in posting medium (Internet and mobile) and the length of the text (140 characters) has made Twitter an appropriate medium to communicate in short messages and share information regardless of time and place.

Openness

Openness is one the main characteristics of the social media on the Internet. Brusse & Hekman (2009) claim that the social media are highly accessible media. They argue that social media services on the Internet have made it easier for their users to participate in activities on the Internet. The emergence of a service such as Wikipedia (a free online encyclopedia) which people can use as an open source to share knowledge publicly, shows a tendency towards openness on the Internet. It seems that not only is there a need for closed communities such as Facebook, but also services such as Twitter which begin with openness are also needed. As mentioned before, individuals enjoy relationships such as those with friends, loved ones, colleagues and also relationships with others in a bigger context such as a relationship with society as a whole. Maybe the socio-pleasure derived from the being able to create a social network on an open platform such as Twitter, is the reason for its usage.

Entertainment

Entertainment is one of the factors by which SNSs allow their users to experience the psycho-pleasure. According to Longman dictionary (2003), to entertain means to amuse or interest people in a way that gives them pleasure. Having pleasure and being entertained is one of the indispensable parts of present life. We try to experience the pleasure of entertainment by watching TV, going to a movie theater, playing games, listening to the radio, playing sports, etc. Socializing and being with our social network also create the pleasure of entertainment. We enjoy speaking with our social network and family members. Knowing about what our friends are doing and telling them about our activities can entertain us. That is why we can spend several hours talking to our friends and social networks. SNSs can also entertain their users by allowing them to know about their friends' and social network's activities on a regular basis but via screens. In fact, users can be entertained by looking at one another's status updates and telling others about their situation.

Mobile platform

SNSs such as Twitter, Facebook and Hyves enable their users to reach their profiles via their mobile phones. Twitter's users can even send messages directly to their profiles without entering into their profile. Mobile platform creates the enjoyment of the socio-pleasure in SNSs' s users mind. Users are able to communicate with their social networks anytime and everywhere. This creates the feeling of being close to their social networks. The mobile phone's usage and its importance in people's daily life, makes it an attractive platform for social networking. According to global mobile phone survey in

11 markets (synovate, 2009), three quarters of the respondents, including 82% of Americans never leave home without their mobile phones. This indicates that how mobile phones are attached to people's daily life.

Playfulness (enjoyment)

Playfulness can create a higher level of psycho-pleasure in the SNSs' users minds. According to Lou (2005), perceived playfulness or perceived enjoyment are the triggers behind the use of the websites. Van der Heijden (2001) also mentions that the perceived enjoyment is one of the factors that influence the usage of the websites in hedonic contexts. The central function of the SNSs is facilitating the users to interact with their social networks. Besides the facilitating function (utilitarian function), SNSs provide their users with the enjoyment of being aware of the activities of their social environment. This creates a playful character for SNSs.

Expression

Expression is one of the reasons why people become members of an SNS (Pempek & Yermolayeva & Calvert). In daily life, people try to express themselves in different ways. Some try to express themselves through physical aspects such as wearing specific clothes or going to certain clubs and cafes, and others attempt to express themselves through ideological aspects such as belonging to a specific political party, using specific terms in social interactions. SNSs are also a platform for users to express themselves (Boyd, 2007). Members use the profiles on SNSs to express themselves to their audience (contacts). They express themselves in different manners such as putting a profile picture, publishing personal information and showing their interest areas. The enjoyment of expression stems from the individual need for self expression. The satisfaction of this need creates psycho-pleasure in SNSs' users' minds.

Privacy issue

SNSs' users have different characteristics and their taste for the level of privacy varies. The extended privacy settings of SNSs might prove this statement. The privacy issue is not something that can be solved by adding a specific feature or application to SNSs. It exists in users' minds. SNSs must try to make sure that the users experience the ideo-pleasure of respect for their privacy need. In fact, the respect for their privacy will create ideo-pleasure in users' minds.

Privacy issue is one of the most important issues for the digital service users. For instance, a user's profile might contain information that are interesting for cyber criminals. Therefore, SNSs must try to employ different policies to avoid the user's concern about the privacy issue. Moreover, the privacy issue is more complicated in SNSs than in offline social interactions. Boyd (2007) argues that "the social network sites are a type of network public." According to Boyd (2007), properties such as persistence, searchability, reliability, and invisibility differentiate the network public and the normal offline situation. To elaborate more, actions exist for a longer time in SNSs than speech in offline situations (persistence). Information can be searched easily in internal search options or on search engines as in Twitter's case (searchability). Everything in digital format can be copied, in contrast to speech in offline situation (reliability). Except in some cases with premium subscription, most SNSs do not report who view the user's profile (invisible audience). The mentioned properties create concerns about the privacy issue in the network public.

On the one hand, the SNSs mostly try to have a basic minimum privacy setting with additional options that users can manage. For example, Facebook provides its users with the minimum privacy setting and let them set their own privacy policy. Facebook shows minimal information such as a profile picture and name on search engines. However, people among the same network can see one

another's profile information. Users can decide themselves which part can be seen by public. Users can even manage the visibility of their postings. On the other hand, it seems Twitter's users are not as concerned about their privacy issue as the Facebook's users are. Tweets are searchable by many search engines and even Twitter states in its privacy policy⁵ that their services are primarily designed to help users share information with the world. It is interesting to discover whether Twitter's users are not concerned about privacy.

⁵ <http://Twitter.com/privacy>

3. Research questions

The main research question is: what factors influence the success of a social network site, specifically Twitter? Social network sites can be seen as a service for their users. They can also be considered a business which can be influenced by different factors. Therefore, the answer to the research question has been sought from the business perspective and user's perspective.

3.1 Business perspective

In the business perspective, two subquestions have been posed to answer the research question. The subquestions have been answered by using interviews. The subquestions are as below:

1. What business factors influenced Twitter's rapid growth?
2. What business factors will help Twitter to keep its stabilized position, if it is reached?

3.2 User's perspective

Based on the theories explained in theoretical framework about the users' perspective, several subquestions have been introduced to answer the research question from the users' view. The subquestions have been answered by a questionnaire held among SNSs' users. The subquestions are as below:

1. Is there a relation between higher performance expectancy and the higher usage frequency of Twitter's users?
2. Is there a relation between higher effort expectancy and the higher usage frequency of Twitter's users?
3. Is there a relation between higher social influence and the higher usage frequency of Twitter's users?
4. Is there a relation between higher facilitating condition and the higher usage frequency of Twitter's users?
5. Is there a relation between higher entertaining character and the higher usage frequency of Twitter's users?
6. Is there a relation between higher expression and the higher usage frequency of Twitter's users?
7. Is there a relation between instant messaging and the higher usage frequency of Twitter's users?
8. Is there a relation between higher playfulness and the higher usage frequency of Twitter's users?
9. Is there a relation between higher assurance of privacy issue and the higher usage frequency of Twitter's users?
10. Is there a relation between higher constant contact and the higher usage frequency of Twitter's users?
11. Is there a relation between status updates (short messaging) and the higher usage frequency of Twitter's users?
12. Is there a relation between open culture (following and being followed by everyone) and the higher usage frequency of Twitter's users?
13. Is there a relation between online-offline relationship and the higher usage frequency of Twitter's users?
14. Is there a relation between mobile platform and higher usage frequency of Twitter's users?

There are three subquestions that are applicable to the STOF model. These subquestions were used to investigate the monetization strategies in Twitter's business model:

15. Will the users leave Twitter, if they are charged for the service?
16. Are the users prepared to pay for the extra features provided by Twitter?
17. Do users oppose to a short and one-time presence of advertising on their screens during usage?

4. Research methodology

This chapter describes the research methodology. In the first part, the research methodology will be explained for the business perspective (literature research and experts' views). In the second part, the research methodology for the user's perspective (questionnaire) will be explained in detail.

4.1 Business perspective

As mentioned before, two subquestions were made to answer the research question: what factors influence the success of a social network site, in this case Twitter ? The subquestions were as below:

1. What factors influenced Twitter's rapid growth?
2. What factors will help Twitter to keep its stabilized position, if it is reached?

The first subquestion

The first subquestion will be answered using literature research and experts' ideas. For this purpose, the organization's evolution theory and the STOF business model have been employed to analyze the influential factors in the growing phase of Twitter. Organizational evolution theory states that the evolution of the organizations are the result of the four generic processes variation, selection, retention, and struggle over scarce resources. The STOF model claims that there are several critical success factors which determine the success of businesses. The relevant success factors for Twitter from both organization's evolution theory and the STOF model will be applied to answer the first subquestion. Moreover, the experts' views will also be used to answer the first subquestion

The second subquestion

Twitter is still in the growing stage of its life cycle. Therefore, experts views will be asked to predict which factors will influence Twitter in the stabilized stage of its life cycle. The second subquestion will be answered using three experts' views via interviews. For a wider view on the success factors in growing and stabilized phases of the life cycle, the experts are intentionally chosen from both academic and business worlds.

The interviewees

The first interviewee is Frank Meeuwssen, a digital communication and new media strategist who is very active in the social media world.

The second interviewee is Dr. Yanto Chandra, assistant Professor of Marketing & Innovation of university of Amsterdam who is also specialized in Social media marketing.

The third interviewee is Tony Bosma, a nominated trendwatcher of 2010 in the Netherlands.

All three interviewees were asked the same questions. They were asked to answer the first and second subquestions from their own perspective. The interview was recorded and processed later.

4.2 Users' perspective s: questionnaire

Research proposition

A questionnaire was made to answer the subquestions from users 'perspective. The main objective of the questionnaire is to see if there is a relationship between the discussed influential factors in the theoretical framework (from user's perspective s) and the Twitter usage. The principle research

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proposition is that there is a relationship between performance expectancy, effort expectancy, social influence, facilitating condition, playfulness, entertainment, expression, online-offline relationship, constant contact, privacy issue, instant messaging, short messaging (status update), openness, mobility and the Twitter's usage.

The whole process is also used for Facebook (socializing SNS) and LinkedIn (networking SNS). This will be done to see how the factors will be evaluated by users in different SNSs. Firstly, the relationship between the influential factors and Twitter's usage will be tested among SNS users from different SNS categories that can give a broader view. Secondly, the comparison of the influence of the factors on different SNSs might indicate which factors influences Twitter's success more than in other cases.

Questionnaire design

A primary questionnaire based on the theoretical framework mentioned in the user's perspective was designed. The subquestions were based on UTAUT (the unified theory of the acceptance of the new technology) and the Tiger pleasure framework. For each of the factors, statements were made to answer the subquestions.

The original validated UTAUT statements were used for the subquestions based on the UTAUT theory. This is the first time that the Tiger pleasure framework has been used as a theoretical basis to test the influential factors on the SNSs' usage. Therefore, the statements have been formulated to discover whether the factors influence the usage of Twitter. The relevant factors have been formulated in separate statements and users have been asked to express their idea about the statements.

The final result was a paper-based questionnaire in Dutch, containing six main sections. The questionnaire was conducted in Dutch to prevent the language bias because the questionnaire respondents are Dutch students and Dutch is their first language.

Structure of the questionnaire

Part one

This section comprises 51 statements based on the Likert scale. The respondents were asked to indicate their degree of agreement or disagreement with the statements. For this purpose, a five-point scale is used to measure the level of their agreement or disagreement. For instance, the respondents for a statement such as "Twitter is useful for my job/study" were asked to express their idea in a five-point scale from 1 to 5 (1. strongly disagree, 2. disagree, 3. neither agree nor disagree, 4. agree, 5. strongly agree)⁶.

Similar statements were used for Twitter, Facebook and LinkedIn to evaluate the level of agreements and disagreements for each of the factors. The relationship between the usage behavior and the influential factors was tested by posing specific statements. For instance, the relationship between the performance expectancy and the usage is tested by presenting similar statements to the respondents regarding Twitter, Facebook and LinkedIn. For example:

Statement A: Performance expectancy

- Twitter is useful for my job/study.

⁶ 1. Helemaal oneens, 2. Oneens, 3. Niet mee eens/Niet mee oneens, 4. Eens, 5. Helemaal eens

- Facebook is useful for my job/study
- LinkedIn is useful for my job/study.

Part two

This section contains three similar questions about the intensity level of the usage of Twitter, Facebook and LinkedIn. Users were asked to choose one of the seven intensity levels to indicate their usage behavior. For instance:

How often do you use Twitter actively?

1. Several times a day
2. About once a day
3. Several times per week.
4. About once a week
5. About once a month
6. Rarely, but definitely less than once a month
7. Never

The users' usage behavior is divided into two groups to test the relationship between the factors and the usage more precisely. The groups are as below:

- User with high usage frequency (High users, score <4);
- Users with low usage frequency (Low users, score ≥ 4).

Part three

In this section, respondents were asked to indicate on a scale of 1 to 3 how often they do activities on SNSs (1. frequently, 2. sometimes and 3. never). The activities are: sharing photos, watching photos, sharing videos, watching videos, sharing links, using other's links, writing a short message about themselves and reading others' short messages. This part is designed to discover which SNSs are being used for what activities.

Unfortunately, this part of the questionnaire has been eliminated from research. The respondents' answers did not seem to be reliable. The pre-test phase did not indicate any problem, but it seems that the respondents were not happy with this part. The low response rate and careless responses to the options (e.g. inserting a tick instead of requested ranking based on numbers) are the reasons to exclude this part from the research.

Part four

In this part, respondents were asked to put Twitter, Facebook and LinkedIn in order based on the importance of these SNSs for their social networking. They were provided five questions with ranking numbers for each SNS (1. Most important, 2. Less important 3. The least important). This part was designed to see which SNS stands in the highest ranking position based on different criteria. Similar to part three, this part has also been excluded from this research due to the same reasons mentioned in part three.

Part five

In this part, the mentioned monetization strategies in the finance domain of the STOF have been investigated by asking the respondents to answer two yes/no questions for each of the SNSs (Twitter, Facebook, LinkedIn) about their readiness to pay for different services. In this part, respondents were asked to express their idea about the membership fee and advertising strategies. The results have been applied to the analysis of the financial area of the STOF model.

Part six

In this part, respondents were asked similar questions about how/where they heard about Twitter, Facebook and LinkedIn for the first time. They were provided options such as: 1. In the news on TV, 2. In the news on the Internet, 3. via friends, 4. Others, namely.

Development phases

The development of the questionnaire was divided into five main phases. In the first phase, a primary questionnaire was designed. The design of the questionnaire was based on the theoretical framework of user's perspectives. In the second phase, the proposed primary questionnaire was changed based on Dr. Harry van Vliet, Kees Winkel and Dr. Rogier Brussee's ideas. In the third phase, the questionnaire was pretested on Crossmedialab members and their input was processed in the final version of the questionnaire. In the fourth phase, the paper-based questionnaire was pretested on a small sample of students to ensure the clarity. These students were chosen randomly in the campus area of the Faculty of Communication and Journalism of the Utrecht University of Applied Science. In the last phase, the questionnaire was given to students at the Faculty of Communication and Journalism of the Utrecht University of Applied Sciences.

Method of collecting data

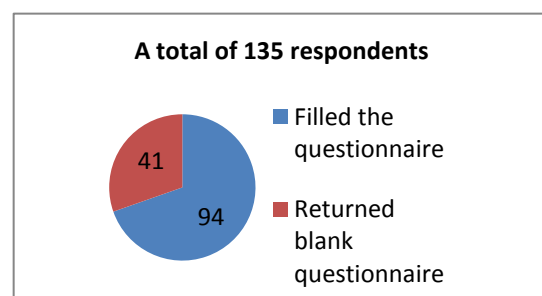
A paper-based questionnaire was prepared and made available personally to the students. The undergraduate students were asked to answer the questionnaire during their classes and were found in the faculty area. Respondents took approximately 15 minutes to complete the entire questionnaire. The respondents' age, postcode and study major were asked. However, no names were collected on the questionnaire to maintain the anonymity.

The responses of the questionnaire have been stored in an Excel file. The Excel file comprises the original questionnaire presented to the respondents, the processed respondents' answers and original questionnaire presented to the respondents in codes.

Participants

The questionnaire was given to students to enhance the probability of finding SNS users. For the same reason, the Faculty of Journalism and Communication was chosen for participants. The students from the Communications and Journalism faculty are expected to be more familiar with the SNSs than those doing other majors. The last reason was the convenience of finding the right sample students.

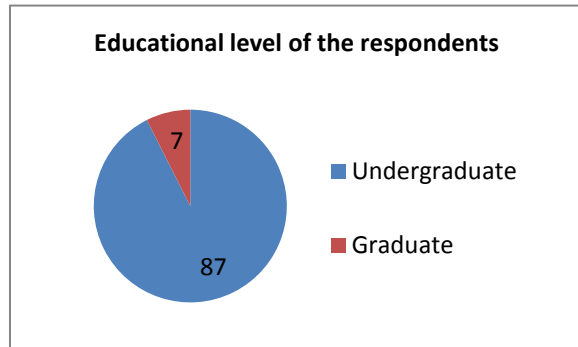
The participants were chosen randomly. They were not asked if they use any SNSs. A total of 135 students aged between 17 and 29 years were asked to answer the questionnaire from which 41 students returned blank questionnaires (Figure 19): 21 respondents indicated they do not use any of the mentioned SNSs by choosing the option "never" in the second section of the questionnaire where they were asked how often they actively use the mentioned SNSs. The other 20 returned the questionnaires with only information about their age, sex, education and postcode filled in. In the instruction part of the questionnaire, students were asked to answer the questions about the SNSs they use. The students were also orally informed that they could only express their ideas about the SNSs they use. It was concluded that the 41 students



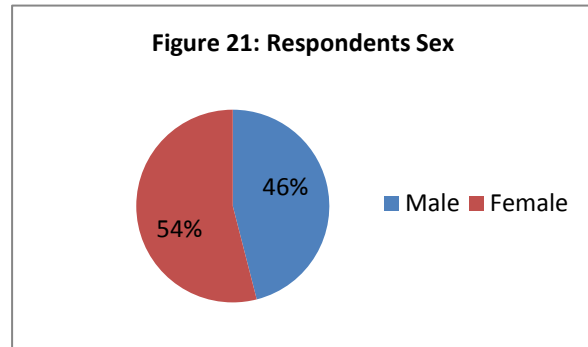
Figuur 19: Respondents' response

who returned blank questionnaires did not use any of the mentioned SNSs.

A total of 94 students answered the questionnaire, of which 87 are undergraduate students and 7 are graduate students (Figure 20). All graduate and undergraduate students are the students of the Faculty of Journalism and Communication at the Utrecht University of Applied Sciences. Fifty-one females and 43 males answered the questionnaire (Figure 20). The Participants were chosen randomly. They were not asked if they use any SNSs.



Figuur 20: Respondents' educational level



Figuur 21: Respondents sex

5. Results & analysis

This part of the research comprises two main sections. The first section contains the answers to the first and the second subquestions from the business perspective. The second section presents the results and analysis of the mentioned subquestions based on theoretical framework from the user's perspective s.

5.1 Business perspective

As mentioned before, in the business perspective SNSs are seen as commercial organizations and their success can be determined by various elements. Two subquestions were made to answer the research question: what factors influence the success of a social network site, in this case Twitter? In this part, the first subquestion (what factors influenced Twitter's rapid growth?) and the second subquestion (what business factors will help Twitter to keep its stabilized position, if it is reached?) were answered using experts' ideas. For this purpose, an active new media strategist on the web, an assistant professor of university of Amsterdam and the trend watcher of the year were interviewed.

The first interviewee was Frank Meeuwsen, a digital communication and new media strategist, the second interviewee was Dr. Yanto Chandra, assistant Professor of Marketing & Innovation of university of Amsterdam who is also specialized in Social media marketing and the third interviewee was Tony Bosma, a nominated trend watcher of 2010 in the Netherlands. The diversity in their backgrounds and specializations ensured insight from both societal and business perspectives about the Twitter's success factors in the growing and stabilized phases of its life cycle.

Subquestion 1: what business factors influenced Twitter's rapid growth?

Frank Meeuwsen

The first factor is the focus. Twitter is successful because it has focused on a simple idea of saying what you are doing in 140 characters. Twitter could provide different features as Jaiko did, instead it tried to provide a simple and focused service to its users. This strategy was also used for the blogs in their early days. When blogs emerged in 1997, they were not more than a text field. They did not have a title, reaction field, RSS feed, add images or many other features. Users could only publish text with a link. Another example of the importance of focus in the growing phase is that Facebook was only a simple platform to connect classmates in its early days.

The second influential factor in Twitter's success was the appearance of celebrities and famous people on Twitter that generated free publicity in the media. For instance, Ashton Kutcher and Obama played important roles in Twitter's promotion at the beginning. Meeuwsen believes that their usage created free publicity and encouraged others to discover Twitter.

The third factor is openness towards the outside world. Twitter is not only open for its users, but its data is also visible for outsiders. This makes Twitter a platform on which everybody can engage. The features such as Twitter@ and Retweet were not created by Twitter itself, but by Twitter's users. This openness to developing various features and applications is another factor behind Twitter's success.

Yanto Chandra

According to Chandra, it is important to check if there are people who would be interested in the new business or service. Twitter is answering the need of a certain niche market. Twitter provides its users a new service. In fact, Twitter has positioned itself to answer a certain need in the market.

Chandra believes that Twitter's success is related to the success of SMS; SMS is used by almost all mobile phone users. Twitter has based its business on this concept but with the extra advantage that people can send the same short message (in 140 characters) to each other from their mobile and computer. Another success factor of Twitter is its snowball effect. It encourages people to introduce it to others. Users cannot enjoy using it alone. It is meant as a service for a network of people. Chandra believes that Twitter also facilitates the need for a faster way of communication. This attracts people because humans are social creatures. Another advantage of Twitter in its niche market is the first mover advantage. Twitter also gives people this feeling of using the next generation SMS and the message can be seen by the whole world. This encourages some people to try it.

Tony Bosma

He believes that Twitter is successful because it is simple for its users. This is the same as Google which provides various services to its users via a simple website. He also believes that the success of Twitter can be sought from the success of and the need for SMS. People already use SMS and it seems they need SMS for communication. Twitter also provides its users a communication instrument by which they can contact one another in a short message similar to SMS. It can be called an SMS service through Internet. According to Bosma, the new trends in society also influence Twitter's usage. The physical dialogue is being transferred into a virtual world. People are also becoming more transparent than before. These changes can be considered factors that influence Twitter's usage.

Subquestion 2: what business factors will help Twitter to keep its stabilized position, if it is reached?

Frank Meeuwssen

Meeuwssen finds it difficult to say which factors precisely will influence the stabilized stage of Twitter's life cycle, but he believes there are a few factors which can play a role such as technical, financial and users' demand. Technically, it is vital to make sure that the system is always on air and functions properly. Financially, the organization must have enough cash inflow to pay the staff and other costs. The last issue is the paying more attention to what the users need in this phase and satisfy their needs.

Yanto Chandra

He believes that in the stabilized stage, firstly, it is very important to improve the functionality of the service. Secondly, PR activities must be intensified. Managing image issues and paying attention to users' privacy issues are also important. Development of a proper business model is needed to continue business and pay the costs.

Tony Bosma

In the stabilized stage, the business model and the monetization are important issues. The business model must be incorporated in the service in a way that does not disturb users' experience of the service.

All the mentioned success factors of Twitter in the growing and stabilized stages of life cycle has been illustrated in (Figure 22).

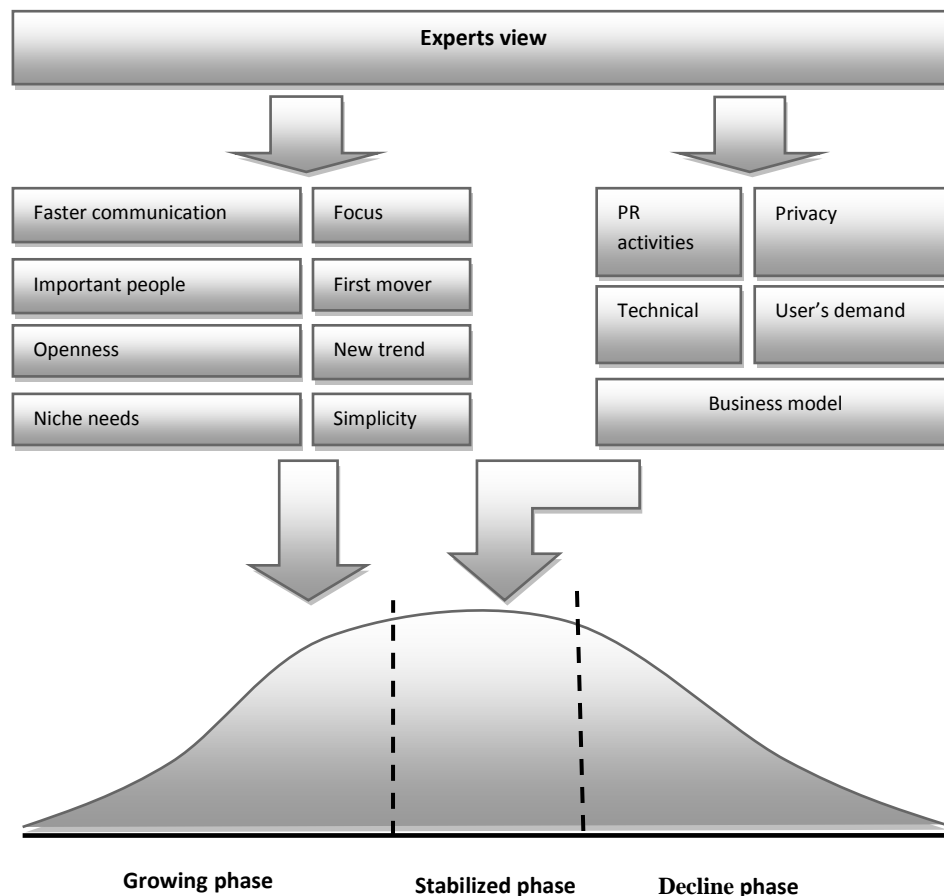


Figure 22: Twitter's success factor in growing and stabilized phases of life cycle

5.2 User's perspective

The SNSs are a service (platform) for their users to adopt it for their online social networking. Therefore, it is important to discover what factors motivate the users to use a social networking platform. For this purpose, the proposed subquestions based on the user's perspective will be analyzed using results from the conducted questionnaire among students.

Questionnaire

In this section, the subquestions are answered. Independent T- test are applied to answer the subquestions. The first subquestion (performance expectancy) shows the procedure applied for all other subquestions (1-16).

In the questionnaire users were asked, firstly, to express their idea about the statements (e.g. Twitter is useful for my work/study) in a five-point scale (Likert scale) from 1 to 5. Secondly, they were asked to mention their usage frequency by saying 'how often they actively use SNSs (see section 2 of the questionnaire in attachment 3). They could respond with options such as: (1. Meerdere keren per dag, 2. Ongeveer één keer per dag, 3. Meerdere keren per week, 4. Ongeveer één keer per week, 5.

Meerdere keren per maand, 6. Heel af en toe maar zeker minder dan een keer per maand, 7. Nooit)⁷. In the T-test, the users are divided into two groups of high user (<4) and Low users (>=4). All the statistical data are available in the attachment (1).

Subquestion 1: Is there a relation between higher performance expectancy and higher usage frequency of Twitter's users?

Twitter: Twitter is useful for my job/study⁸

T-test is applied to see if there is a statistically significant difference between the means of the performance expectancy of the high users and low users. For this purpose, the following procedure will be used:

- $H_0: \mu_1 - \mu_2 = 0$ (no difference)
- $H_1: \mu_1 - \mu_2 \neq 0$ (different)

μ_1 = Low users, μ_2 = High users

The comparison of the average scores of the high users (<4) and the low users (>=4) about Twitter performance expectancy indicates that we can reject the H_0 in favor of the H_1 . The $P < 0.05$ ($P = 0.001$) and, therefore, the difference between the two means is statistically significantly different from zero at the 5% level of significance. This shows that users with higher usage frequency have a more positive opinion about Twitter performance expectancy than those with the lower usage frequency.

Group Statistics				
Hoe vaak doe je iets op Twitter	N	Mean	Std. Deviation	Std. Error Mean
Twitter is nuttig voor mijn werk of opleiding >= 4	32	2,31	1,061	,188
< 4	36	3,28	1,186	,198

9

Figure 22: Twitter performance expectancy

⁷ 1. Several times a day, 2. About once a day, 3. Several times a week, 4. About once a week, 5. Rarely, but definitely less than once a month, 6. Rarely, but definitely less than once a month, 7. Never

⁸ Twitter is nuttig voor mijn werk en/of opleiding

⁹ Translation: "Hoe vaak doe je zelf iets op Twitter?" means *How often do you Twitter actively?*

"Twitter is nuttig voor mijn werk of opleiding" means *Twitter is useful for my job/study.*

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Twitter is nuttig voor mijn werk en/of opleiding	Equal variances assumed	1,831	,169	-3,520	68	,001	-.985	,274	-1,513	-.418
	Equal variances not assumed			-3,543	65,998	,001	-.985	,272	-1,509	-.421

Figure 23: Twitter performance expectancy

Facebook: Facebook is useful for my job/study¹⁰

We cannot reject the H_0 in favor of the H_1 . The $P > 0.05$ ($P = 0.32$) and, therefore, the difference between the two means is not statistically significantly different from zero at the 5% level of significance. This shows that the users' idea about the Facebook's performance expectancy does not differ by their usage frequency.

Group Statistics				
Hoe vaak doe je iets op Facebook		N	Mean	Std. Deviation
Facebook is nuttig voor mijn werk en/of opleiding	≥ 4	44	2,43	,925
	< 4	43	2,65	1,110

Figure 24: Facebook performance expectancy

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Facebook is nuttig voor mijn werk en/of opleiding	Equal variances assumed	2,104	,151	-1,002	85	,319	-.219	,219	-.656	,218
	Equal variances not assumed			-1,000	81,825	,320	-.219	,219	-.658	,217

Figure 25: Facebook performance expectancy

LinkedIn: LinkedIn is useful for my job/study¹¹

we can reject the H_0 in favor of the H_1 . The $P < 0.05$ ($P = 0.014$) and, therefore, the difference between the two means is statistically significantly different from zero at the 5% level of significance. This shows that the users' idea about the LinkedIn performance expectancy is different in two groups of high users and low users. The high users score more than the low users.

¹⁰ Facebook is nuttig voor mijn werk en/of opleiding

¹¹ LinkedIn is nuttig voor mijn werk/opleiding

Attention:

A total of 94 students answered the questionnaire from which 89,6% are the undergraduate students and 9,4% graduate students. This might be the reason behind the low sample number of the high users of LinkedIn in all cases which is not more than 5. A sample number of 5 seems not to be reliable for a valid conclusion. Therefore, the LinkedIn results will not be included in the analysis of the means of different groups (high users and low users).

Group Statistics				
Hoe vaak doe je iets op LinkedIn	N	Mean	Std. Deviation	Std. Error Mean
LinkedIn is nuttig voor mijn werk >= 4	50	3,12	1,100	,156
en/of opleiding < 4	5	4,40	,548	,245

Figure 26: LinkedIn performance expectancy

Independent Samples Test									
	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
LinkedIn is nuttig voor mijn werk	1,479	,229	-2,555	53	,014	-1,280	,501	-2,285	-,275
en/of opleiding									
Equal variances assumed									
Equal variances not assumed			-4,411	7,773	,002	-1,280	,290	-1,853	-,807

Figure 27: LinkedIn performance expectancy

Analysis

As you can see in the (Figure 28), performance expectancy plays a role in usage frequency of the Twitter's users. There is a difference between the means of the Twitter high users and the Twitter low users. This is not true about the Facebook. There is not a significant difference between the means of the high users and the low users of the Facebook. Therefore there is not a relation between higher performance expectancy and the higher usage in the Facebook.

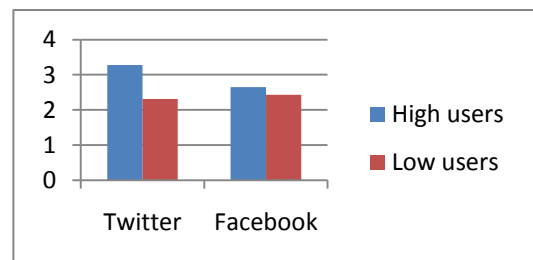


Figure 28: Comparison Twitter and Facebook

Sub question 2: Is there a relation between higher effort expectancy and higher usage frequency of Twitter's users?

Twitter: Twitter is user friendly¹²

The scores on the Twitter effort expectancy indicates that we can reject the H_0 in favor of the H_1 . The $P < 0.05$ ($P = 0.00$), and, therefore, the difference between the two means is statistically significant

¹² Ik vind Twitter gebruiksvriendelijk

different from zero at the 5% level of significance. We can see that the Users with higher usage frequency have more positive opinion about Twitter user friendliness than those with the lower usage frequency.

Facebook: Facebook is user friendly¹³

The high users are more positive about the Facebook user friendliness than the low users. Since the $P < 0.05$ ($P = 0.00$), the difference is statistically significant. Therefore high users are more positive about Facebook user friendliness than the low users.

Means Comparison

Effort expectancy plays a role in the usage frequency of the Twitter's users and the Facebook's users. The comparison of the means indicates that the high users and the low users of Twitter are both more positive about the effort expectancy than the Facebook high users and low users.

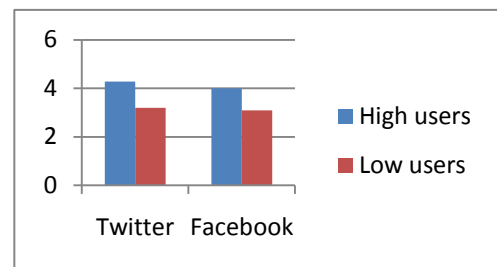


Figure 29: Effort expectancy Twitter and Facebook

Subquestion 3: Is there a relation between higher social influence and higher usage frequency of Twitter's users?

Twitter: People around me think I should use Twitter¹⁴

There is a difference between the means of the high users and low users about the social influence. The difference is statistically significant, because the $P < 0.05$ ($P = 0.023$). High user of Twitter score more than the low users. In fact, the degree of social influence in high users is more than the low users.

Facebook: People around me think I should use Facebook¹⁵

The $P > 0.05$ ($P = 0.41$). This indicates that there is not a significant difference in the mean score of the high users and the low users Facebook about the social influence. In fact the social influence is not a determinant factor in the level of usage.

Means comparison

There is a relation between the high usage frequency of Twitter's users and the high social influence. This is not true about Facebook (no statistically significant difference).

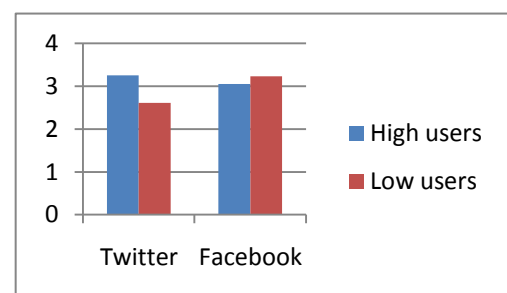


Figure 30: Social influence Twitter and Facebook

¹³ Ik vind Facebook gebruiksvriendelijk

¹⁴ Mensen in mijn omgeving vinden dat ik Twitter moet gebruiken

¹⁵ Mensen in mijn omgeving vinden dat ik Facebook moet gebruiken

Subquestion 4: Is there a relation between higher facilitating condition and higher usage frequency of Twitter's users?

Twitter: I can use Twitter without any technical problems¹⁶

There is a difference in the means of the Twitter high users and Twitter low users. The high users of the Twitter score more on the facilitating condition than the low users. This difference is statistically significant ($P < 0.05$, $P = 0.003$). This means that the high user are more positive about the facilitating condition of the Twitter than the low users.

Facebook: I can use Twitter without any technical problems¹⁷

The $P > 0.05$ ($P = 0.21$), and, therefore, there is evidence that the means are not different. In fact, the high users and the low users think the same about the facilitating condition of the Facebook.

Means comparison

There is a relation between the higher facilitating condition and the higher usage frequency of Twitter's users. The high users and the low users of Twitter seems not to have problem with the facilitating condition.

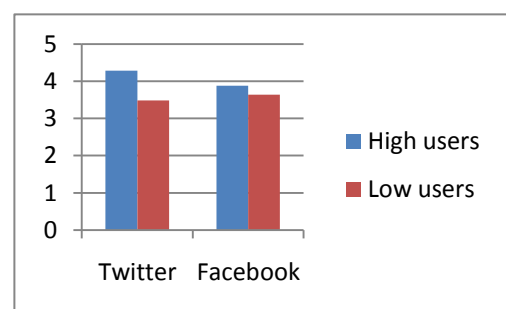


Figure 31: Facilitating condition Twitter and Facebook

Subquestion 5: Is there a relation between higher entertaining character and higher usage frequency of Twitter's users?

Twitter: It is fun and interesting to see what my friends are doing on daily basis (via) on Twitter¹⁸

There is a difference in the means of the scores on the entertaining character of Twitter between the high users and the low users. The $P < 0.05$ ($P = 0.001$), and therefore, The difference is statistically significant. The high users of Twitter find it more entertaining to follow their social network on Twitter than the low users.

Facebook: It is fun and interesting to see what my friends are doing on daily basis (via) on Facebook¹⁹.

There is evidence that the means of the high users and the low users of the Facebook on the entertaining character of the Facebook are different ($P < 0.05$, $P = 0.01$). In fact, the high user are more positive about the entertaining character of the Facebook than the low users.

¹⁶ Ik kan Twitter zonder (technische) problemen gebruiken

¹⁷ Ik kan Facebook zonder (technische) problemen gebruiken

¹⁸ Ik kan Facebook zonder (technische) problemen gebruiken

¹⁹ Ik vind het leuk en interessant om via Facebook te zien wat mijn vrienden dagelijks doen

Means Comparison

There is a relation between the higher entertaining character and the higher frequency of usage of both Facebook and Twitter's users. Twitter and Facebook's users have almost the same idea about the entertaining character of the SNSs. The high users in both of the SNSs score more on the entertaining character.

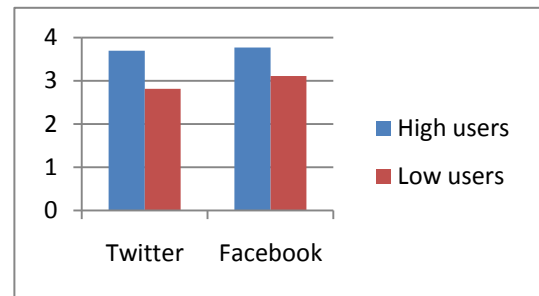


Figure 32: Entertainment Twitter and Facebook

Subquestion 6: Is there a relation between higher expression and higher usage frequency of Twitter's users?

Twitter: I share my ideas openly with everyone by Twitter²⁰.

There is evidence that the means of the high users and the low users of Twitter are significantly different ($P < 0.05$, $P = 0.001$). Expression influences the usage of the high users more than the low users.

Facebook: I share my ideas openly with everyone by Facebook²¹

There is not enough evidence that the means of the two groups (high users and low users of the Facebook) are different. The difference is not statistically significant ($P > 0.05$, $P = 0.149$).

Means comparison

There is a relation between the higher expressive character of the Twitter's users and the higher usage frequency. In fact, the high Twitter users' mean is more than 3 and in the positive direction. The Facebook's (high and low) users seems not to use Facebook more to express themselves.

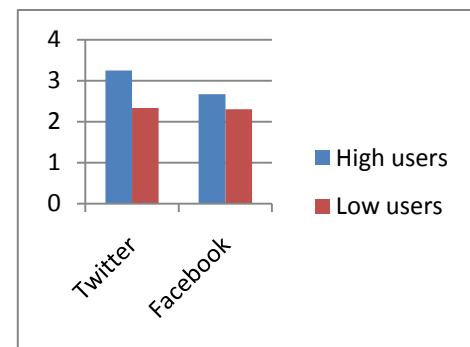


Figure 33: Expression Twitter and Facebook

Subquestion 7: Is there a relation between instant messaging and higher usage frequency of Twitter's users?

Twitter: I like Twitter because I can chat with my friends on Twitter²².

The means of the high users and the low users of Twitter's users on the instant messaging are not different ($P > 0.05$, $P = 0.252$). In fact, the instant messaging function does not result in higher usage.

Facebook: I like Twitter because I can chat with my friends on Facebook²³.

²⁰ Met Twitter deel ik mijn ideeën openlijk met iedereen

²¹ Met Facebook deel ik mijn ideeën openlijk met iedereen

²² Ik vind het aantrekkelijk dat ik met mijn vrienden kan chatten op Twitter

²³ Ik vind het aantrekkelijk dat ik met mijn vrienden kan chatten op Facebook

In contrast to Twitter, there is a difference between the means of the high users and low users of Facebook about the instant messaging and it is statistically significant ($p < 0.05$, $P = 0.008$). The high users scored more positively on the instant messaging than the low users.

Means comparison

The means indicate that the higher instant messaging in Facebook somehow results in a higher usage but not in Twitter. Both (high and low) users do not use Twitter for instant messaging purposes.

Since the Twitter does not have the same chat option as in the Facebook, the result seems logical. However, there is a relation between instant messaging and higher usage frequency of the high users of Facebook.

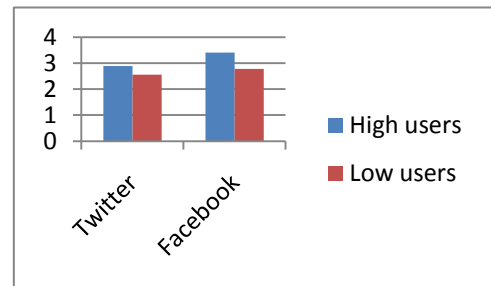


Figure 34: Instant messaging Twitter and Facebook

Subquestion 8: Is there a relation between higher playfulness and the higher usage frequency of Twitter's users?

Twitter: I like to follow my social network on Twitter²⁴.

The means of the high users is more than the low users. The difference is statistically significant ($P < 0.05$, $P = 0.00$). The high users consider Twitter more playful than the low users.

Facebook: I like to follow my social network on Facebook²⁵

The same as the Twitter, the means of the two groups (high users and the low users of the Facebook) are different and it is statistically significant ($P < 0.05$, $P = 0.000$). The high users are more positive about the playfulness than the low users.

Means comparison

There is a relation between the high usage frequency of the Twitter and Facebook's users and the high usage frequency. The Twitter high users are somehow more positive than the Facebook high users about the playfulness character.

However one cannot say Twitter is much more playful than the Facebook due to the small difference in the means.

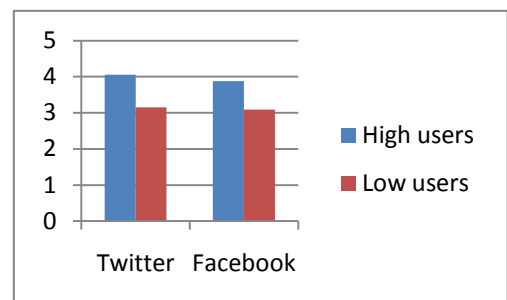


Figure 35: Playfulness Twitter and Facebook

Subquestion 9: Is there a relation between higher assurance of privacy issue and the higher usage frequency of Twitter's users?

Twitter: I am worried about my privacy on Twitter²⁶

²⁴ Ik vind het leuk om mijn sociale omgeving te volgen op Twitter

²⁵ Ik vind het leuk om mijn sociale omgeving te volgen op Facebook

²⁶ Ik vind het leuk om mijn sociale omgeving te volgen op Twitter

According to the evidence ($p > 0.05$, $P = 878$), there is not a difference in the means of the two groups (high users and the low users of the Twitter) about privacy issue.

Facebook: I am worried about my privacy on Facebook²⁷.

The same as Twitter, $P < 0.05$, $P = 0.445$, and therefore there is not enough evidence that the means of the two groups (high users and low users) are different.

Means comparison

There is not a relation between the privacy issue and the higher usage frequency in Twitter and Facebook high users. In fact, more assurance about the privacy issue is not related to the more usage frequency of their high users. Both Twitter and Facebook's users seems not to be worry about their privacy issues. Interestingly, there is a difference in (means) the degree of the concerns about the privacy issue

between Twitter's users and the Facebook's users. Twitter's users seem to be even less concerned about their privacy than the Facebook's users.

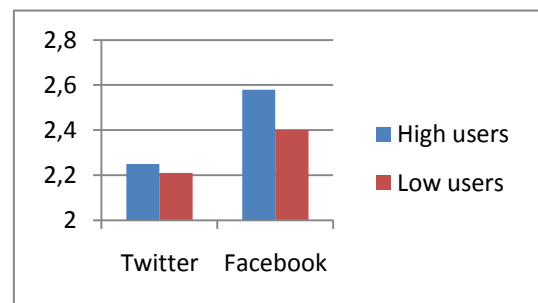


Figure 36: Privacy Twitter and Facebook

Subquestion 10: Is there a relation between higher constant contact and the higher usage frequency of Twitter's users?

Twitter: I use Twitter to be in touch with my friends constantly²⁸.

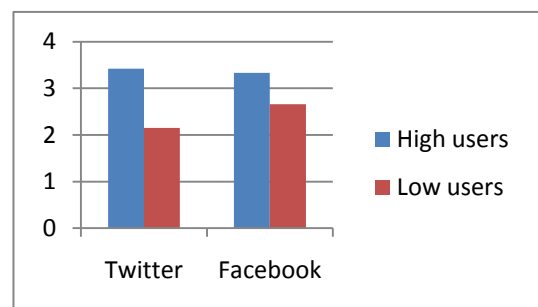
The $P < 0.05$, $P = 0.00$, and therefore there is a statistically significant difference between the means of the two groups (high users and the low users. Being in constant contact with the friends and social networks motivate higher users to use Twitter more than the low users.

Facebook: I use Facebook to be in touch with my friends constantly²⁹.

The $P < 0.05$, $P = 0.002$, and therefore, there is a statistically significant difference between the two means of the two groups (high users and low users).

Means comparison

There is a relation between the constant contact and the higher usage frequency for both Twitter and Facebook high users. The Twitter high users are more positive than the Facebook high users.



²⁷ Ik maak me zorgen over mijn privacy op Facebook

²⁸ Ik maak me zorgen over mijn privacy op Facebook

²⁹ Ik gebruik Facebook om constant in contact te zijn met mijn vrienden

Subquestion 11: Is there a relation between status updates (short messaging) and the higher usage frequency of Twitter's users?

Figure 37: Constant contact Twitter and Facebook

Twitter: I find it attractive to read the short messages posted by my contacts on Twitter³⁰.

The difference between the means of the two groups is statistically significant ($P < 0.05$, $P = 0.000$). The high users like the status updates (short messaging) more than the low users.

Facebook: I find it attractive to read the short messages posted by my contacts on Facebook³¹

The same as Twitter, there is a difference between the means of the two groups (high user and low users). The difference is statistically significant ($P < 0.05$, $P = 0.005$)

Means comparison

There is a relation between the status updates and the higher usage frequency of both Twitter and the Facebook high users. The comparison of the mean of the high users and the low users of Twitter and Facebook indicate that the status updates (short messages) does influence the frequency of the usage of these SNSs. Twitter high users score more positively than the Facebook.

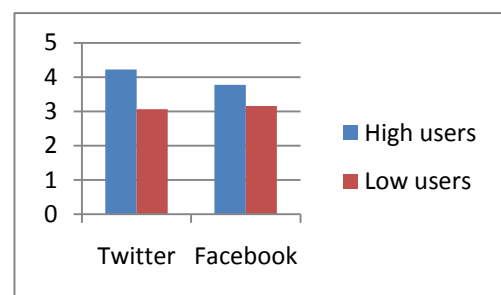


Figure 38: Status updates Twitter and Facebook

Subquestion 12: Is there a relation between open culture (following and being followed by everyone) and the higher usage frequency of Twitter's users?

This factor is divided into sections. In the first section, users express their likeliness to follow. In the second section, users express their likeliness to be followed by others.

Part one

Twitter: I like Twitter because I can follow Twitter messages from everyone³².

There is a difference between the means of the two groups (high users and the low users). The $P < 0.05$, $P = 0.00$, and therefore, the difference is statistically significant. In fact, high users like more than low users to follow others.

Facebook: I like Facebook because I can follow Facebook messages from everyone³³.

The same as Twitter, there is a difference between the means of the two groups (high user and low users) and it is statistically significant ($P < 0.05$, $P = 0.021$).

³⁰ Ik vind het aantrekkelijk om korte berichtjes van mijn contacten op Twitter te lezen

³¹ Ik vind het aantrekkelijk om korte berichtjes van mijn contacten op Facebook te lezen

³² Ik vind het aantrekkelijke van Twitter dat ik berichten van iedereen kan volgen

³³ Ik vind het aantrekkelijke van Facebook dat ik berichten van iedereen kan volgen

Means comparison

There is a relation between the higher open culture of Twitter and the higher usage frequency of the Twitter high users. The means of the high users indicates that the users like an open system in which they can follow everyone. It seems that Twitter high users are more happy with following everyone (open culture) than the Facebook high users.

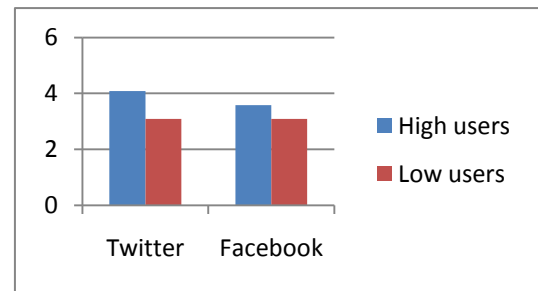


Figure 39: Open culture Twitter Facebook (part 1)

Part 2

Twitter: I find it interesting that everyone can follow me on Twitter³⁴.

The $P < 0.004$, $P = 0.004$, and therefore the difference between the two means of the two groups (high users and the low users) is statistically significant. The high users like it more than the low users to be followed on Twitter.

Facebook: I find it interesting that everyone can follow me on Facebook³⁵

There is not a difference in the means of the high users and the low users of Facebook. There is also evidence that the means of the two groups (high users and low users) are not different ($P > 0.05$, $P = 0.445$).

Means comparison

There is a relation between high open culture (being followed by everyone) and the high usage frequency of Twitter high users. This is not true about the Facebook's users. It seems that Twitter high users find it more interesting to be followed by others than Facebook's users.

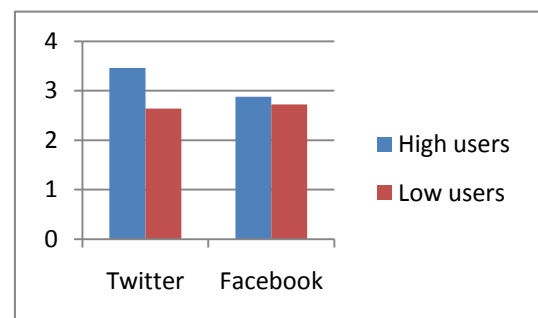


Figure 40: Open culture Twitter Facebook (part2)

Subquestion 13: Is there a relation between online-offline relationship and the higher usage frequency of Twitter's users?

This subquestion is divided into two sections. In the first section, users indicate if they know their contacts personally. In the second section, users indicate if their contacts are business-related.

Part one

Twitter: I know most of my Twitter Contacts personally³⁶.

There is a difference between the means of the two groups (high users and low users). The $P < 0.05$, $P = 0.027$, and therefore the difference between the means of the two groups is statistically significant.

³⁴ Ik vind het aantrekkelijk van Twitter dat iedereen mij kan volgen

³⁵ Ik vind het aantrekkelijk van Facebook dat iedereen mij kan volgen

³⁶ Ik vind het aantrekkelijk van Facebook dat iedereen mij kan volgen

Facebook: I know most of my Facebook Contacts personally³⁷.

There is a difference between the means of the high users and the low users of Facebook. The $P < 0.05$, $P = 0.001$, and therefore the difference in the means of the two groups is statistically significant.

Means comparison

There is a relation between the high online-offline relationship (knowing contacts personally) and the higher usage frequency. It seems that both high and low users of the Twitter and Facebook know their contacts personally. This indicates that Twitter and Facebook are used to facilitate an existing offline relationships in an online world. The Facebook high users score more positively on this issue than Twitter's users. This indicates that Facebook high users know their contacts more personally than Twitter high users.

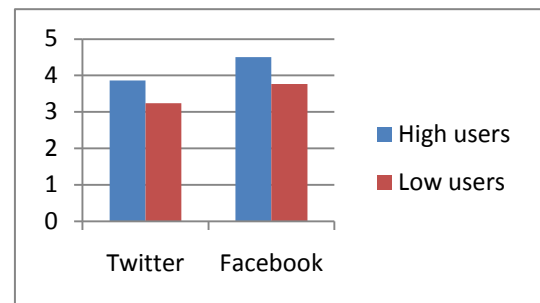


Figure 41: Online-offline relationship Twitter and Facebook

Part two

Twitter: Most of my Twitter contacts are business-related³⁸.

The $P > 0.05$, $P = 0.903$, and therefore there is no evidence that the means of the two groups (high users and the low users) are significantly different.

Facebook: Most of my Facebook contacts are business-related³⁹

The same as Twitter, the $P > 0.05$, $P = 0.060$, and therefore there is not enough evidence that the means of the two groups (high user and the low users) are significantly different.

Means comparison

There is not a relation between high online-offline relationship (business-related contacts) and the high usage frequency of the both Twitter and Facebook's users. The high and low users of Twitter and Facebook indicate that their contacts are not from business background. Since the majority of the respondents were students, this result is not

surprising. Most of the students do not have business contacts. In fact, this part of the question was not posed to the right sample.

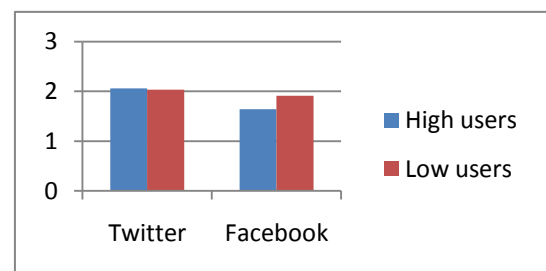


Figure 42: Online-offline relationship Twitter and Facebook

³⁷ Ik ken de meesten van mijn Facebookcontacten persoonlijk

³⁸ Ik ken de meesten van mijn Facebookcontacten persoonlijk

³⁹ Ik ken de meesten van mijn Facebookcontacten zakelijk

Subquestion14: Is there a relation between mobile platform and higher usage frequency of Twitter's users?

Twitter: I like Twitter because I can send messages at any time from my mobile⁴⁰.

The $P < 0.05$, $P = 0.00$, and therefore there is a significant statistical difference between the two means of the two groups (high users and the low users of Twitter).

Facebook: I like Facebook because I can send messages at any time from my mobile⁴¹

There is enough evidence that the means of the two groups (high users and the low users) are significantly difference ($P < 0.05$, $P = 0.010$).

Means comparison

There is a relation between the mobile platform and the higher usage frequency of the Twitter and the Facebook high users. The Twitter high users like Twitter more than the high users of the Facebook for its mobile platform.

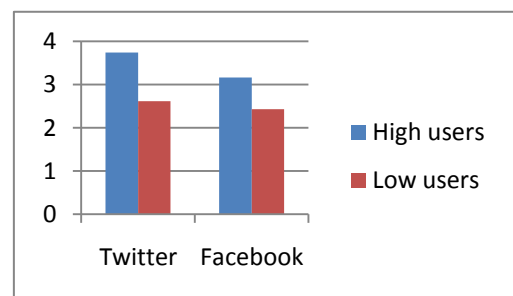


Figure 43: Mobile platform Twitter and Facebook

Analysis of factors

In the previous part, the relation between high usage frequency and the various factors were analyzed. In all of the introduced factors, there is a relation between high usage frequency of the Twitter's users and the mentioned factors except instant messaging and the online-offline relationship (business-related contacts).

In this part, the strength of the relationship between the high usage frequency and the factors for both high and low users will be discussed to discover which factors influence the usage frequency of both Twitter high users and the low users⁴².

As mentioned, users were asked to express their ideas about the influential factors (e.g. performance expectancy, effort expectancy, ...) in a scale of 1 to 5 (1. strongly disagree, 2. disagree, 3. neither agree /nor disagree, 4. agree, 5. strongly agree)⁴³.

The following factors are the factors with the scores more than 3 (score > 3) that indicate the (slight/strong) degree of influence of the various factors on the usage frequencies of the high and low users of Twitter. These factors are considered as the influential factors that affect the Twitter's usage. The factors are as below:

- Effort expectancy
- Facilitating condition
- Playfulness

⁴⁰ Ik vind het aantrekkelijk van Twitter dat ik op elk moment berichten kan sturen vanaf mijn mobiel

⁴¹ Ik vind het aantrekkelijk van Facebook dat ik op elk moment berichten kan sturen vanaf mijn mobiel

⁴³ 1. helemaal oneens, 2. Oneens, 3. Niet eens/Niet oneens, 4. Eens, 5. Helemaal eens
Masoud Banbersta - Crossmedialab

- Status updates
- Online-offline relationship (personal contacts)
- Open culture (being followed)

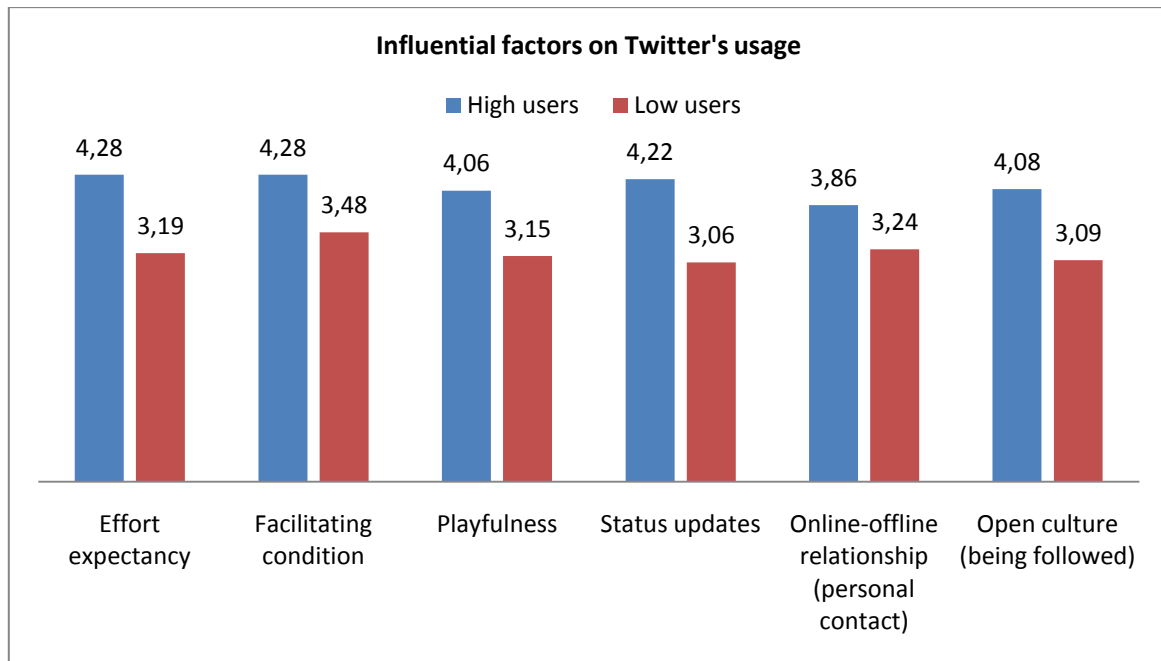


Figure 44: The influential factors on Twitter's usage

Facebook versus Twitter

In comparison between the high and low users of Twitter and Facebook with the means above 3 ($\mu > 3$), Twitter scored in some factors more than the Facebook. The factors are as follows:

- Facilitating condition
- Playfulness
- Status updates (short messaging)

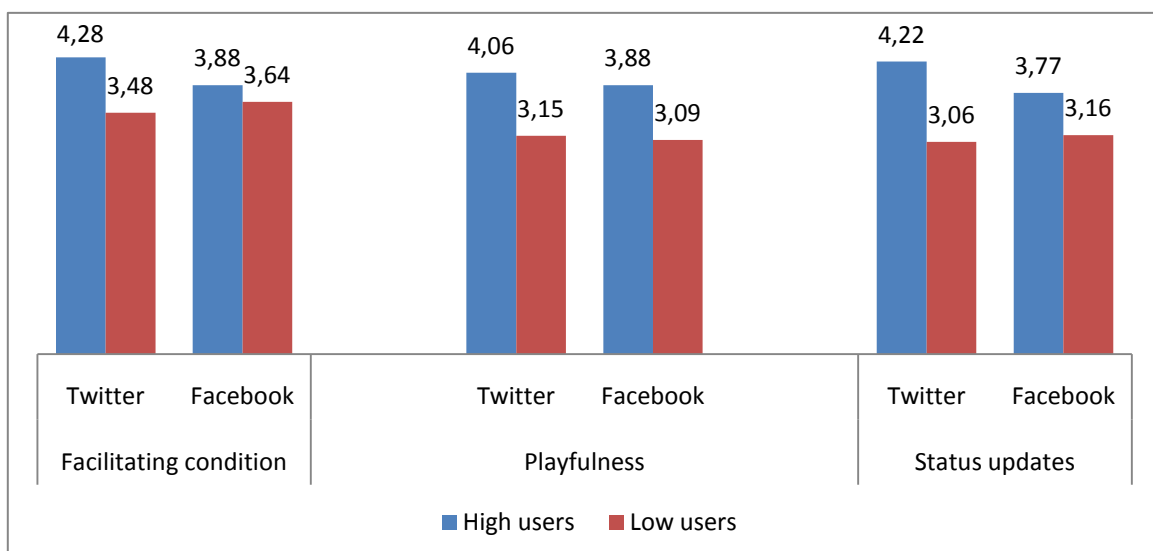


Figure 45: Comparison between Twitter and Facebook

Monetization

Subquestion 15: Will the users leave Twitter, if they are charged for the service?

The same statement were asked about Twitter, Facebook and LinkedIn. Users were asked to say "yes/no" to the following question: "would you use (Twitter Facebook, LinkedIn), if you had to pay a small amount of € 2 per year for membership?"⁴⁴.

The results indicate that the majority of the Twitter's users will not leave the site, if they had to pay the membership fee. However, nearly ¼ of the Twitter's users are against the membership fee. The same is also true about Facebook and LinkedIn. The majority of the users are not against the membership fee.

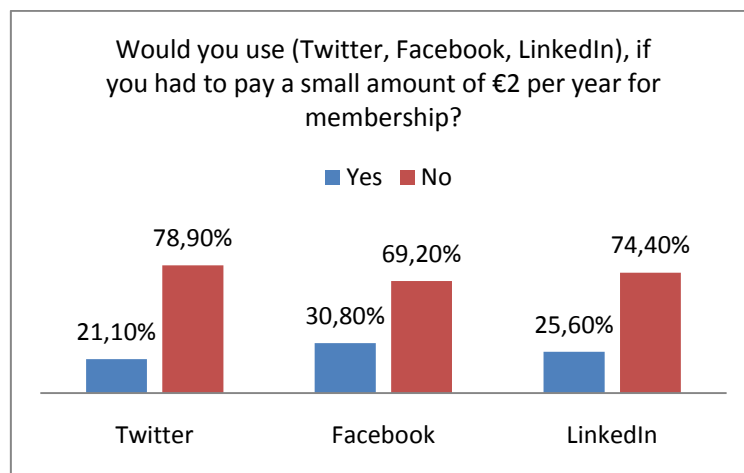


Figure 46: Membership fee

Subquestion 16: Are the users prepared to pay for the extra features provided by Twitter?

Users were asked to express their idea about the same statement "I am willing to pay for additional applications, such as being able to see the location of my friends on Twitter, Facebook, LinkedIn"⁴⁵ in a Likert scale of 1 to 5.

As you can see below, the means of the scores for all three SNSs are less than 2 ($\mu < 2$). This indicate that users are not willing to pay for the mentioned extra application.

⁴⁴ Zou je geen gebruikmaken van (Twitter, Facebook, LinkedIn), als je een klein bedrag van €2 per jaar moet betalen voor lidmaatschap?

⁴⁵ Ik ben bereid om voor extra applicaties te betalen, bijvoorbeeld om de locatie van mijn vrienden op Twitter te zien.

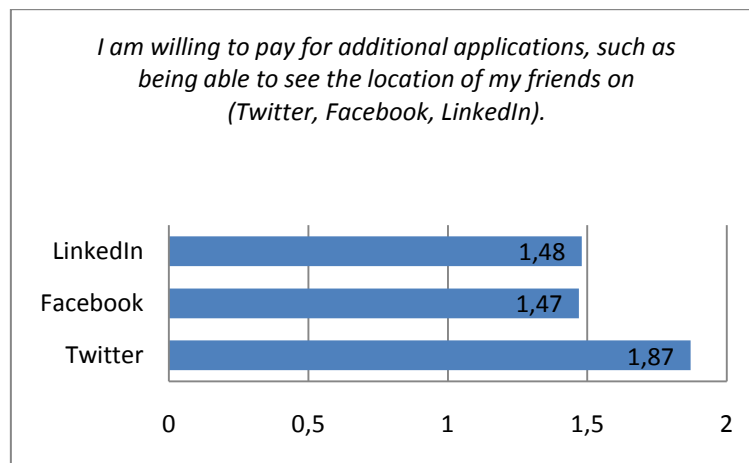


Figure 47: Freemium

Subquestion 17: Do users oppose to a short and one-time presence of advertising on their screens during usage?

The same statement were asked about the Twitter, Facebook and the LinkedIn. Users were asked to say "yes/no" to: "Would you use (Twitter, Facebook, LinkedIn), if you were obliged to watch 10 seconds of advertising once during your visit?"⁴⁶

Interestingly the Facebook's users are divided on the advertising strategy. However the majority of Twitter's users and LinkedIn users are not against the presence of a short one-time advertising.

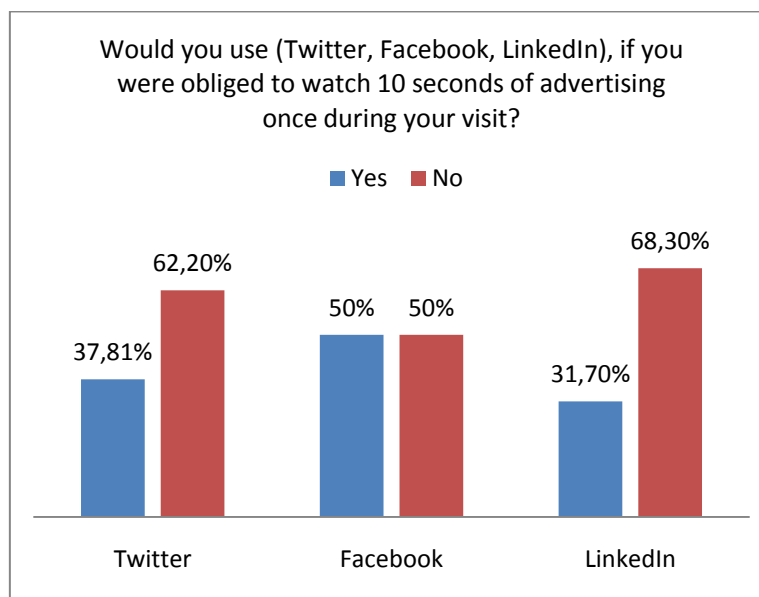


Figure 47: Advertising

⁴⁶ Zou je gebruikmaken van (Twitter, Facebook, LinkedIn) , als je tijdens je gebruik eenmalig 10 seconden reclame moet kijken?

PR and Marketing:

According to the statistics from the questionnaire, the majority of the (Twitter, Facebook, LinkedIn) users have heard the name of these SNSs for the first time from their friends. It can be assumed that the word of mouth marketing is the most effective way of promotion of the SNSs.

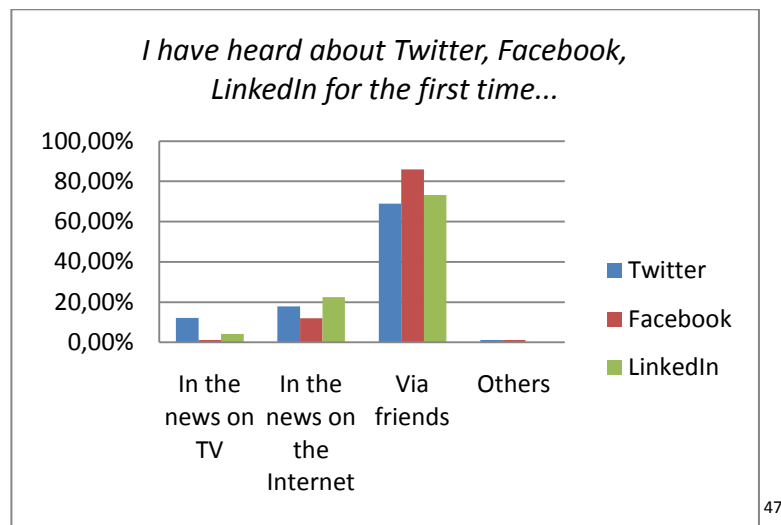


Figure 48: PR & Marketing

⁴⁷ Ik heb voor het eerst gehoord over (Twitter, Facebook, LinkedIn)....1. in het nieuws op TV, 2. In het nieuws op internet, 3, via vrienden, 4, anders...

6. Discussion

The research question was: what factors influence the success of a social network site, specifically Twitter? The success factors of a social network sites, Twitter, cannot be clarified by a single method or a single view. For this reason, Twitter's success factors are sought from two perspectives. One from the business perspective and one from the user's perspective. Besides the organization evolution theory, the STOF model is used for a better clarification of the success factors of Twitter.

Experts' view on the growing phase

In the business perspective, experts' view were used to elucidate the success factors of Twitter in its growing phase. Experts believe that the factors such as: being the first mover, focusing on short messaging, faster way of communication, Twitter's usage by important people, openness, simplicity, being a new trend, satisfying a niche need are the reason behind the Twitter's success in its growing phase.

In my opinion, all the mentioned factors by experts play a role in Twitter's success. However, faster way of communication, simplicity and openness are the most influential factors.

The need for a faster way of communication is due to nowadays busy life. This might be one of the reason behind the adoption of the SMSs as a usual communication channel. Twitter's short messages is a response to the mentioned demand. Twitter provides its users with a platform (service) on which they can communicate with their social contacts in a faster way.

The openness also influences Twitter's success. Twitter is an open platform where everyone can easily join and it also adapts itself to its users' demand. The features such as Twitter@ and Retweet are the examples of Twitter's adaption to the user's demand.

Simplicity is also a determinant factor in Twitter's success. Twitter is a simple system to use. This makes Twitter accessible to large public.

Users' view

Twitter's success is also sought from the user's perspective via a questionnaire held among SNSs' users. The questionnaire results indicate that there are several influential factors on Twitter's success from the user's perspective. The factors are based on the theories (UTAUT theory and Tiger pleasure framework) discussed in the user's perspective. According to the results, effort expectancy, facilitating condition, playfulness, status updates (short messaging) and open culture are the most influential factors behind Twitter's usage.

Twitter scored more (positively) than Facebook on the following factors:

- Facilitating condition,
- Playfulness
- Status updates (short messaging) shows.

As mentioned by the experts, technical issues are important for Twitter's success. It seems that users also support this idea. They have expressed that they are happy with the technical aspects more with Twitter than with Facebook.

Twitter's users are more satisfied about the playfulness character of following their social networks on Twitter than Facebook. In fact, Twitter's users find it more joyful to follow their social networks on daily basis on Twitter.

The scores on the status updates (short messaging) also indicate that Twitter is used more because of its short messages. Users like the short messages in Twitter more than the status updates of their contacts in the Facebook.

Evolution view on growing phase

In my opinion, all the mentioned factors from expert view and users view can be related to the three generic processes of the evolution which influenced the Twitter's success in its growing phase. Variation and selection and retention are the three major elements of generic process of evolution that affected Twitter's success in the growing phase intensively.

Variation

Firstly, SNSs such as Sixdegrees.com and Friendster emerged to connect people. Afterwards, SNSs tried to differentiate themselves from each other and specialize in specific areas. This trend created different categories of SNSs such as socializing SNSs, networking SNSs, navigating SNSs. As mentioned before, Twitter can be used for all three purposes. This means that the versatility in usage purposes (socializing, networking, navigating) is the first variation element used by Twitter which influences its success.

Secondly, Twitter used strategies such as simplicity, focus and openness in its variation phase to distinguish itself from other SNSs. The simplicity mentioned by experts as the success factors of the Twitter is also supported by users' idea about the lower level of effort expectancy and the facilitating condition. Users are provided with an easy system to use without technical difficulties.

Twitter's users also like Twitter because of its openness. In contrast to the usual SNSs, Twitter applied an open culture in which everyone can follow and be followed by others.

Selection

Twitter applied a selection element of generic process of evolution by choosing a niche market for SMS and a faster way of communication. Based on the existing demand for SMS's usage (a niche market for a faster way of communication), micro-blogging and the trend to use SNSs, Twitter established a new kind of SNS to connect people via short messaging. This was a response to the Target audiences who needed a faster way of communication in their social networking. This is also supported from the user's perspective. Status updates (short messaging) is one of the influential factors behind the Twitter's usage.

Retention

Twitter has also applied retention element of generic process of evolution. Twitter has used a unique strategy by looking at its users' preferences and demands. For instance, Retweet and Tweet@ are created by users but Twitter has incorporated these features on its site later. By this strategy, Twitter selected (selection) the new created features (variations) by its users. Twitter has also applied retention element of generic process of evolution. There are different signs of the duplication and reproduction of variations in Twitter's structure. The menus such as Home, profile, finding people, settings are the example of the retention of the selected variations from the previous generation of SNSs.

STOF model view on growing phase

There are several critical success factors of the STOF model that influenced Twitter's success in the growing phase. Twitter's success in growing phase can be related to different factors from STOF model domains such as:

- service domain: targeting and creating value elements;
- technology domain: accessibility for customers and system integration;
- finance domain: pricing.

Targeting and value elements (service domain) played a role in Twitter's success. Twitter attempted to target a specific customer segment. This does not mean Twitter targeted specific groups with similar socio-demographic characteristics. Instead, Twitter targeted a group with a common need. Twitter took advantage of an existing need for short messages. According to the statistics, 330 billion SMS messages were generated in the First quarter of the 2009 in the USA (William, 2009). Therefore, based on the current SMS' usage, Twitter targeted a group who is eager to communicate with its social network (contacts) through short messaging.

Creating a value proposition (service domain) is another CSF which influenced Twitter's success. By value proposition (Osterwalder & Pigneur, 2009, p. 25) companies and organizations can distinguish themselves from their competitors and this is the reason why a customer changes its product or service deliverer. Customer value can be created by solving customer's problem or satisfying a need. Twitter provided its users a free social networking platform for those who want to communicate with each other in short messages for different purposes (socializing, networking, navigating). Besides the users are facilitated by mobile service. They can send messages from Internet and their mobile phones. By this means, Twitter provided its users a different service than other SNSs. However, this function has been replicated by Facebook and Hyves.

The critical success factors in the technology domain of the STOF model also played a big role in Twitter's success. Twitter is a web-based service. Therefore technological elements are really important for satisfying the users' need. The accessibility for customers and system integration, are most influential actors in Twitter's success based on CSFs of the STOF model in technology domain. Twitter tried to enhance the accessibility (technology domain) of its service to its users. Firstly, similar to all SNSs, Twitter also uses Internet as a medium for service delivering. This facilitate a large group of users. Secondly, Twitter integrated mobile phone to its service which allows users to be able to send their short messages via mobile on their profile.

Twitter is also very easy to be integrated in new systems. Nowadays most of the online newspapers have the Twitter option on their site to make it easy for their users to send the articles (news) to their social network (s). Twitter has also been integrated into SNSs such as Facebook. The easiness in integration of Twitter with different services has played a role in Twitter's success. Moreover Twitter's users are not charged for the service they receive.

Twitter challenges in stabilized phase

As mentioned before, Twitter is still in its growing phase. there are several factors that influenced the Twitter's success in its growing phase. However, Twitter also needs to be aware of the factors that will affect its success in its stabilized phase. According to the experts' view, PR activities, users' demand, technical issues, privacy issue and choosing the right business model (monetization) are the determinant factor for Twitter to retain its success.

PR activities make sure that Twitter presence in both users and non-users mind will be reinforced. According to the questionnaire, around 70 percent of the Twitter's users have heard Twitter's name for the first time from their friends. This indicates the importance of the PR activities for creating the word of mouth marketing. Twitter must also pay special attention to the new demands raised by its users. The same as the Retweet and Tweet@ case, Twitter must response to the users' demands.

Technical issue is also very important. As the users' numbers grow, the need for more sophisticated technical infrastructure grows either. Therefore, Twitter must be equipped with a proper technical structure to prevent technical failures. The open character of the Twitter platform can raise new privacy issues in the future. According to the analysis of the results in the questionnaire, Twitter's users are not concerned about their privacy on Twitter. However, experts believe that privacy issue might become a challenge for the Twitter. The experts also stated that the right (monetization strategy) is another challenge for the Twitter's success in the stabilized phase.

Based on the analysis of the results from the questionnaire, the majority (4/5) of the Twitter's users do not oppose to a small amount of membership fee. 2/3 of the Twitter's users will bear a short one-off advertisement on their screens. Twitter's users are not willing to pay for the extra applications (freemium) such as finding the location of their friends. Therefore, Membership fee and the advertising might be a better monetization strategy than the freemium.

Reflections and suggestions

This research presents numerous limitations. Firstly, the sample used for the questionnaire is a convenience sample for the university students. Secondly, the sample homogeneousness (undergraduate students) creates overrepresentation of the undergraduate students' idea about the SNSs. The sample includes 87 undergraduate students and 7 graduate students from the total of 94. Thirdly, most of the students would not use LinkedIn (a networking SNS) for professional purposes so often as the professional might do. Therefore, students were not a proper sample for LinkedIn. This inappropriateness of the student sample is also shown by the low sample size ($N=5$) for the high users of the LinkedIn ($4<$).

The sample included only Dutch students. Two thirds of the Dutch population has a profile on Hyves. Therefore, it was better to use Hyves instead of Facebook in the questionnaire for more precise results.

In the second section of the questionnaire (attachment 4), users were asked to indicate their usage frequency by choosing one of the following options: 1. Several times a day, 2. About once a day, 3. Several times per week, 4. About once a week, 5. About once a month, 6. Rarely, but definitely less than once a month, 7. Never. In the conducted T-test analysis, users were divided into two groups of high users (with scores <4) and the low users (with scores ≥ 4) to test the relationship between the factors and the usage frequencies. The users who never used the SNSs (Twitter, Facebook, LinkedIn) actively, have responded with the seventh option (7. Never). Since these users never used the SNS actively, their idea cannot be considered as a reliable source for testing the relationship between the factors and the usage frequencies. Therefore the results in the category of low users have been affected negatively. In the future researches, the users' idea who never use a SNS must be removed in the analysis of the results for more reliable results.

The usage of the validated statements in the questionnaire from the UTAUT theory seems not to be the right statement for the SNSs. The questions must be adapted to the SNSs' usage. For instance, "the Twitter is useful for my job/study" (performance expectancy) can be changed into "Twitter is an

useful instrument for my social networking". By this approach the answers can be more relevant to the social networking.

There are some new findings in this research that can be used as a basis for the future researches about the success factors of the SNSs. For instance, the Tiger pleasure framework which is applied to the products by Patrick Jordan (2000) has been applied to the SNSs' usage. All of the elements discussed in Tiger pleasure framework can be investigated in details in the future researches. Besides, at the moment SNSs do not provide physio-pleasure to their users. The future researches can also focus on how the SNSs can provide the physio-pleasure to their users.

The STOF model can also be used in future research for the success factors of the SNSs. The same as the Tiger pleasure framework each of the domains (e.g. service domain) can be separately investigated for a better understanding of the success factors of the SNSs.

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Attachments

Attachment 1: Statistical information from the questionnaire

Performance expectancy

Twitter

Group Statistics				
Hoe vaak doe je iets op Twitter	N	Mean	Std. Deviation	Std. Error Mean
Twitter is nuttig voor mijn werk	>= 4	32	2,31	1,061
of opleiding	< 4	38	3,28	1,188

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Twitter is nuttig voor mijn werk of opleiding	Equal variances assumed	1,931	,169	-3,520	68	,001	-,085	,274	-1,513	-,418
	Equal variances not assumed			-3,543	66,998	,001	-,085	,272	-1,509	-,421

Facebook

Group Statistics				
Hoe vaak doe je iets op Facebook	N	Mean	Std. Deviation	Std. Error Mean
Facebook is nuttig voor mijn	>= 4	44	2,43	,925
werk en/of opleiding	< 4	43	2,65	1,110

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Facebook is nuttig voor mijn werk en/of opleiding	Equal variances assumed	2,104	,151	-1,002	85	,319	-,219	,219	-,655	,218
	Equal variances not assumed			-1,000	81,625	,320	-,219	,219	-,658	,217

LinkedIn

Group Statistics

Hoe vaak doe je iets op LinkedIn	N	Mean	Std. Deviation	Std. Error Mean
LinkedIn is nuttig voor mijn werk	50	3,12	1,100	,156
en/of opleiding	5	4,40	,548	,245

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
LinkedIn is nuttig voor mijn werk	1,478	,229	-2,555	53	,014	-1,280	,501	-2,285	-,275
en/of opleiding			-4,411	7,773	,002	-1,280	,290	-1,863	-,697

Effort expectancy

Twitter

Group Statistics

Hoe vaak doe je iets op Twitter	N	Mean	Std. Deviation	Std. Error Mean
Ik vind Twitter	32	3,19	1,281	,226
gebruiksvriendelijk	36	4,28	,882	,147

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Ik vind Twitter	5,470	,022	-4,125	66	,000	-1,090	,264	-1,618	-,563
gebruiksvriendelijk			-4,038	54,114	,000	-1,090	,270	-1,632	-,549

Facebook

Group Statistics

Hoe vaak doe je iets op Facebook	N	Mean	Std. Deviation	Std. Error Mean
Ik vind Facebook	44	3,09	1,096	,165
gebruiksvriendelijk	43	4,00	,756	,115

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik vind Facebook gebruiksvriendelijk	Equal variances assumed	17,707	,000	-4,494	88	,000	-,909	,202	-1,311	-,507
	Equal variances not assumed			-4,613	78,601	,000	-,909	,201	-1,310	-,508

LinkedIn

Group Statistics				
Hoe vaak doe je iets op LinkedIn	N	Mean	Std. Deviation	Std. Error Mean
Ik vind LinkedIn	>= 4	49	3,12	,881
gebruiksvriendelijk	< 4	5	4,40	,894

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik vind LinkedIn gebruiksvriendelijk	Equal variances assumed	.019	.881	-3.085	62	.003	-1.278	.414	-2.108	-.447
	Equal variances not assumed			-3.047	4.827	.030	-1.278	.419	-2.387	-.188

Social influence

Twitter

Group Statistics				
Hoe vaak doe je iets op Twitter	N	Mean	Std. Deviation	Std. Error Mean
Mensen in mijn omgeving vinden dat ik Twitter moet gebruiken	>= 4	33	2,61	1,223
	< 4	36	3,25	1,079

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Mensen in mijn omgeving vinden dat ik Twitter moet gebruiken	Equal variances assumed	.897	.407	-2.323	67	.023	-.844	.277	-1.197	-.091
	Equal variances not assumed			-2.310	84.110	.024	-.844	.279	-1.201	-.087

Facebook

Group Statistics					
	Hoe vaak doe je iets op Facebook	N	Mean	Std. Deviation	Std. Error Mean
Mensen in mijn omgeving vinden dat ik Facebook moet gebruiken	>= 4	43	3,23	1,020	,156
	< 4	43	3,05	1,112	,170

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
				t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.						Lower	Upper
Mensen in mijn omgeving vinden dat ik Facebook moet gebruiken	Equal variances assumed	,002	,982	,809	84	,421	,188	,230	-.271	,644
	Equal variances not assumed			,809	83,381	,421	,188	,230	-.271	,644

LinkedIn

Group Statistics					
	Hoe vaak doe je iets op LinkedIn	N	Mean	Std. Deviation	Std. Error Mean
Mensen in mijn omgeving vinden dat ik LinkedIn moet gebruiken	>= 4	51	2,51	1,155	,162
	< 4	4	3,25	1,258	,629

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Mensen in mijn omgeving vinden dat ik LinkedIn moet gebruiken	Equal variances assumed	.322	.573	-1,227	63	.225	-.740	.603	-1,950	.469
	Equal variances not assumed			-1,139	3,409	.328	-.740	.650	-2,674	1,194

Facilitating condition

Twitter

Group Statistics

	Hoe vaak doe je iets op Twitter	N	Mean	Std. Deviation	Std. Error Mean
Ik kan Twitter zonder (technische) problemen gebruiken	>= 4	33	3,48	1,149	,200
	< 4	36	4,28	1,003	,167

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik kan Twitter zonder (technische) problemen gebruiken	Equal variances assumed	1,619	,208	-3,060	67	,003	-.783	,259	-1,310	-.276
	Equal variances not assumed			-3,042	63,845	,003	-.783	,281	-1,314	-.272

Facebook

Group Statistics

	Hoe vaak doe je iets op Facebook	N	Mean	Std. Deviation	Std. Error Mean
Ik kan Facebook zonder (technische) problemen gebruiken	>= 4	44	3,64	,917	,138
	< 4	43	3,88	,931	,142

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik kan Facebook zonder (technische) problemen gebruiken	Equal variances assumed	,929	,338	-1,248	85	,215	-.247	,198	-.641	,147
	Equal variances not assumed			-1,248	84,878	,215	-.247	,198	-.641	,147

LinkedIn

Group Statistics

	Hoe vaak doe je iets op LinkedIn	N	Mean	Std. Deviation	Std. Error Mean
Ik kan LinkedIn zonder (technische) problemen gebruiken	>= 4	49	3,59	,934	,133
	< 4	5	4,20	,837	,374

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
				t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.						Lower	Upper
Ik kan LinkedIn zonder (technische) problemen gebruiken	Equal variances assumed	200	,657	-1,368	52,168		-.808	,435	-1,481	,285
	Equal variances not assumed			-1,631	5,074	,185	-.808	,307	-1,625	,408

Entertainment

Twitter

Group Statistics					
Hoe vaak doe je iets op Twitter		N	Mean	Std. Deviation	Std. Error Mean
Ik vind het leuk en interessant om via Twitter te zien wat mijn vrienden dagelijks doen	>= 4	32	2,81	1,030	,182
	< 4	38	3,69	1,009	,168

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik vind het leuk en interessant om via Twitter te zien wat mijn vrienden dagelijks doen	Equal variances assumed	249	,620	-3,583	68	,001	-.882	,248	-1,376	-.388
	Equal variances not assumed			-3,559	64,733	,001	-.882	,248	-1,377	-.387

Facebook

Group Statistics					
	Hoe vaak doe je iets op Facebook	N	Mean	Std. Deviation	Std. Error Mean
Ik vind het leuk en interessant om via Facebook te zien wat mijn vrienden dagelijks doen	>= 4	45	3,11	1,005	,150
	< 4	43	3,77	,751	,114

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik vind het leuk en interessant om via Facebook te zien wat mijn vrienden dagelijks doen	Equal variances assumed	6,191	,015	-3,458	88	,001	-.858,190	-1,034	-.278	
	Equal variances not assumed			-3,481	81,337	,001	-.858,189	-1,031	-.281	

LinkedIn

Group Statistics				
Hoe vaak doe je iets op LinkedIn		N	Mean	Std. Deviation
Ik vind het leuk en interessant om via LinkedIn te zien wat mijn vrienden dagelijks doen	>= 4	49	2,41	1,079
	< 4	5	4,00	,707

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik vind het leuk en interessant om via LinkedIn te zien wat mijn vrienden dagelijks doen	Equal variances assumed	4,218	,045	-3,215	52	,002	-1,562	,495	-2,585	-,568
	Equal variances not assumed			-4,525	6,088	,004	-1,582	,352	-2,449	-,734

Expression

Twitter

Group Statistics				
Hoe vaak doe je iets op Twitter		N	Mean	Std. Deviation
Met Twitter deel ik mijn ideeën openlijk met iedereen	>= 4	33	2,33	1,051
	< 4	38	3,25	1,228

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Met Twitter deel ik mijn ideeën openlijk met iedereen	Equal variances assumed	2,207	,142	-3,317	87	,001	-.917	,276	-1,468	-.365
	Equal variances not assumed			-3,340	88,702	,001	-.917	,274	-1,485	-.386

Facebook

Group Statistics				
Hoe vaak doe je iets op Facebook		N	Mean	Std. Deviation
Met Facebook deel ik mijn ideeën openlijk met iedereen	>= 4	43	2,30	1,166
	< 4	42	2,67	1,141

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Met Facebook deel ik mijn	Equal variances assumed	.018	.889	-1,458	83,149		-.384	.260	-.882	.133
Ideen openlijk met iedereen	Equal variances not assumed			-1,457	83,000,149		-.384	.260	-.882	.133

LinkedIn

Group Statistics				
Hoe vaak doe je iets op LinkedIn		N	Mean	Std. Deviation
Met LinkedIn deel ik mijn ideeën openlijk met iedereen	>= 4	49	2,14	,913
	< 4	5	2,80	1,095

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Met LinkedIn deel ik mijn ideeën openlijk met iedereen	Equal variances assumed	.017	.887	-1,508	52	.138	-.657	.438	-1,532	.217
	Equal variances not assumed			-1,298	4,585	.268	-.657	.507	-1,897	.882

Instant messaging

Twitter

Group Statistics				
Hoe vaak doe je iets op Twitter	N	Mean	Std. Deviation	Std. Error Mean
Ik vind het aantrekkelijk dat ik met mijn vrienden kan chatten op Twitter	>= 4	33	2,55	1,034
	< 4	36	2,89	1,389

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
Ik vind het aantrekkelijk dat ik met mijn vrienden kan chatten op Twitter	Equal variances assumed	2,494	,123	-1,158	87	,262	-,343	,287	-,908 ; ,249
	Equal variances not assumed			-1,171	84,360	,248	-,343	,283	-,929 ; ,242

Facebook

Group Statistics				
Hoe vaak doe je iets op Facebook	N	Mean	Std. Deviation	Std. Error Mean
Ik vind het aantrekkelijk dat ik met mijn vrienden kan chatten op Facebook	>= 4	44	2,77	1,159
	< 4	43	3,40	,979

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
Ik vind het aantrekkelijk dat ik met mijn vrienden kan chatten op Facebook	Equal variances assumed	2,001	,161	-2,704	85	,008	-,823	,230	-1,080 ; -,166
	Equal variances not assumed			-2,709	83,281	,008	-,823	,230	-1,080 ; -,166

LinkedIn

Group Statistics

	Hoe vaak doe je iets op LinkedIn	N	Mean	Std. Deviation	Std. Error Mean
Ik vind het aantrekkelijk dat ik met mijn vrienden kan chatten op LinkedIn	>= 4	49	2,00	,866	,124
	< 4	5	1,80	,837	,374

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik vind het aantrekkelijk dat ik met mijn vrienden kan chatten op LinkedIn	Equal variances assumed	,003	,980	,493	52	,824	,200	,406	-,814	1,014
	Equal variances not assumed			,507	4,918	,834	,200	,394	-,818	1,218

Playfulness

Twitter

Group Statistics

	Hoe vaak doe je iets op Twitter	N	Mean	Std. Deviation	Std. Error Mean
Ik vind het leuk om mijn sociale omgeving te volgen op Twitter	>= 4	33	3,15	1,004	,175
	< 4	38	4,08	,791	,132

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik vind het leuk om mijn sociale omgeving te volgen op Twitter	Equal variances assumed	4,568	,036	-4,173	67	,000	-,904	,217	-1,338	-,472
	Equal variances not assumed			-4,130	60,793	,000	-,904	,216	-1,342	-,468

Facebook

Group Statistics

Hoe vaak doe je iets op Facebook		N	Mean	Std. Deviation	Std. Error Mean
Ik vind het leuk om mijn sociale omgeving te volgen op Facebook	>= 4	43	3,08	1,019	,155
	< 4	42	3,88	,739	,114

Independent Samples Test

	Levene's Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik vind het leuk om mijn sociale omgeving te volgen op Facebook	Equal variances assumed	10,001	,002	-4,072	83	,000	-.788	,194	-1,173	-.403
	Equal variances not assumed			-4,087	78,649	,000	-.788	,193	-1,172	-.404

LinkedIn

Group Statistics

Hoe vaak doe je iets op LinkedIn		N	Mean	Std. Deviation	Std. Error Mean
Ik vind het leuk om mijn sociale omgeving te volgen op LinkedIn	>= 4	49	2,53	1,101	,157
	< 4	5	3,60	1,140	,510

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik vind het leuk om mijn sociale omgeving te volgen op LinkedIn	Equal variances assumed	,127	,723	-2,083	52	,044	-1,089	,518	-2,110	-,029
	Equal variances not assumed			-2,004	4,704	,104	-1,089	,534	-2,458	,320

Privacy

Twitter

Group Statistics					
	Hoe vaak doe je iets op Twitter	N	Mean	Std. Deviation	Std. Error Mean
Ik maak me zorgen over mijn privacy op Twitter	>= 4	33	2,21	,927	,161
	< 4	36	2,25	1,105	,184

Independent Samples Test											
		Levene's Test for Equality of Variances		t-test for Equality of Means							
				F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
		Lower	Upper								
Ik maak me zorgen over mijn privacy op Twitter	Equal variances assumed	,180	,680	-,153	87,878		-,038	,247		-,530	,455
	Equal variances not assumed			-,155	86,602	,878	-,038	,246		-,527	,451

Facebook

Group Statistics					
	Hoe vaak doe je iets op Facebook	N	Mean	Std. Deviation	Std. Error Mean
Ik maak me zorgen over mijn privacy op Facebook	>= 4	45	2,40	,915	,136
	< 4	43	2,58	1,258	,192

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
				t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.						Lower	Upper
Ik maak me zorgen over mijn privacy op Facebook	Equal variances assumed	7,863	,008	-,778	88,440		-,181	,234	-,648	,283
	Equal variances not assumed			-,771	76,508	,443	-,181	,235	-,650	,287

LinkedIn

Group Statistics					
	Hoe vaak doe je iets op LinkedIn	N	Mean	Std. Deviation	Std. Error Mean
Ik maak me zorgen over mijn privacy op LinkedIn	>= 4	49	2,27	,953	,136
	< 4	5	2,00	1,000	,447

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
									Lower Upper
Ik maak me zorgen over mijn privacy op LinkedIn	Equal variances assumed	,000	,987	,501	52	,557	,285	,449	-,638 1,188
	Equal variances not assumed			,508	4,772	,508	,285	,467	-,864 1,494

Constant contact

Twitter

Group Statistics				
Hoe vaak doe je iets op Twitter	N	Mean	Std. Deviation	Std. Error Mean
Ik gebruik Twitter om constant in contact te zijn met mijn vrienden	33	2,15	1,253	,218
	36	3,42	,937	,156

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
									Lower Upper
Ik gebruik Twitter om constant in contact te zijn met mijn vrienden	Equal variances assumed	1,097	,162	-4,775	67	,000	-1,285	,285	-1,704 -,738
	Equal variances not assumed			-4,718	59,044	,000	-1,285	,288	-1,802 -,728

Facebook

Group Statistics				
Hoe vaak doe je iets op Facebook	N	Mean	Std. Deviation	Std. Error Mean
Ik gebruik Facebook om constant in contact te zijn met mijn vrienden	44	2,66	,861	,130
	43	3,33	1,063	,162

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
									Lower Upper
Ik gebruik Facebook om constant in contact te zijn met mijn vrienden	Equal variances assumed	1,623	,208	-3,217	85	,002	-,668	,207	-1,078 -,258
	Equal variances not assumed			-3,210	80,725	,002	-,668	,208	-1,080 -,258

LinkedIn

Group Statistics				
Hoe vaak doe je iets op LinkedIn	N	Mean	Std. Deviation	Std. Error Mean
Ik gebruik LinkedIn om constant in contact te zijn met mijn vrienden	49	2,02	1,031	,147
	5	2,20	,837	,374

Independent Samples Test									
	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Ik gebruik LinkedIn om constant in contact te zijn met mijn vrienden	158	,604	-.376	52,708		-.180	,477	-1,138	,778
			-.447	5,324	,673	-.180	,402	-1,106	,836

Status updates

Twitter

Group Statistics				
Hoe vaak doe je iets op Twitter	N	Mean	Std. Deviation	Std. Error Mean
Ik vind het aantrekkelijk om korte berichtjes van mijn contacten op Twitter te lezen	33	3,08	1,116	,194
	36	4,22	,722	,120

Independent Samples Test									
	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Ik vind het aantrekkelijk om korte berichtjes van mijn contacten op Twitter te lezen	7,753	,007	-5,176	67,000		-1,162	,224	-1,610	-,714
			-5,083	53,868	,000	-1,162	,229	-1,620	-,703

Facebook

Group Statistics					
	Hoe vaak doe je iets op Facebook	N	Mean	Std. Deviation	Std. Error Mean
Ik vind het aantrekkelijk om korte berichtjes van mijn	>= 4	43	3,18	1,022	,156
contacten op Facebook te lezen	< 4	43	3,77	,895	,137

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik vind het aantrekkelijk om korte berichtjes van mijn contacten op Facebook te lezen	Equal variances assumed	1,847	,178	-2,918	84	,005	-.806	,207	-1,017	-.193
	Equal variances not assumed			-2,918	82,575	,005	-.806	,207	-1,017	-.193

LinkedIn

Group Statistics					
	Hoe vaak doe je iets op LinkedIn	N	Mean	Std. Deviation	Std. Error Mean
Ik vind het aantrekkelijk om korte berichtjes van mijn	>= 4	49	2,37	,951	,136
contacten op LinkedIn te lezen	< 4	5	3,60	1,517	,678

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
				t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.						Lower	Upper
Ik vind het aantrekkelijk om korte berichtjes van mijn contacten op LinkedIn te lezen	Equal variances assumed	.822	.369	-2,611	52	.012	-1,233	.472	-2,180	-.285
	Equal variances not assumed			-1,782	4,327	.144	-1,233	.692	-3,097	.632

Open culture

Part one: Twitter

Group Statistics					
	Hoe vaak doe je iets op Twitter	N	Mean	Std. Deviation	Std. Error Mean
Ik vind het aantrekkelijke van Twitter dat ik berichten van iedereen kan volgen	>= 4	32	3,09	1,146	,203
	< 4	36	4,08	,692	,115

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik vind het aantrekkelijke van Twitter dat ik berichten van iedereen kan volgen	Equal variances assumed	6,040	,010	-4,365	68	,000	-.990	,227	-1,442	-.537
	Equal variances not assumed			-4,245	48,713	,000	-.990	,233	-1,458	-.521

Facebook

Group Statistics				
Hoe vaak doe je iets op Facebook		N	Mean	Std. Deviation
Ik vind het aantrekkelijke van Facebook dat ik berichten van iedereen kan volgen	>= 4	44	3,09	1,030
	< 4	43	3,58	,906

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik vind het aantrekkelijke van Facebook dat ik berichten van iedereen kan volgen	Equal variances assumed	.563	.443	-2,358	85	.021	-.490	.208	-.904	-.077
	Equal variances not assumed			-2,380	84,076	.021	-.490	.208	-.904	-.077

LinkedIn

Group Statistics				
Hoe vaak doe je iets op LinkedIn		N	Mean	Std. Deviation
Ik vind het aantrekkelijke van LinkedIn dat ik berichten van iedereen kan volgen	>= 4	49	2,51	1,102
	< 4	5	3,40	1,342

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik vind het aantrekkelijke van LinkedIn dat ik berichten van iedereen kan volgen	Equal variances assumed	.001	.975	-1,889	52,067		-.890,527		-1,947,187	
	Equal variances not assumed			-1,434	4,567	.218	-.890,820		-2,831,751	

Open culture

Part two: Twitter

Group Statistics				
Hoe vaak doe je iets op Twitter		N	Mean	Std. Deviation
Ik vind het aantrekkelijke van Twitter dat iedereen mij kan volgen	>= 4	33	2,64	1,025
	< 4	35	3,48	1,221

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik vind het aantrekkelijke van Twitter dat iedereen mij kan volgen	Equal variances assumed	1,549	,218	-2,993	68,004		-.821,274		-1,368	-,273
	Equal variances not assumed			-3,008	65,153	,004	-.821,273		-1,368	-,278

Facebook

Group Statistics				
Hoe vaak doe je iets op Facebook		N	Mean	Std. Deviation
Ik vind het aantrekkelijke van Facebook dat iedereen mij kan volgen	>= 4	43	2,72	1,008
	< 4	43	2,88	1,051

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower Upper
Ik vind het aantrekkelijke van Facebook dat iedereen mij kan volgen	Equal variances assumed	,024	,877	-,733	84,468		-,183,222		-,604,279
	Equal variances not assumed			-,733	83,860,468		-,183,222		-,604,279

LinkedIn

Group Statistics				
Hoe vaak doe je iets op LinkedIn		N	Mean	Std. Deviation
Ik vind het aantrekkelijke van LinkedIn dat iedereen mij kan volgen	>= 4	49	2,69	1,045
	< 4	5	3,20	,837

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower Upper
Ik vind het aantrekkelijke van LinkedIn dat iedereen mij kan volgen	Equal variances assumed	,720	,400	-1,048	52,300		-,608,484		-1,477,485
	Equal variances not assumed			-1,258	5,383,281		-,608,403		-1,621,609

Online-offline relationship

Part one:Twitter

Group Statistics				
Hoe vaak doe je iets op Twitter		N	Mean	Std. Deviation
Ik ken de meesten van mijn Twittercontacten persoonlijk	>= 4	33	3,24	1,173
	< 4	36	3,86	1,099

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower Upper
Ik ken de meesten van mijn Twittercontacten persoonlijk	Equal variances assumed	,284	,598	-2,281	67,027		-,818,274		-1,185,-073
	Equal variances not assumed			-2,255	65,485,028		-,818,274		-1,187,-071

Facebook

Masoud Banbersta - Crossmedialab

Group Statistics				
Hoe vaak doe je iets op Facebook	N	Mean	Std. Deviation	Std. Error Mean
Ik ken de meesten van mijn Facebookcontacten persoonlijk >= 4	43	3,77	1,212	,185
Facebookcontacten persoonlijk < 4	42	4,50	,872	,104

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik ken de meesten van mijn	Equal variances assumed	8,414	,005	-3,438	83	,001	-,733	,213	-1,157	-,308
Facebookcontacten persoonlijk	Equal variances not assumed			-3,457	85,901	,001	-,733	,212	-1,158	-,310

LinkedIn

Group Statistics				
Hoe vaak doe je iets op LinkedIn	N	Mean	Std. Deviation	Std. Error Mean
Ik ken de meesten van mijn LinkedIncontacten persoonlijk >= 4	47	3,38	1,051	,153
LinkedIncontacten persoonlijk < 4	5	3,40	1,817	,812

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik ken de meesten van mijn LinkedIncontacten persoonlijk	Equal variances assumed	5,580	,022	-,072	50	,943	-,038	,532	-1,108	1,031
	Equal variances not assumed			-,048	4,280	,985	-,038	,827	-2,274	2,187

Online-offline relationship

Part two: Twitter

Group Statistics				
Hoe vaak doe je iets op Twitter	N	Mean	Std. Deviation	Std. Error Mean
Ik ken de meesten van mijn Twittercontacten zakelijk >= 4	33	2,03	,918	,160
Twittercontacten zakelijk < 4	36	2,08	,791	,132

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik ken de meesten van mijn	Equal variances assumed	2,493	,119	-,123	67,903		-,025	,206	-,436	,386
Twittercontacten zakelijk	Equal variances not assumed			-,122	63,484	,903	-,025	,207	-,439	,389

Facebook

Group Statistics					
		N	Mean	Std. Deviation	Std. Error Mean
Hoe vaak doe je iets op Facebook	k				
Ik ken de meesten van mijn	>= 4	44	1,91	,709	,107
Facebookcontacten zakelijk	< 4	42	1,64	,577	,089

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik ken de meesten van mijn	Equal variances assumed	,083	,774	1,904	84,080		,268	,140	-,012	,544
Facebookcontacten zakelijk	Equal variances not assumed			1,914	81,981	,059	,268	,139	-,011	,543

LinkedIn

Group Statistics					
	Hoe vaak doe je iets op LinkedIn	N	Mean	Std. Deviation	Std. Error Mean
Ik ken de meesten van mijn LinkedIncontacten zakelijk	>= 4	49	2,55	1,156	,165
	< 4	5	3,80	,837	,374

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik ken de meesten van mijn	Equal variances assumed	2,094	,164	-2,945	62,023		-1,249	,533	-2,318	-,180
LinkedIncontacten zakelijk	Equal variances not assumed			-3,054	5,892	,024	-1,249	,409	-2,283	-,235

Mobile

Twitter

Group Statistics				
	Hoe vaak doe je iets op Twitter	N	Mean	Std. Deviation
Ik vind het aantrekkelijke van Twitter dat ik op elk moment berichten kan sturen vanaf mijn mobiel	>= 4	33	2,61	1,171
	< 4	34	3,74	1,333

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
									Lower
Ik vind het aantrekkelijke van Twitter dat ik op elk moment berichten kan sturen vanaf mijn mobiel	Equal variances assumed	308	,681	-3,680	66,000		-1,129,307		-1,742
	Equal variances not assumed			-3,687	64,974,000		-1,129,308		-1,741

Facebook

Group Statistics				
	Hoe vaak doe je iets op Facebook	N	Mean	Std. Deviation
Ik vind het aantrekkelijke van Facebook dat ik op elk moment berichten kan sturen vanaf mijn mobiel	>= 4	44	2,43	1,283
	< 4	43	3,16	1,290

Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
									Lower
Ik vind het aantrekkelijke van Facebook dat ik op elk moment berichten kan sturen vanaf mijn mobiel	Equal variances assumed	428	,515	-2,660	86,010		-,731,278		-1,279
	Equal variances not assumed			-2,660	84,932,010		-,731,278		-1,279

LinkedIn

Group Statistics				
	Hoe vaak doe je iets op LinkedIn	N	Mean	Std. Deviation
Ik vind het aantrekkelijke van LinkedIn dat ik op elk moment berichten kan sturen vanaf mijn mobiel	>= 4	49	2,27	,930
	< 4	5	2,60	1,673

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ik vind het aantrekkelijke van LinkedIn dat ik op elk moment berichten kan sturen vanaf mijn mobiel	Equal variances assumed	3,972	,062	-,708	62	,482	-,335	,473	-1,284	,614
	Equal variances not assumed			-,440	4,268	,681	-,335	,780	-2,398	1,728

Attachment 2: Statistical data for monetization strategies

Membership fee

Twitter

Zou geen gebruik maken van Twitter, als je kleine bedrag bijvoorbeeld €2 per jaar moet betalen voor het lidmaatschap.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	19	20,2	21,1	21,1
no	71	75,5	78,9	100,0

Facebook

Zou je geen gebruik maken van Facebook, als je kleine bedrag bijvoorbeeld €2 per jaar moet betalen voor het lidmaatschap.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	28	29,8	30,8	30,8
no	63	67,0	69,2	100,0
Total	91	96,8	100,0	
Missing System	3	3,2		
Total	94	100,0		

LinkedIn

Zou je geen gebruik maken van LinkedIn, als je kleine bedrag bijvoorbeeld €2 per jaar moet betalen voor het lidmaatschap.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	21	22,3	25,6	25,6
no	61	64,9	74,4	100,0
Total	82	87,2	100,0	
Missing System	12	12,8		
Total	94	100,0		

Advertising

Twitter

Zou je gebruikmaken van Twitter, als je tijdens je gebruik eenmalig 10 seconden reclame moet kijken?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	34	36,2	37,8	37,8
no	56	59,6	62,2	100,0

Facebook

Zou je gebruikmaken van Facebook, als je tijdens je gebruik eenmalig 10 seconden reclame moet kijken?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	46	48,9	50,0	50,0
no	46	48,9	50,0	100,0
Total	92	97,9	100,0	
Missing System	2	2,1		
Total	94	100,0		

LinkedIn

Zou je gebruikmaken van LinkedIn, als je tijdens je gebruik eenmalig 10 seconden reclame moet kijken?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	26	27,7	31,7	31,7
no	56	59,6	68,3	100,0
Total	82	87,2	100,0	
Missing System	12	12,8		
Total	94	100,0		

PR and Marketing

Twitter

Ik heb voor het eerst gehoord van Twitter ...

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	In het nieuws op tv	11	11,7	12,2	12,2
	In het nieuws op internet	16	17,0	17,8	30,0
	Via vrienden	62	66,0	68,9	98,9
	Andere bron	1	1,1	1,1	100,0
	Total	90	95,7	100,0	
Missing	System	4	4,3		
Total		94	100,0		

Facebook

Ik heb voor het eerst gehoord van Facebook ...

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	In het nieuws op tv	1	1,1	1,1	1,1
	In het nieuws op internet	11	11,7	12,0	13,0
	Via vrienden	79	84,0	85,9	98,9
	Andere bron	1	1,1	1,1	100,0
	Total	92	97,9	100,0	
Missing	System	2	2,1		
Total		94	100,0		

LinkedIn

Ik heb voor het eerst gehoord van LinkedIn ...

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	In het nieuws op tv	3	3,2	4,2	4,2
	In het nieuws op internet	16	17,0	22,5	26,8
	Via vrienden	52	55,3	73,2	100,0
	Total	71	75,5	100,0	

Attachment 3: Questionnaire structure

Performance expectancy
Twitter is useful for my job/study
Facebook is useful for my job/study
LinkedIn is useful for my job/study
Effort expectancy
Twitter is user friendly
Facebook is user friendly
LinkedIn is user friendly
Social influence
People around me think that I should use Twitter
People around me think that I should use Facebook
People around me think that I should use LinkedIn
Facilitating conditions
I can use Twitter without any technical problems
I can use Facebook without any technical problems
I can use LinkedIn without any technical problems
Status updates (short messages)
I like to read the short messages posted by my contacts on Twitter
I like to read the short messages posted by my contacts on Facebook
I like to read the short messages posted by my contacts on LinkedIn
Instant messaging
I like to use Twitter to chat with my friends
I like to use Facebook to chat with my friends
I like to use LinkedIn to chat with my friends
Entertainment
It is fun and interesting to see what my friends are doing real time on Twitter
It is fun and interesting to see what my friends are doing real time on Facebook
It is fun and interesting to see what my friends are doing real time on LinkedIn
Open culture
Part one
I like Twitter because I can follow Twitter messages from everyone
I like Facebook because I can follow Facebook messages from everyone
I like LinkedIn because I can follow LinkedIn messages from everyone
Part two
I like Twitter because everyone can follow me
I like Facebook because everyone can follow me
I like LinkedIn because everyone can follow me
Expression
I share my ideas openly with everyone on Twitter
I share my ideas openly with everyone on Facebook
I share my ideas openly with everyone on LinkedIn
Constant contact
I use Twitter to be in touch with my friends constantly
I use Facebook to be in touch with my friends constantly

I use LinkedIn to be in touch with my friends constantly
Playfulness
I like to follow my social network on Twitter
I like to follow my social network on Facebook
I like to follow my social network on LinkedIn
Online-Offline relationship
Part one
I know most of my Twitter contacts personally
I know most of my Facebook contacts personally
I know most of my LinkedIn contacts personally
Part two
Most of my Twitter contacts are business-related
Most of my Facebook contacts are business-related
Most of my LinkedIn contacts are business-related
Mobile
I like Twitter because I can send messages any time from my mobile phone
I like Facebook because I can send messages any time from my mobile phone
I like LinkedIn because I can send messages any time from my mobile phone
Privacy
I am worried about my privacy on Twitter
I am worried about my privacy on Facebook
I am worried about my privacy on LinkedIn
Usage frequency
How often do you use Twitter actively?
Several times a day
About once a day
Several times a week
About once a week
About once a month
Rarely, but definitely less than once a month
Never
How often do you use Facebook actively?
Several times a day
About once a day
Several times a week
About once a week
About once a month
Rarely, but definitely less than once a month
Never
How often do you use Facebook actively?

Several times a day
About once a day
Several times a week
About once a week
About once a month
Rarely, but definitely less than once a month
Never
Business model
Membership fee
Would you use Twitter, if you had to pay a small amount of € 2 per year for membership?
Would you use Facebook, if you had to pay a small amount of € 2 per year for membership?
Would you use LinkedIn, if you had to pay a small amount of € 2 per year for membership?
Advertising
Would you use Twitter, if you were obliged to watch 10 seconds of advertising once during your visit?
Would you use Facebook, if you were obliged to watch 10 seconds of advertising once during your visit?
Would you use LinkedIn, if you were obliged to watch 10 seconds of advertising once during your visit?
Freemium
I am willing to pay for additional applications, such as localising my friends on Twitter
I am willing to pay for additional applications, such as localising my friends on Facebook
I am willing to pay for additional applications, such as localising my friends on LinkedIn
PR & Marketing
I have heard about Twitter for the first time in ...
I have heard about Facebook for the first time in ...
I have heard about LinkedIn for the first time in ...
a. In the news on TV
b. In the news on Internet
c. From friends
d. Others ...

Attachment 4: The original questionnaire in English language and Dutch language

Questionnaire (English version)

This is a survey on the use of social networking sites. I'd like to know your opinion and first impressions on them; hence there are no right or wrong answers. Fill in the questions about the websites you use. Follow the instructions for each component.

What is your age?

Sex: Male/Female

What major are you studying (did you graduate in)?.....

What is your postal code?

This survey takes about 10 minutes. Thanks for your efforts!

Masoud Banbersta

Hogeschool Utrecht

Part 1

In this section, you are asked to indicate whether you agree or disagree with the following statements (totally disagree = left; right = totally agree).

	<i>strongly disagree</i>	<i>Disagree</i>	<i>Neither agree/nor disagree</i>	<i>Agree</i>	<i>Strongly disagree</i>
Most of my LinkedIn contacts are business-related					
Facebook is useful for my job/study					
I know most of my Twitter contacts personally					
I like LinkedIn because everyone can follow me					
I share my ideas openly with everyone on Facebook					
I like to read the short messages posted by my contacts on Twitter					
I know most of my Facebook contacts personally					
It is fun and interesting to see what my friends are doing real time on LinkedIn					
I use Twitter to be in touch with my friends constantly					
I like LinkedIn because I can follow LinkedIn messages from everyone					
I like to use Facebook to chat with my friends					
Twitter is user friendly					
I like to read the short messages posted by my contacts on LinkedIn					
I like Twitter because I can follow Twitter messages from everyone					
It is fun and interesting to see what my friends are doing real time on Facebook					
I share my ideas openly with everyone on LinkedIn					
I can use Twitter without any technical problems					
I like Facebook because I can follow Facebook messages from everyone					
People around me think I should use Twitter					
LinkedIn is useful for my job/study					
I like to read the short messages posted by my contacts on Facebook					
I like to use LinkedIn to chat with my friends					
Twitter is useful for my job/study					

I like Facebook because everyone can follow me					
I am worried about my privacy on Twitter					
I can use LinkedIn without any technical problems					
Facebook is user friendly					
I like to follow my social network on Twitter					
I am worried about my privacy on LinkedIn					
Most of my Facebook contacts are business-related					
It is fun and interesting to see what my friends are doing real time on Twitter					
LinkedIn is user friendly					
I am willing to pay for additional applications, such as localising my friends on Facebook					
I share my ideas openly with everyone on Twitter					
I use LinkedIn to be in touch with my friends constantly					
I like to follow my social network on Facebook					
People around me think I should use LinkedIn					
I like Twitter because everyone can follow me					
I like Facebook because I can send messages at any time from my mobile phone					
Most of my Twitter contacts are business-related					
I can use Facebook without any technical problems					
I like LinkedIn because I can send messages at any time					
I like Twitter because I can send messages at any time					
I use Facebook to be in touch with my friends					
I am willing to pay for additional applications, such as localising my friends on LinkedIn					
I like to use Twitter to chat with my friends					
People around me think I should use Facebook					
I know most of my LinkedIn contacts personally					
I am willing to pay for additional applications, such as localising my friends on Twitter					
I am worried about my privacy on Facebook					
I like to follow my social network on LinkedIn					

Part 2

In this section, you are asked to indicate how often you actively use mentioned websites.

How often do you use Twitter actively?	
Several times a day	
About once a day	
Several times a week	
About once a week	
About once a month	
Rarely, but definitely less than once a month	
Never	
How often do you use Facebook actively?	
Several times a day	
About once a day	
Several times a week	
About once a week	
About once a month	
Rarely, but definitely less than once a month	
Never	
How often do you use LinkedIn actively?	
Several times a day	
About once a day	
Several times a week	
About once a week	
About once a month	
Rarely, but definitely less than once a month	
Never	

Part 3

In this section, you'll see a list of the sites' activities.

Sort these activities (1 = often, 2 = sometimes, 3 = never). Example: 'I read the news: Twitter 3, Facebook 1, LinkedIn 2'.	Twitter	Facebook	LinkedIn
I share photos			
I look at pictures			
I share videos			
I look at videos			
I share links			
I use links from others			
I write a short note about myself			
I read short messages from others			

Part 4

In this section, you are asked to grade the mentioned websites from the most important (1), less important (2) to the least important (3) for your social networking.

	Twitter	Facebook	LinkedIn
Which one do you like the most?			
Which one is the most useful?			
Which one do you prefer to use?			
Which one is the most user friendly?			
Which one strikes you the most?			

Part 5

In this section, you are asked to circle Yes or No.

Would you use Twitter, if you had to pay a small amount of € 2 per year for membership?	Yes	No
Would you use Facebook, if you had to pay a small amount of € 2 per year for membership?	Yes	No
Would you use LinkedIn, if you had to pay a small amount of € 2 per year for membership?	Yes	No
Would you use Twitter, if you were obliged to watch 10 seconds of advertising once during your visit?	Yes	No

Would you use Facebook, if you were obliged to watch 10 seconds of advertising once during your visit?	Yes	No
Would you use LinkedIn, if you were obliged to watch 10 seconds of advertising once during your visit?	Yes	No
Would you use Twitter, if you had to pay a small amount of € 2 per year for membership?	Yes	No
Would you use Facebook, if you had to pay a small amount of € 2 per year for membership?	Yes	No
Would you use LinkedIn, if you had to pay a small amount of € 2 per year for membership?	Yes	No
Would you use Twitter, if you were obliged to watch 10 seconds of advertising once during your visit?	Yes	No
Would you use Facebook, if you were obliged to watch 10 seconds of advertising once during your visit?	Yes	No
Would you use LinkedIn, if you were obliged to watch 10 seconds of advertising once during your visit?	Yes	No

Part 6

In this section, circle the right option.

I have heard about Twitter for the first time	a. in the news on television	b. in the news on Internet	c. via friends	d. otherwise: ...
I have heard about Facebook for the first time ...	a. in the news on television	b. in the news on Internet	c. via friends	d. otherwise: ...
I have heard about LinkedIn for the first time ...	a. in the news on television	b. in the news on Internet	c. via friends	d. otherwise: ...

If you have any comments on social networking sites, please write them below:

Thank you for your participation in this survey.

Questionnaire in Dutch

Dit is een onderzoek naar het gebruik van social networking sites. Ik ben geïnteresseerd in je eerste indruk. Er is dus geen goed of fout antwoord. Vul de vragen in over de websites die je gebruikt. Volg de instructie bij elke onderdeel.

Wat is je leeftijd?.....

Ik ben: man/ vrouw

Welke opleiding volg je (of heb je gevolgd)?.....

Wat is je postcode (alleen de cijfers):.....

Deze enquête duurt ongeveer 10 minuten. Alvast bedankt voor je moeite!

Masoud Banbersta

Hogeschool Utrecht

Onderdeel 1

Bij dit onderdeel moet je aangeven in hoeverre je het eens of oneens bent met de stellingen

helemaal mee oneens = links; helemaal mee eens = rechts

	Helemaal mee oneens	Mee oneens	Niet mee eens / niet mee oneens	Mee eens	Helemaal mee eens
Ik ken de meesten van mijn LinkedIncontacten zakelijk					
Facebook is nuttig voor mijn werk en/of opleiding					
Ik ken de meesten van mijn Twittercontacten persoonlijk					
Ik vind het aantrekkelijke van LinkedIn dat iedereen mij kan volgen					
Met Facebook deel ik mijn ideeën openlijk met iedereen					
Ik vind het aantrekkelijk om korte berichtjes van mijn contacten op Twitter te lezen					
Ik ken de meesten van mijn Facebookcontacten persoonlijk					
Ik vind het leuk en interessant om via LinkedIn te zien wat mijn vrienden dagelijks doen					
Ik gebruik Twitter om constant in contact te zijn met mijn vrienden					
Ik vind het aantrekkelijke van LinkedIn dat ik berichten van iedereen kan volgen					
Ik vind het aantrekkelijk dat ik met mijn vrienden kan chatten op Facebook					
Ik vind Twitter gebruiksvriendelijk					
Ik vind het aantrekkelijk om korte berichtjes van mijn contacten op LinkedIn te lezen					
Ik vind het aantrekkelijke van Twitter dat ik berichten van iedereen kan volgen					
Ik vind het leuk en interessant om via Facebook te zien wat mijn vrienden dagelijks doen					
Met LinkedIn deel ik mijn ideeën openlijk met iedereen					
Ik kan Twitter zonder (technische) problemen gebruiken					

Ik vind het aantrekkelijke van Facebook dat ik berichten van iedereen kan volgen					
Mensen in mijn omgeving vinden dat ik Twitter moet gebruiken					
LinkedIn is nuttig voor mijn werk en/of opleiding					
Ik vind het aantrekkelijk om korte berichtjes van mijn contacten op Facebook te lezen					
Ik vind het aantrekkelijk dat ik met mijn vrienden kan chatten op LinkedIn					
Twitter is nuttig voor mijn werk en/of opleiding					
Ik vind het aantrekkelijke van Facebook dat iedereen mij kan volgen					
Ik maak me zorgen over mijn privacy op Twitter					
Ik kan LinkedIn zonder (technische) problemen gebruiken					
Ik vind Facebook gebruiksvriendelijk					
Ik vind het leuk om mijn sociale omgeving te volgen op Twitter					
Ik maak me zorgen over mijn privacy op LinkedIn					
Ik ken de meesten van mijn Facebookcontacten zakelijk					
Ik vind het leuk en interessant om via Twitter te zien wat mijn vrienden dagelijks doen					
Ik vind LinkedIn gebruiksvriendelijk					
Ik ben bereid om voor extra applicaties te betalen, bijvoorbeeld om de locatie van mijn vrienden op Facebook te zien					
Met Twitter deel ik mijn ideeën openlijk met iedereen					
Ik gebruik LinkedIn om constant in contact te zijn met mijn vrienden					
Ik vind het leuk om mijn sociale omgeving te volgen op Facebook					
Mensen in mijn omgeving vinden dat ik LinkedIn moet gebruiken					
Ik vind het aantrekkelijke van Twitter dat iedereen mij kan volgen					
Ik vind het aantrekkelijke van Facebook dat ik op elk moment berichten kan sturen vanaf mijn mobiel					
Ik ken de meesten van mijn Twittercontacten zakelijk					
Ik kan Facebook zonder (technische) problemen gebruiken					

Ik vind het aantrekkelijk van LinkedIn dat ik op elk moment berichten kan sturen vanaf mijn mobiel					
Ik vind het aantrekkelijk van Twitter dat ik op elk moment berichten kan sturen vanaf mijn mobiel					
Ik gebruik Facebook om constant in contact te zijn met mijn vrienden					
Ik ben bereid om voor extra applicaties te betalen, bijvoorbeeld om de locatie van mijn vrienden op LinkedIn te zien					
Ik vind het aantrekkelijk dat ik met mijn vrienden kan chatten op Twitter					
Mensen in mijn omgeving vinden dat ik Facebook moet gebruiken					
Ik ken de meesten van mijn LinkedIncontacten persoonlijk					
Ik ben bereid om voor extra applicaties te betalen, bijvoorbeeld om de locatie van mijn vrienden op Twitter te zien					
Ik maak me zorgen over mijn privacy op Facebook					
Ik vind het leuk om mijn sociale omgeving te volgen op LinkedIn					

Onderdeel 2

Bij dit onderdeel geef je aan: Hoe vaak doe je iets op de genoemde websites? Kruis aan wat van toepassing is.

Hoe vaak doe je zelf iets op Twitter?	
Meerdere keren per dag	
Ongeveer één keer per dag	
Meerdere keren per week	
Ongeveer één keer per week	
Ongeveer één keer per maand	
Heel af en toe maar zeker minder dan één keer per maand	
Nooit	
Hoe vaak doe je zelf iets op Facebook?	
Meerdere keren per dag	
Ongeveer één keer per dag	
Meerdere keren per week	
Ongeveer één keer per week	
Ongeveer één keer per maand	
Heel af en toe maar zeker minder dan één keer per maand	
Nooit	
Hoe vaak doe je zelf iets op LinkedIn?	
Meerdere keren per dag	
Ongeveer één keer per dag	
Meerdere keren per week	
Ongeveer één keer per week	
Ongeveer één keer per maand	
Heel af en toe maar zeker minder dan één keer per maand	
Nooit	

Onderdeel 3

Bij dit onderdeel zie je een lijst met activiteiten die je kunt doen op websites.

Rangschik die activiteiten (1 = vaak; 2 = soms; 3 = nooit). Voorbeeld: "Ik lees het nieuws: Twitter 3, Facebook 1, LinkedIn 2".	Twitter	Facebook	LinkedIn
Ik deel foto's			
Ik bekijk foto's			
Ik deel video's			
Ik bekijk video's			
Ik deel links			
Ik gebruik links van anderen			
Ik schrijf een kort berichtje over mijzelf			
Ik lees korte berichtjes van anderen			

Onderdeel 4

Bij dit onderdeel zet je de genoemde websites in de volgorde van meest belangrijke (1); minder belangrijk(2); minst belangrijk(3) voor jou social networking.

(1 = meest belangrijke; 2 = minder belangrijk; 3 = minst belangrijk):	Twitter	Facebook	LinkedIn
Welke vind je het leukst om te gebruiken?			
Welke vind je het nuttigst om te gebruiken?			
Welke vind je het prettigst om te gebruiken?			
Welke vind je het meeste gebruiksvriendelijke om te gebruiken?			
Welke trekt je meeste aandacht?			

Onderdeel 5

Bij dit onderdeel omcirkel je 'ja' of 'nee' bij de gestelde vraag.

Zou je geen gebruik maken van Twitter, als je kleine bedrag bijvoorbeeld €2 per jaar moet betalen voor het lidmaatschap	Ja	Nee
Zou je geen gebruik maken van Facebook, als je kleine bedrag bijvoorbeeld €2 per jaar moet betalen voor het lidmaatschap	Ja	Nee
Zou je geen gebruik maken van LinkedIn, als je kleine bedrag bijvoorbeeld €2 per jaar moet betalen voor het lidmaatschap	Ja	Nee
Zou je gebruikmaken van Twitter, als je tijdens je gebruik eenmalig 10 seconden reclame moet kijken?	Ja	Nee
Zou je gebruikmaken van Facebook, als je tijdens je gebruik eenmalig 10 seconden reclame moet kijken?	Ja	Nee
Zou je gebruikmaken van LinkedIn, als je tijdens je gebruik eenmalig 10 seconden reclame moet kijken?	Ja	Nee

Onderdeel 6

Bij dit onderdeel omcirkel je de juiste optie.

Ik heb voor het eerst gehoord over Twitter ...	a. In het nieuws op Televisie	b. in het nieuws op Internet	c. via vrienden	d. anders, namelijk: ...
Ik heb voor het eerst gehoord over Facebook ...	a. In het nieuws op Televisie	b. in het nieuws op Internet	c. via vrienden	d. anders, namelijk: ...
Ik heb voor het eerst gehoord over LinkedIn ...	a. In het nieuws op Televisie	b. in het nieuws op Internet	c. via vrienden	d. anders, namelijk: ...

Als je nog opmerkingen heb over social networking sites, schrijf ze hieronder:

Bedankt voor je deelname aan deze enquête.