Business success and sustainability of major US social network companies

A comparison between Facebook, Twitter, LinkedIn and Google

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Declaration

I declare that no part of the work described in this dissertation has been submitted in support of an application for a degree or qualification at this or any other college/university.

Further, all the work in this dissertation is entirely my own, except referenced in the text as a specific source and included in the bibliography.

Signed: ______________________

Yvan Heches
22\textsuperscript{nd} May, 2014
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I am also grateful to the Dublin Business School and the Liverpool John Moores University which admitted and allowed me to do my Masters of Business Administration degree in Finance in a studious atmosphere. Furthermore, I would like to thank the Dublin Business School members and especially the library staff for their constant help and availability.

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Abstract

Since the late 90’s, the development of new technologies as well as the establishment of Web 2.0 have permitted the emergence of social media such as social network sites. In recent years the growing popularity of Twitter, LinkedIn, Google+ and in particular Facebook reveal that these sites are an important phenomenon in society. Although these companies have a large user base, their sustainability and their business success in a capitalistic economy depends essentially on their profitability. In particular, the business model and the strategies of a company are critical in terms of making a profit. The monetization approach of social network sites is frequently based on an online advertising model. However, this does not necessarily lead to business success.

The current study aims to investigate if these four American (US) social network companies are successful financially and if this success is sustainable through the analysis of various factors. A comparison between Facebook, Twitter, LinkedIn and Google+ is also made. In addition, six in-depths interviews (qualitative data) were conducted as part of this research.

The research found that even if the monetization by the sale of advertising space is the main source of revenue for the four companies studied, results are different from one company to another. Additionally, the importances of social, psychological or technological factors are also presented, as well as the significance of new mobile devices for these social network companies. Following, the main causation of growth is explored for these four major US social network companies, such as innovation and acquisitions.
Chapter 1: Introduction

1.1 Background

During the 90’s, the world was euphoric with the development of information and communication technologies (ICT), contributing to the emergence of a virtual economy. Many dotcoms companies such as start-ups, who offered new services benefited from this new trend, but this was not for long (Ofek E. and Richardson M., 2003).

In the end of the decade, the burst of the internet and communication speculative bubble proved fatal for many companies, causing the collapse of many. The burst of the bubble was due to an overestimation of companies from stakeholders. The apparition of Web 2.0 offered a second life for the dotcoms companies after the 2000’s (Ljungqvist A., and Wilhelm, 2003).

The emergence of the internet and social network sites has modified human relationships and business (Qualman, 2012). Indeed, due to technology advancement, the majority of people and in particular young people have become very much accustomed to communicating and socializing through these sites (DeGroot, J.M., 2011). In addition, the French Institute of public opinion (IFOP) claims that 86% of internet users in 2013 are members of a social network site compared to only 27% in 2008.

In the last ten years, the increasing number of users on the first social network sites such as Facebook, attracted many new entrants in the sector which are in general more specialized (Balagué and Fayon, 2012, p.37). Facebook, Twitter, LinkedIn and to a lesser extent, Google (for Google+) were able to launch their respective social network site to evolve and adopt diverse transformations. Before expanding worldwide, these US companies demonstrated that they were able to show leadership in their own market. The use and the presence of these sites by people in most parts of the world in recent years are indicative of their attractiveness. However, the behaviors and needs of users are forever changing and force social network companies to constantly evolve their services (Flanagin, A.J. and Metzger M.J., 2001).
In addition, increased competition and the need for capital to develop their businesses caused social network companies to generate revenue. As a result, their strategies and their business models have evolved in order to grow in a capitalist economy. They also keep in mind that the strength of a social network site is above all its users. According to a study conducted in 2013 by the IFOP, an internet user is registered on an average of 4.5 social network sites.

Facebook, Twitter, LinkedIn and Google+ are aware that their popularity and success depends on their users. However users are also a source of decline if their desires or behaviors change (Cannarella and Spechler, 2014). In particular, they are guided by their needs. The decline of the social network ‘Myspace’ occurred during the same time Facebook emerged, which attracted users who preferred to swap to this new innovative site with more functionality. Importantly, the user base constitutes a competitive advantage for social network companies, but its durability is definitively not acquired.

Most of the US social network sites nowadays like Facebook, Twitter, Google+ and LinkedIn are free of charge to register. As previously seen, these companies require more equity due to the rise of the competition, the sharp increase of users as well as the improvements of their new features. However, because of their free access, these social network sites appear to be unable to generate enough revenue to satisfy their growth (Kim et al., 2010).

In addition, reported by Balagué and Fayon (2012, p.33), experts and analysts argue that the excessive market valuation of these four companies are not correlated with their economic situation. Thus, the business success and sustainability mainly depends on their abilities to generate revenue.

### 1.2 Suitability of the researcher

The choice of the research topic was not determined by fortuity, but has a real significance to the researcher as it is of particular interest in terms of personal and professional reasons. Before becoming a student at Dublin Business School in 2013, I started my studies in Finance at ISEG Bordeaux and Paris (European Higher Institute of Management) for a period of five years. My studies allowed me to get a Bachelor's in Finance and then a Master of Finance
with a specialization in audit and financial control. During my first year, my classmates and I discovered new social network sites and particularly Facebook. Since I started my studies in 2008, I have followed the evolution of Facebook and also lately Twitter, LinkedIn and Google. Using these sites almost every day, I was curious to understand how they made their businesses and how they could survive with their free access. By being a registered active member on these four social networks, it was found to help and provide me with the relevant knowledge and practical tools for the current research.

In addition of having a personal interest, the choice of the research topic follows a professional purpose. ‘Information Technology’ (IT) sector is highly implanted in Dublin, as well as major US social network companies. As I intend to work in a financial service in one of these companies from this sector, I decided to choose this topic for my research. Furthermore, I would like to explore and to gain expertise concerning social networks.

1.3 Research question and objectives

The aim of this dissertation is to demonstrate and critically analyze if Facebook, Twitter, LinkedIn and Google (related to Google+) are successful financially and if this success is sustainable. Furthermore, through a comparison between these four companies the research will also explore what are the possible reasons for their possible business success and sustainability.

Bryman (2008) emphasize that a pertinent research question must be clear and concise.

Consequently, the research title of the dissertation is:

“Business success and sustainability of major US social network companies. A comparison between Facebook, Twitter, LinkedIn and Google”
Alongside this, the research question of the current dissertation is the following:

“Are major US social network companies successful financially and is this success sustainable?”

The establishment of the research question results from the need to meet the following objectives:

- To understand how major US social network companies can be financially successful and sustainable. (The objective is to analyze which factors could contribute to their possible financial success and sustainability).

- To explore if their evolution and their possible business success could be comparable (The purpose here is to analyze if Facebook, Google, Twitter and LinkedIn have similar or different business models and strategies).

- To determine their actual limits and the impacts of their business changes (The objective is to analyze the negative and positive impacts of their development).

- To define the various challenges and opportunities of major US social network companies (The aim here is to establish by analyzing the collected data, an overview of the challenges and potential opportunities of these companies).

1.4 Organization of the dissertation

The first chapter of the dissertation is the “Introduction” which is composed of various parts. The context of the research is primarily presented and then followed by the research question as well as the objectives. Finally, the suitability of the researcher, the scope and limitations of the research, and its contributions are also clarified.

The “Literature Review” constitutes the second chapter of the dissertation and uses relevant academic papers to summarize the general and different aspects of the topic. This chapter is divided into four sections. Firstly, an exploration of the concept ‘Web 2.0’ is made,
and is then followed by terms such as ‘social media’ and ‘social networks’. In the second section, it presents the business models of Facebook, Twitter, LinkedIn and Google (related to Google+), and the internal and external factors which can influence them. An analysis of their business strategies is also reported in the third section. Finally, the last part outlines the main business limitations of these companies.

The third chapter explains the “methodology and methods” used for this research. It introduces the research framework and the methodology implemented in order to meet the objectives and the research question. This chapter intends to present the philosophy, the approach and the research design undertaken as well as an informative part concerning the data collection through the “research onion” as depicted by Saunders and others (2008).

The fourth chapter “Data presentation and findings” present the results of the data collected from the six interviews.

The fifth chapter “Conclusions” summarizes and critically analyzes the results obtained from the previous chapter “Data presentation and findings”. Importantly, the general conclusions drawn explore and clarify any assumptions raised in the “literature review” and suggest possible recommendations.

The sixth and final chapter called “Self-Reflection” highlights the learning situation, the experience and the skills developed by the researcher in the writing of this dissertation.

1.5 Scope and limitations of the research

Although the definition of success is very broad, the dissertation topic is mainly focused on business and financial success. The technical and social aspects of these social network sites are briefly presented. The dissertation is based primarily on a specification of the concept Web 2.0, terms ‘social media’ as well as ‘social network site’, which is necessary for the discussion of this dissertation. Addressing the dissertation topic, an analysis of various factors through a comparison of Facebook, Twitter, LinkedIn and Google (related to Google+) is also made to determine if these companies are successful financially and if this success is sustainable.
The research includes the cases studies of Facebook, Twitter, LinkedIn and Google, and thus is not focused on other social network companies. The conclusions that will be made by the researcher in this dissertation are in no way proved logically and scientifically. In addition, because of time constraints, the analysis and the demonstration made through this dissertation is based from the data collected. Therefore, because of this exploratory nature of the research, the conclusions drawn will depend on the reader point of view.

1.6 Major contribution and recipients of the research

The current research adds to the limited research on business success and sustainability in the four social network companies (Facebook, Twitter, LinkedIn and Google+). The exploration of different point of view through this research permits to develop a neutral analysis. The study reveals that many internal and external conceptual factors influence their abilities to generate revenues. Also, the research highlights the potential challenges faced as well as the opportunities of these companies.

The main recipients of this dissertation are:

- The researcher’s supervisor, Mr. Patrick O’Callaghan
- The researcher, Mr. Yvan Heches
- The Dublin Business School and the Liverpool John Moores University

And also the six participant of this research:

- Mrs. Otilia Otlacan
- Mr. Damien Hiesse
- Mr. Adam Sadilek
- Mr. Serden Eren
- Mr. Wayne Breitbarth
- Mr. Eric Delcroix
Chapter 2 : Literature review

2.1 Introduction

Social network companies have changed interactions for humans. The current literature review will first discuss the concepts of Web 2.0 and Social media that are the foundation for the development of social network sites. Second, strategies conducted and business model factors within social network companies are explored in order to investigate if these companies are successful and sustainable financially from a business perspective. Furthermore, a comparison between Facebook, Twitter, LinkedIn and Google+ is made. Finally, this literature review concludes with an analysis of the main business limitations concerning these social network sites.

2.2 Exploration of the concept of Web 2.0, social media and social networks

2.2.1 What is the Web 2.0?

The concept of Web 2.0 arose during a brainstorming conference session between Tim O’Reilly and John Battelle, in October 2004. The term was initially introduced in 1999, in the article entitled “Fragmented future” by Darcy Dinucci. It alluded to a new invasive way of interacting between people through devices such as televisions (TV) and cell phones. A prominent discussion didn’t emerge until five years later, when the two lecturers democratized the term (O'Reilly, 2005). Together, Tim O’Reilly and John Battelle described and defined the Web 2.0 as a “core of principles and practices” around developed sites and technologies but not limited by a frame (O'Reilly, 2005). Nevertheless, since the establishment of this concept, the meaning of Web 2.0 remains controversial by specialists. Some researchers consider that Web 2.0 is only referring to a meaningless marketing term, while others claim this new concept should be integrated. According to Madden and Fox
“Web 2.0 has become a catch-all buzzword that people use to describe a wide range of online activities and applications”.

Many definitions have been established since 2004. However, Bradley (2007, p.2) and Allen (2013) argue that there is no specific definition for this term because the notion is complex and unclear.

Musser and O’Reilly (2006) tried to define Web 2.0 as follows:

“Web 2.0 is much more than just pasting a new user interface onto an old application. It’s a way of thinking, a new perspective on the entire business of software-from concept through delivery, from marketing through support. Web 2.0 thrives on network effects: databases that get richer the more people interact with them, applications that are smarter the more people use them, marketing that is driven by user stories and experiences, and applications that interact with each other to form a broader computing platform” (Musser and O’Reilly, 2006).

From an objective approach, it may be argued that this definition also remains imprecise and unspecific. Instead of defining the concept, some specialists are trying to add elucidations and meanings. Thereby, Levy (2009) enlighten that the development of the term Web 2.0 is due to easier access to the Internet and the evolution of users habits.

Weinberger (2007) described the Web 2.0 as an evolution of the web, not as a revolution. Contrast to this, Poynter and Lawrence (2008) and Lehtimäki and authors (2009) argued that it creates a break in the web, a progression toward a participative virtual environment where each user communicate, contribute, organize content and share it with other. Similarly, Tapscott and Williams (2006) reinforce this idea by pointing out that Web 2.0 is “a global, ubiquitous platform for computation and collaboration”.

Web 1.0 is characterized by an ordered system constituted by fixed page based model where there is few publishers as well as many users searching and reading information.

In their research, Fuch and authors (2010) defined web 1.0 “as a tool for cognition” and web 2.0 “as a medium for human communication”. In addition, Web 2.0 can be considering as “a wisdom web, people-centric Web, participative Web, and read/write Web” (Murugesan, 2007).
Although the notion of information production is not new, Komito (2008) suggest that new technologies made it more accessible and widespread. In his research, Quiggin (2008) reinforces this idea, explaining that: “Internet and related models of communication allow the aggregation and integration of unprecedented volumes of information contributed by users, which is in opposition to the model of information being centrally produced and disseminated” (Quiggin, 2008).

Otherwise, the emergence of new web 2.0 technologies such as AJAX or Java, enabled a design style that is more dynamic and interactive for the development of applications like Google Map (Zucker, 2007). For Cooke and Buckley (2007) this evolution led to a system out of control because information is more spilt.

From a general aspect, even if it is complicated to give specific definitions of Web 2.0, various terms related to it are employed through this research. Overall, the term Web 2.0 is in general accepted as a vague and imprecise definition, representing a large diversity of concepts and terms such as: participation, social and collective intelligence, collaboration, applications and social media (Garnier and Hervier, 2011).

### 2.2.2 Social media

#### Definitions of social media

Since the late 90’s, Web 2.0 technologies have been improved and contribute to the development of social media. Indeed, the concept of web 2.0 which allows users to be active participants in the network has permitted the development and enhancement of social media (Kangas et al., 2007). By following this idea, Web 2.0 can be assimilated as a platform of social media. Moreover, Kaplan and others (2009) and Lehtimäki and others (2009) in their research use the term Web 2.0 in order to qualify social media.

Lietsala and researchers (2008) consider social media as a term that describes web services and includes publications and contents sharing among users. The contents of social media may be in various types including: pictures, photos, writing, videos [...]. Lehtimäki and authors (2009) also consider it to be information channel.
In fact, social media is found to be based on user generated content and the behaviours of users influence its value greatly (Kangas et al., 2007). In particular: comments, ratings, reviews and all other assessments attributed by users to any content on these social media (Evans, 2008). Therefore, social media allows the democratization of content, which leads people to publish information.

From a general point of view, many definitions of social media previously proposed were led to give users who mainly played the role of consumer, the possibility to be a contributor as well (see figure 1).

![Figure 1: Roles of users through social media](image)

In addition, the representation of social media through a supply chain (extension of the model from Doyle, 2002) allows the representation of creating media content, from an user perspective (see figure 2).

![Figure 2: Social media and supply chain (Adapted from Doyle, 2002)](image)
For Safko and authors (2009), the terminology of social media corresponds to technologies and means that allow users to interact with others and establish connections more easily. The value of social media arises from the individual and the collective, not the mass (Evans, 2008). Kim and researchers (2010) reinforce this idea by viewing social media from the perspective of three elements: community, people and user created content.

Finally, Kangas and others (2007) defines social media as follows:

“Social media is a process, where individuals and groups build up a common understanding and meanings with contents, communities and Web 2.0 technology” (Kangas et al., 2007, p.12).

![Figure 3: The core concepts surrounding social media (Kangas et al., 2007)](image)

➢ **Classification of Social Media**

Characteristics such as participation, conversation, communities, connectedness or openness are related to social media (Mayfield 2008). With the development of new technologies and the emergence of Web 2.0, social media exist through various forms of production. Generally, social media are classified in multiple ways. Even if technologies are evolving rapidly with new features, the distinctions among the different categories of social media are rather blurred because many characteristics are similar (Kane et al. 2014). Through their researches adapted from Constantinides and Fountain (2008), Lehtimäki and others (2009) separated social media into five main categorizations as follows (see figure 4):
- Blogs and podcasts
- Communities (including discussion forums and wiki)
- Content aggregators
- Virtual worlds
- Social network sites

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>TOOL</th>
<th>FOCUS</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. BLOGS AND PODCASTS</td>
<td>Traditional blogs, video, podcasts</td>
<td>Informing of current events and novelties</td>
<td>Blogs by Dell, podcasts from interviews</td>
</tr>
<tr>
<td>2. SOCIAL NETWORKS</td>
<td>Social networks</td>
<td>Content sharing, maintaining relationships</td>
<td>MySpace, Facebook, IRC-Galley, LinkedIn, ITToolbox</td>
</tr>
<tr>
<td>3. COMMUNITIES</td>
<td>Online communities</td>
<td>Members’ mutual interests and reciprocal</td>
<td>Communities formed around similar interests</td>
</tr>
<tr>
<td></td>
<td>Member-initiated</td>
<td>interaction</td>
<td>e.g. Autea.net (photography)</td>
</tr>
<tr>
<td></td>
<td>Organization-sponsored</td>
<td>Business transactions, brand building</td>
<td>Communities by Mozilla, Finanz, Dell and</td>
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<tr>
<td></td>
<td></td>
<td>interaction among organization and</td>
<td>Salesforce.com</td>
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<tr>
<td></td>
<td></td>
<td>customers, co-creation of products</td>
<td></td>
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<tr>
<td></td>
<td>Third-party established</td>
<td>Enable communication and transactions</td>
<td>eBay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>between buyers and sellers</td>
<td></td>
</tr>
<tr>
<td>4. CONTENT AGGREGATORS</td>
<td>RSS, widget, bookmarks, tagging</td>
<td>Categorizing and customizing of web</td>
<td>Dailymotion, Yahoo! Widgets</td>
</tr>
<tr>
<td></td>
<td>services etc.</td>
<td>content</td>
<td></td>
</tr>
<tr>
<td>5. VIRTUAL WORLDS</td>
<td>Virtual worlds</td>
<td>Substitute for the real world</td>
<td>Second Life, World of Warcraft, Kaneva,</td>
</tr>
<tr>
<td></td>
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<td>Universe, Habbo</td>
</tr>
</tbody>
</table>

Figure 4: Categorization of social media and related tools (Lehtimäki et al., 2009)

From a critical perspective, although many features are similar among these categories, the nature and use of each social media differ (see figure 5). For example, even if Youtube and Facebook have similarities, they are also differ in a number of aspects for example their connectivity or content. However, despite their differences some social media applications can fit into others. While Facebook or Google+ mainly focuses on social networks, others like Youtube enhance social network sites without being its main purpose (Golbeck, 2007).
In order to better identify the different forms of social media, Kaplan and Haenlein (2009) designed a scheme in two dimensions focused on social processes of self presentation/self disclosure and social presence/media richness (see figure 6). Furthermore, these aspects are two key elements of social media (Kaplan and Haenlein, 2009).

From a vertical perspective of classification, the higher is the social presence of users and stronger is the social influence on their exchange behavior. Quickness and the degree of privacy are two factors that allow determine the level of social presence, while efficiency of social media depends on the amount and the quality of content shared.

Concerning a horizontal perspective, self presentation and self disclosure factors are related to the desire to give a good opinion to others and disclose the information intended.
By taking social networks as an example from this framework, users are able to create, post and share content and personal information. Therefore, it increases moderately the media richness and the social presence of its users, as well as strengthens their public exposure.

<table>
<thead>
<tr>
<th>Self-presentation/ Self-disclosure</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Blogs</td>
<td>Social networking sites</td>
<td>Virtual social worlds</td>
</tr>
<tr>
<td></td>
<td>(e.g., Facebook)</td>
<td>(e.g., Second Life)</td>
<td>(e.g., World of Warcraft)</td>
</tr>
<tr>
<td></td>
<td>Collaborative projects (e.g., Wikipedia)</td>
<td>Content communities (e.g., YouTube)</td>
<td></td>
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</tbody>
</table>

**Figure 6**: Classification of Social Media by social presence/media richness and self-presentation/self-disclosure (Kaplan and Haenlein, 2009)

As previously stated, categories of social media applications vary. After discussing Web 2.0 and social media which are fundamental to this research, the followings sections will focus on social network sites and in particular Facebook, Twitter, Google+ and LinkedIn.

2.2.3 Social network sites

➢ What is a social network sites?

The interest focused on social networks resulted primarily from studies in sociology that explored interactions between individuals or actors in the real life (Blau, 1977; Cook et al., 1983). Studies were mainly focused on the character and the consequences of their exchanges. With the emergence of social network sites, the meaning of this term has taken new dimensions, including a more complex social structure called “organizational networks” (Raider and Krackhardt, 2002). Easthope (2009) adds the idea that the identity construction “is moving from former identity based on place toward hybrid and flexible forms”.

Social network sites are online services/platforms to communicate and connect with others human primarily for associative, private, politic, professional or economic reasons (Balagué and Fayon, 2012, p.16). The purpose of social network sites is not to publish but to develop connections between people and to give them the possibility of being part of a community.
of friends, relations or some interest group (Boyd D., 2006; Balagué and Fayon, 2012, p.17). Although, the core function of social networks is to communicate, the development of publishing information shifted social networks to social media. Compared to social media which can be described as a strategy, social networks are said to be a tool and a means for people to connect with each other (Albrechtslund, 2008).

Relevant for social network sites (such as Facebook, Twitter, LinkedIn and Google+), the theoretical and empirical law of Robert Metcalfe demonstrates that the more users there are in a network, the more valuable the network will be (Metcalf R., 1995).

![Figure 7: Representation of the Metcalfe’s law (Metcalf R., 1995)](image)

Social network sites are an illustration of the six degrees of separation theory established by Frigyes Karinthy in 1929. According to this concept, anyone worldwide can be connected to another through a chain of acquaintances that has no more than five intermediaries. Although this theory has not been scientifically proven, Facebook argued in 2011 that it is possible to downgraded the six degree of separation to four (Markoff J., and Sengupa S., 2011). Similarly, LinkedIn implement this theory by explaining to users their degree of separation relative to other members.

The previous section provides evidence that social networks such as Twitter, Facebook, LinkedIn or Google+ have all similar features and are based on the purpose: connecting users through common links. However, from a critical point of view social network sites also have their own features and operations.
Major US social network companies

- Facebook

Accessible in almost all countries and through 78 languages, Facebook is used by 1.28 billion active users worldwide a month. Eighty-one percent of users are said to be located outside US and Canada (data from Facebook site, December 2013).

Launched in 2004 in the United States (U.S.), Facebook can be described as a social network site that was initially used for specific purposes. Firstly, as a social utility to connect, interact and stay in touch with people (Ellison, Steinfield, and Lampe, 2007). Secondly, to meet new people online, get information about them or to contact people familiar to them (Joinson, 2008; Hew, 2011). Thirdly, to follow the trend of others, because individuals believe it to be well perceived (Hew, 2011). Fourthly, as a means to show the users popularity by having multiple Facebook “friends” and increasing popularity by rising the number of friends (Hew 2011; Pempek et al., 2009). Fifthly, as a tool to express or present one-self (Smith & Kidder, 2010). Finally, for learning purposes (Hew 2011).

A person’s homepage and profile are the essential features for a users experience on Facebook. After primarily being a social network for students, Facebook the developed new features (such as “the Wall”, “Status” and “Event”) which improved users interactions subsequently leading to a wider audience (Roblyer et al., 2010). Furthermore, the emergence of a number of applications (for example games and sharing new content like picture or music) created new reasons to use Facebook and led new people to utilize it. With a sharp increase of people joining, Facebook also attracted people and companies for professional and business purposes.

In fact, Facebook is a platform for a bilateral interaction dialogue and became a reference in the field of social network sites (Walter, 2013, p.21).
Twitter

Created in 2006, Twitter is a micro-blogging platform that is also considered as a social network site. It allows users to send short messages, called “tweets”, to other Twitter members directly, privately or publicly (Thomases, 2010; Whinston et al., 2014). Tweets are limited to 140-characters (Fischer & Reuber, 2010).

Twitter is employed monthly by 255 million active users’ worldwide (data from Twitter site, February 2014), in order to communicate, share content and site URLs, to report news, and market end (Honeycutt & Herring, 2009; Java et al., 2007). It is said to answer the question: “What are you doing?” (Damnjanovic V., 2011).

All Twitter users can be content broadcasters and/or consumers. Otherwise, they have the opportunity to be a “follower”, that is a subscription to receive tweets from a specific member without his/her consent. However, they can also be followed (“following”) by a member who desires to receive their tweets (Java et al., 2007). All Twitter users are connected to each other through a “following-follower” relationship that is relatively open and tweets can also be retweeted by others for their respective network of followers.

According to Kwak and authors (2010) retweeting is a mechanism of information diffusion on Twitter, which thus allows enhancing the audience, like a viral phenomenon. Adapted from previous research (Kwak et al., 2010), Whinston and others point out that because of this “follower-following” relationship, Twitter is beyond the stage of a social network site and instead should be assigned with a new category called a “social broadcasting network”.
Used for professional networking, LinkedIn is a social network site founded in 2003. With more than 300 million registered users (one third in US) and membership from over 200 countries, LinkedIn is established on a simple philosophy: “Relationship Matters” (Datas from LinkedIn site, April 2014).

The main goal of the professional social network site is to allow registered members to exchange and to keep in contact with people they know in business through a list of “connections” (Balagué and Fayon, 2012). Features like “profile updates” and “connection updates” are displayed on the home page that enable the user to present their news their own network. In addition, it is possible to combine their Twitter account into LinkedIn in order to publish all or specific tweets (Balagué and Fayon, 2012).

However, members also use LinkedIn for other purposes such as: finding and eventually meeting people with a specific expertise, potential clients or service providers, discovering new business options, making job offers, finding suitable candidate [...] (Comer, 2010; Damnjanovic, 2011; Balagué and Fayon, 2012). In fact, LinkedIn is used for various purposes and the main reason for using the site is individual different as members include experts, students and also recruiters that aim to search or advertise (Broughton et al., 2013, p12; Smith Proulx, 2012).
Due to the rise of new social networks, Google launched its own social network called Google+, on June 28th 2011 with a private beta, which went public three months later. Google+ is not the first attempt for Google to be on the social network scene, earlier Google Wave and Buzz were two “flops” (Curran 2012). Google+ is used by 359 million active members worldwide a month and 31% of users are between the ages of 25-34 (Della Dora, 2014).

Similar to Facebook features (such as “news feed”, “lists” of friends and “like’s”) Google+ use comparable characteristics called: “stream”, “circles”, and “+1” (Balagué and Fayon, 2012, p.143). However, most of Google+ features go further. For example “circles” allow a classification of its contacts (private, professional and others) and allow users to choose which circles of users they want to show their content to (Ronfaut, 2014). Furthermore, in order to connect with others members, the consent is unidirectional, that is like Twitter (Curran, 2012).

Although Google+ uses some similar features to Facebook and Twitter in its design, it is said to be more than a social network because it allows the connection of users to other Google services. All Gmail users automatically have a Google+ account, which is necessary to publish a comment on Youtube (Ronfaut, 2014).
2.3 Business model of major US social network companies

2.3.1 Theoretical framework of a business model

In each company, the business plan is an essential tool which follows all steps of a project that includes its creation and development. In general, business plans are used to allow define the priorities of a project, to evaluate its viability, or to reassure and convince investors in order to raise funds (Kaplan & Warren, 2007, and Ford, Bornstein & Pruitt, 2007).

The business plan is the declination concrete, operational and calculation of the business model permitting to answer the question: how to make money? The business model is therefore the heart of the business plan that allows the development of the overall strategy of the company. According to Rappa (2004), a business model is “a method of doing business by which a company can sustain itself”. Mazzarol (2001) emphasized that business success depends on conducting a business plan and described this phenomenon as “practice precedes planning”. However, from a critical perspective, business planning does not guarantee business success.

Social network companies such as Facebook, Twitter, LinkedIn and Google (for Google+) have evolved their business models by changing their strategies since their creation. Due to a dynamic and uncertain business environment of these companies (Annual report of LinkedIn, 2012, p24), it is essential to understand and to use business models according to Osterwalder and Pigneur (2002) (see figure 8).

![Figure 8: The business logic triangle (Osterwalder and Pigneur, 2002).](image_url)
Osterwalder (2004) created the business logic triangle as presented in Figure 9. The business strategy, the business organization and ICT (Information and Communications Technology) are the three component of the business model which conceptualize the money earning logic of a firm. Otherwise, the business model defined by these elements which are linked between each other is subject to continual external forces.

![Figure 9: Environment and conceptualization of the Business model (Osterwalder, 2004)](image)

An analysis and a comparison of the business model elements of Facebook, Twitter, LinkedIn and Google (for Google+) through the next parts will permit the introduction of elements which may answer the question regarding whether or not these social network companies can be successful and sustainable, in particular in terms of business and financial reasons.

### 2.3.2 Culture and Business Organization

The creation of Facebook, LinkedIn, Twitter and Google+ would not exist without the vision and the passion of their inventors (Forbes, 2013). A “passion” is the motivation of the inventor to accomplish their desires and motivations spiritually, artistically, politically, economically, socially or personally. Adapted from an interview of Steve Jobs in 1995, Walter (2013) emphasized that passion encourages perseverance, which is a key component of success. The reason for the success of Facebook, LinkedIn and Twitter in the development of
these social network companies, is due to their inventors convictions (Segall, 2012; Walter, 2013).

Warren Buffet resumed this fact by arguing that “Without passion, you don’t have energy. Without energy, you have nothing”. The case of Google+ is different compared to Facebook, Twitter and LinkedIn because the social network was launched by employees from Google in order to serve the company’s expectations (Ronfaut, 2014). In particular, to link Google+ with other Google services such as Gmail and YouTube.

Mark Zuckerberg, the founder and CEO of Facebook (initially called ‘The Facebook”) had the objective of connecting the world as well as privileging their users. In order to achieve this, he surrounded himself with employees, investors and partners who shared his convictions in order to form a business organization. Importantly, Facebook found the sense of fulfillment of oneself is necessary in order to develop worker’s devotion and loyalty around a charisma leader (Randall, 2013). Founders of Twitter and LinkedIn have reported similar success with this approach for the development of their company.

A business organization is a person or a group of people that work together in order to reach objectives. In Google (especially Google+, it is the employees that make up the company and this is also identical to Facebook, Twitter or LinkedIn (from Google site, part culture). The link between business principles, styles of operating, beliefs, work climate, behaviors and attitudes define the culture of a company (Thompson and Strickland, 1987). In fact, the culture of a company emanates from its employees, but also influences its business organization. According to Wait and Dayman (2012) the company culture is a critical factor to succeed from a business perspective.

2.3.3 Competitive advantages and human behavior

As previously mentioned, the culture and the business organization of a company constitute important factors which can contribute to its success. In each major US social network companies, the gathering of workforces around a common purpose and the passion of founders permitted the establishment and development of a product which satisfies numerically the social needs of people (Walter, 2013, p.167). Furthermore, the emergence
of Web 2.0 promoted these services. The launch of Twitter, Facebook and LinkedIn highlighted the need of the existence of these types of social networks.

Evolving in an uncertain business is due to the unpredictability of human behaviors, planning and predicting correctly the future of these companies is an important factor for their success. It allows the companies to anticipate and avoid pitfalls, thus permitting their sustainability. The clear-sightedness of decision-makers is also vital for their growth (Walter, 2013, p.154). However, various factors should not be overestimated which could affect financial outcomes (Annual report of Facebook, 2012, p.17; Deloitte report, 2010).

Currently from a business perspective, the success of social network companies corresponds to acquiring and keeping its users, developers as well as generating a profit. Therefore, one of the competitive advantages of Facebook, Twitter, LinkedIn and Google+ results in the maximum user engagements which led to an increase advertising, online payments, and thus revenues (Annual reports of Facebook, Linkedin, Twitter and Google, 2012). In order to keep this competitive advantage very volatile (Flanagin, A.J. and Metzger M.J., 2001), it is necessary to innovate or adapt constantly the success factors of these sites such as:

- The design (ease to use, reliable)
- Privacy (privacy filter and control)
- Entry barriers (Ease to register)
- Localization (Local content, Languages)
- Activity (Relationships, interests)
- Markets considerations (market position)
- Platform (Computer, Mobile devices)

Despite an increase of 25% of Twitter users between 2013 and 2014, its CEO Dick Costolo admitted in February 2014 that his company has a broken down growth in comparison with other social networks (Ferran and Ronfaut, 2014). He argued that Twitter has not found the formula to attract a high number of people unlike Facebook. However, in order to resolve this problem, a new version of Twitter is emerging with a new design highlighting the importance of content (Périnell, 2014).

At the beginning of Mark Zuckerberg’s company, it was targeting a specific category of users: students of some universities in the United States. Also applicable for LinkedIn and Twitter,
the site knew this lightning success was due to a promotion favored by word of mouth and a distribution facilitated by the internet (Kirkpatrick, D., 2010). Subsequently Facebook as well as LinkedIn and Twitter, acquired and kept their users by the free access and their increasingly popularity. Emphasized by Heinonen (2009, p.6), ease of use, the reliability and the comprehension of these social network sites are determinant factors for their success and particularly in term of business. Latest of these four social network sites, Google+ is growing for similar reasons but also because has benefits of synergies with others existing Google services (Ronfaut, 2014).

During a conference in the Brigham University in 2011, Mark Zuckerberg argued that Facebook resulted from sociology, psychology as well as technology (Walter, 2013, p.167). From a critical point of view, even if the popularity, engagement and ties of users make the strength of these social network sites, the user behavior is one of the main weaknesses and sources of decline which results in a dramatic “wind turn” for these companies (Hawkins and Vel, 2013).

### 2.4 Business Strategies of Facebook, Twitter, LinkedIn and Google+

#### 2.4.1 Market position

Existing for around ten years, Facebook, Twitter and LinkedIn are growing in an environment that is becoming more and more competitive owing to the emergence of worldwide new social network sites such as Google+. According to Sarvary and Zhang (2012), the sustainability of these companies depends mainly on their profitability, which requires maintaining the audience interest by implementing new features. The market position of Facebook, Google+, Twitter and LinkedIn are therefore progressive in function of the strategies undertaken.

The figure distinguishing specialist from general social network sites and also those focused on individual or on community permit to understand the market position of the four companies (See figure 10).
From Balagué and Fayon (2012) market position presented in Figure 10, even if the four social network sites are mainly focused on the identity of individuals and its network contacts, LinkedIn differs from Twitter, Facebook and Google+ by being more specialized. This is similar to a niche market (Papacharissi, 2009). A second classification is also useful to bring out the market position of the four social network sites (See figure 11). A distinction is made between those favoring personal usages that differ from a more professional usage. Collaboration is also distinguished from the information diffusion.

Figure 10: Market position of Facebook, Twitter, Google+ and LinkedIn in function of the target (Adapted from Balagué and Fayon, 2012, p.28-29)

Figure 11: Market position of Facebook, Twitter, Google+ and LinkedIn in function of the utilization (Adapted from Balagué and Fayon, 2012, p.28-29)
2.4.2 Monetization and life cycle

Due to the growing audience and in order to support a possible future growth, Twitter, Google+, Linkedin and in particular Facebook were required to increase their major resources such as servers, storage, power, and data centers (Annual report of Facebook, Google, 2013, p.13 and p.29). As stated in the annual report in 2013 by the four companies, attracting and retaining talented employees’ remains a priority in order to continue to innovate and to be sustainable. According to Kim and authors (2010) the business strategy of social network sites should be modified over time with the consideration of demographic users.

The monetization of these services appears to be the most obvious way to gather revenue in order to meet financial needs. The free access of Facebook, Linkedin, Google+ and Twitter lead to monetize these sites with the development of various forms of revenue. Furthermore, the development of these services on new platforms such as mobile devices was profitable for the companies and generated high financial performance (Annual report of Facebook, Twitter, Google and Linkedin, 2013). For example in 2013, 45% of Facebook’s total advertising revenue came from mobile devices. Facebook and Linkedin are diversifying their sources of income compared to Twitter and Google+ by receiving revenue from online payments infrastructure. These include payments for applications, games and premium accounts that allow the user have more features (Annual report of LinkedIn and Facebook, 2013). However, many authors have argued that these four companies are focused on an advertising business model (Purohit and Worren, 2009; Rappa, 2010; Banbersta, 2010).

The revenue of Google comes essentially from its advertising platform: Google Ads. In fact, Google Ads use data provided by all Google applications such as Google+ and sell it to marketers which allow them to improve their advertising (Google Annual report, 2013). The total revenue of Google was very high during the period 2010-2013 because it included all Google services (See figure 11). Unlike Facebook based on “Business to Consumer” (many users but with low value added), Linkedin is more focused on “Business to Business” (few users but with a high value added). However, the total revenue of Facebook was higher during the period 2010-2013 because its user base was wider.
From a critical point of view, Twitter took time to develop its business model that is currently focused on advertising compared to Facebook, Google and LinkedIn (see figure 11). Based on financial data and in accordance with the BCG Matrix, the four social network companies are positioned between a “cash cow” and “stars” position (See figure 12). In fact, evaluating their market growth is complicated because even if the revenues are increasing, the uncertainty of the business makes it difficult to estimate their future. In spite of its high profitability, Facebook’s future is controversial. Some authors argue that this company will continue to succeed while others criticized its future by emphasizing that its growth is slowing to a mature market (Curran et al., 2012; Kirkpatrick, D., 2010; Fournier, 2014).

Figure 12: Revenues of Facebook, LinkedIn, Twitter, Google\textsuperscript{1} (data based on their annual report 2012, 2013)

\footnotesize{\begin{tabular}{l|cccc}
\hline
 & 2010 & 2011 & 2012 & 2013 \\
\hline
\textbf{Facebook} \\
Advertising revenue & 1868 & 3154 & 4279 & 6986 \\
Payments and other fees & 106 & 557 & 810 & 886 \\
\hline
\textbf{Total revenue} & 1974 & 3711 & 5089 & 7872 \\
\textbf{LinkedIn} \\
Revenue from recruitment products (Talent Solutions) & 102 & 261 & 524 & 860 \\
Advertising Revenue (Marketing solutions) & 79 & 156 & 258 & 362 \\
Premium Subscriptions & 62 & 105 & 190 & 307 \\
\hline
\textbf{Total revenue} & 243 & 522 & 972 & 1529 \\
\textbf{Twitter} \\
Advertising revenue & - & 78 & 269 & 595 \\
Data licensing and other & - & 29 & 48 & 70 \\
\hline
\textbf{Total revenue} & 28 & 106 & 317 & 665 \\
\textbf{Google*} \\
Advertising revenue & 28236 & 36531 & 43686 & 50547 \\
Other revenue & 1085 & 1374 & 2353 & 4972 \\
\hline
\textbf{Total revenue} & 29321 & 37905 & 46039 & 55519 \\
\hline
\end{tabular}}

\textsuperscript{1} Include Google+ which provide data for the monetization through Google Ads
The image displaying the life cycle illustrates precisely the dilemma concerning their future (see figure 13). Business indicators reveal that Facebook, Twitter, LinkedIn and Google+ are growing, but the question remains regarding its sustainability. The annual report in 2013 by Facebook provides a statement:

“If we fail to retain existing users or add new users, or if our users decrease their level of engagement with Facebook, our revenue, financial results, and business may be significantly harmed”.

Figure 13: Representation of the Boston consulting Group Matrix

Figure 14: Representation of the life cycle of Facebook, Twitter, Google+ and LinkedIn
2.4.3 Innovation and Acquisitions

As previously mentioned, innovation remains a “critical factor” for the growth of social network companies (Ernst&Young, 2012). Their research and development budget is increasing every year in order to propose new services to existing members and also to attract new users (See figure 14). Furthermore, innovation on mobile devices constitutes a priority for these companies.

![Figure 15: Research and development budget (Data based on their annual report 2012 and 2013)](image)

According to Facebook Inc:

“Certain competitors, including Google, could use strong or dominant positions in one or more markets to gain competitive advantage against us in areas where we operate including: by integrating competing social networking platforms or features into products they control such as search engines, web browsers, or mobile device operating systems; by making acquisitions; or by making access to Facebook more difficult” (Annual report of Facebook, 2012, p.19).
Therefore, companies like Google, Facebook, Twitter and LinkedIn proceed of various acquisitions in order to keep their competitive advantage, reduce the competition, expand into new markets and to acquire new technology or talented employees (Vermeulen and Barkema, 2001; Annual Report of LinkedIn, 2012, p.35). As found by Twitter, Facebook and LinkedIn, acquisitions are also a way to reduce dependences with search engine such as Google or Yahoo.

Recently, the sectors of social network sites have made a number of improvements by spending large amount of money. For example, the establishment of Whatsapp by Facebook in February 2014 cost the company a total amount of $19 billion. Even if the acquisition can be an effective growth vehicle [Anand et al., (1997) and Capron et al., (1998)], Ravenscraft and Scherer (1987) emphasized that “they are inherently risky, as they are associated with significant uncertainty and a high potential for financial loss”. Nevertheless, while WhatsApp reported low revenues, Mark Zuckerberg stated at the 2014 Mobile World Congress in Barcelona, that it would be worthwhile and necessary due to its strategic value (Rahn, 2014).

2.5 Business Limits

With the quick expansion of social network companies, sharing and communicating unintentionally private information to the public is normal on Facebook and Twitter (Krishnamurthy B., 2010).

Due to a number of users concern regarding their privacy on social networks, companies have added a privacy options in order to address this issue and so users can continue to use the sites. Consequently, these implementation permit for companies to meet users expectations (Annual Report of Twitter, Facebook Google and LinkedIn, 2013). However, Ehrlich and Shami (2010) pointed out that users are less likely to put confidential information on Twitter. In fact, user behaviors towards privacy may constitute a limit for their business success.
Unlike Facebook or Twitter, LinkedIn didn’t have this problem because it’s a professional network which includes privacy features. Google+ through the use of “circles” permits to avoid these privacy problems. Nowadays, privacy features are becoming a standard for social network sites.

The model advertising undertaken by these social network companies is criticized by various authors. Indeed, through their researches they claim that consumers consider advertising as nuisance (Dukes and Gal-Or 2003; Dukes 2004; Gabszewicz, Laussel, and Sonnac 2004; Anderson and Coate 2005, Anderson and Gans 2010). By following their argumentation, the monetization via online advertizing could affect the quality and the ease to use of social network services. Therefore from a critical point of view, to have a good business model it is necessary to do a fair compromise between ‘make money’ and ‘satisfy the users without too much advertising’.

Access restriction in whole or in part, in some countries such as China, represent a problem that encounters for example Facebook and Twitter contrary to LinkedIn and Google+ (Golla, 2014) (See appendix 2). This regulatory barrier prevents the two companies to penetrate these markets with their products and to increase their user base (Facebook and Twitter Annual Report, 2013). In addition, legal risk is high because governments in other countries may seek to restrict access for these social network sites if they are consider to be in violation of the laws. Therefore, that could affect negatively their business and financial results.
2.6 Conclusion

To summarize, this chapter shows that social network companies are a form of social media. It has been pointed out that these services are not only tools but it is rather a new way of interact and collaborate for communication purposes. A presentation of Facebook, Twitter, LinkedIn and Google+ is also made. Furthermore, this chapter describes their business model and relevant factors which may influence their strategies.

In fact, besides Lee and authors (2006) mention that the revenue model, the value proposition and the competitive strategy are significant factors to succeed in a business perspective, Laundon and Traver (2003) identify factors such as competitive environment, organizational development, market opportunities and the team management, also as success elements. However, the analysis between these four companies is mostly highly theoretical because social network companies are recent and few analyses were made. So there is a gap of information to determine if these companies are successful and sustainable in a business perspective.

Finally, through the comparison of different point of view, this chapter has clarified and introduced some element of answers concerning the objective and the research question.
Chapter 3 : Research Methods and Methodology

3.1 Introduction

The current chapter introduces the research framework and the methodology implemented in order to meet the objectives of the research question. Different findings are observed through the research methods and methodology. In fact, it is explore throughout this chapter the most appropriate way to collected data and how the data should be analyzed in term of the research question asked. Rudestam and Newton (2007) emphasizes the necessity of building a structured methodology. In order to collect data relative to the research question, the researcher used the “research onion” as depicted by Saunders and authors (2008).

From the different onion’s layers by Saunders and others (2008), it examines firstly what is the most relevant philosophy. Secondly, a focus is on the research approach method undertaken. Then, the choices of collection technique, the chosen strategy and the time horizon are defined in their respective sections in order to establish a research design. The data collection technique, secondary data collection, data analysis, population and sample are also discussed. Finally this chapter is concluded by ethical issues and limitations.

Figure 16: Research Onion (Saunders et al, 2012)
3.2 Research Philosophy

The research philosophy is the first step of the “onion” model and induces to made assumptions which allows the researcher understand what is going to be investigate for the research question (Johnson and Clark, 2006). In fact, the research philosophy adopted will influence further layers, including the research strategy and the method used.

In order to meet the objectives of the research question, interpretivism research is the most suitable philosophy. Indeed, the aim of interpretivism is not to explain reality but to understand it through human interpretations. According to Saunders and authors (2008), ontology, epistemology and axiology are three major ways of thinking which shape the decision of taking such a philosophy and not another.

When considering the ontology principles, the subjectivism aspect is paramount/essential for answering the research question. The comprehension of perceptions and consequent actions of humans influencing social phenomena are important for this topic (Saunders et al., 2008). Indeed, to demonstrate if these US social network companies are successful and sustainable from a business and financial perspective, the analysis of human behaviour and thought is necessary (such as their users or employees). Even if numbers and financial results are precise, they can also be interpreted differently (KPMG, Ernst&Young and US Securities and Exchange Commission site). From a subjective perspective, the business success and sustainability of the four companies, is thus conditioned by the interpretations and actions of people.

In accordance with the term constructionism these social phenomena is in a constant state of revision (Berger and Luckmann, 1991; Burr, 2003). In an epistemological reflection, that can be defined as understanding the actions of humans which is important for the subjective meanings of their motivations (Remenyi et al, 1998). In fact, the epistemological position adopted by the researcher could lead to different research approaches and information (Martinet and Le Moigne, 1990). Therefore, the information obtained is subjective and contextual.
The axiology is also an important way of thinking because it allow the researcher evaluate the credibility of the research results. Indeed, the researcher value and implications play throughout the research process could influence actions undertaken (Heron, 1996). Thereby, it is important to make subjective judgements and demonstrate its values. For example, the relevance of the research results concerning strategies adopted by US social network companies to ensure their business success and sustainability, could be influenced with the researcher’s values because he is also a social network user.

The concept of research paradigms developed by Burrell and Morgan (1982) (see figure 17) allow the clarification and summarisation of the ontology and epistemology reflection. Through the illustration of the model which implements conceptual dimensions, it is then possible to adopt the most relevant philosophy for this research question.

![Figure 17: The concept of research paradigms (Burrell and Morgan, 1982)](image)

Thus, the subjective way and the “regulation” conceptual dimension of knowledge undertaken concerning the research question refers to an interpretive paradigm and consequently to an interpretive philosophy. In conclusion, the purpose of the current research is to analyse and demonstrate if and why the four US social network companies are successful financially and if this success is sustainable, but not to draw certified conclusions due to the interpretive nature of the research (Burrell and Morgan, 1982).
3.3 Research Approach

Following the interpretive philosophy undertaken in the first layer, the second step refers to the research approach. Saunders and authors (2012, p.144) identified three different methods approaches: deduction, induction and abduction. For the purpose of the dissertation, the inductive approach is used because it fits with the very essence of the research objective. Additionally as reported by Saunders and others (2007), it has the advantage to develop an understanding of the way in which humans interprets their social world.

In terms of the research question, the inductive approach permits the researcher to analyze the phenomenon and generate untested conclusions from the data collected. In other words, to analyze and demonstrate if Facebook, LinkedIn, Twitter and Google (for Google+) are successful and sustainable from a business and financial perspective, it is important to study a small sample of subjects particularly concerned with the topic. Therefore related to Easterby-Smith and researchers (2008), the data collected will permit the establishment of different opinions and form a conceptual framework concerning the research question.

3.4 Research Choice:

Denzin and Lincoln (2005) acknowledge that the philosophical position of interpretivism, is a philosophical position which drives the implementation of a qualitative research design. In addition, Saunders and others (2012, p. 163) point out that an inductive approach generally lead to the use of a qualitative study.

Constituting the third layers of the onion, the research choice used is a mono-method through a qualitative study. According to Taylor and Bogdan, qualitative research permit the researcher to analyze descriptive data, such as the words written or said and the observatory behavior of people (Taylor and Bogdan, 1984). In fact, the use of a multiple method or quantitative mono-method is less relevant than a qualitative mono-method in this dissertation because the quality of the data collected through questionnaires can not provide precise and descriptive data.
The research choice taken is the premise of the research design which is followed by the research strategy. Through these steps and the time horizon later, the research question will be turning into a research project, which is by nature mainly exploratory.

The exploratory research clarifies the questions asked illustrating flexibility and adaption to change. Indeed, the nature of the research design leads to the modification of the direction taken as a result of new data and the apparition of new ideas (Saunders et al, 2007).

According to Saunders and others (2012, p.171), there are various ways to conduct an exploratory research such as: “search of the literature, interviewing ‘experts’ in the subject, conducting in-depth individual interviews or conducting focus group interviews”. Otherwise, these interviews are likely to be partially unstructured (Saunders et al., 2012, p.171).

### 3.5 Research strategy

After choosing the interpretive philosophy, an inductive approach and a qualitative study (mono-method), the fourth layer of the “onion” concerns the research strategy. According to Denzin and Lincoln (2005) works [adapted by Saunders and authors (2008)], this step is: “a methodological link between the philosophy taken and subsequent choice of methods to collect and analyse data”.

![Figure 18: Methodological choice (Saunders et al, 2012, p.165)](image-url)
In conducting the research, a narrative inquiry was employed when interviewing. This research strategy agree with Musson (2004) idea “to derive theoretical explanations from narrative accounts whilst maintaining their integrity”. Similarly, Saunders and others (2012, p.188) describe a narrative inquiry as a strategy: “which seek to preserve chronological connections and the sequencing of events related by the narrator”.

Due to its intense and complex nature, the use of small samples is generally associated with a narrative inquiry strategy (Saunders et al., (2012, p.1889). Within the framework of the topic covered, the interviews conducted will provide data in order to make assumptions related to the research objectives.

Furthermore, it is important in this context to have an analytical rigour concerning actions, events and relationships in order to analyze the data. Therefore, through these interviews it is easier to build a report and to answer various assumptions and questions through the followings forms:

- To know what happened, to whom, whereabouts and why?
- To know what consequences and conclusions arose from this?
- What is the meaning of these events?
- What is the final outcome of the interview? What is the participant point of view?

### 3.6 Time Horizon

The Time Horizon constitutes the last step of the research design and the fifth layer of the “onion”. Two different time horizons are proposed by Saunders and others (2012, p.190): the ‘cross-sectional’ and the ‘longitudinal’. The cross-sectional research was employed to suit the research question because it allowed the researcher study the situation at a particular time. Indeed, the dissertation aimed to analyze and demonstrate if major US social network companies were and are successful financially and how they could be sustainable, during a given period. The purpose is not to explain if these companies are successful and sustainable over a long period, but rather to know if it is actually the case.

The response elements of the research question are based on the present day.
Due to a strong temporal constraints and the recent apparition of social network companies, the cross-sectional research is thus more appropriate to build our research. Therefore, the time horizon used is not a “diary” but a “snapshot” perspective according to Saunder and researchers (2008). In conclusion, the period of the research was between the day of obtaining the proposal results until the submission of the dissertation (28th February 2014 to 23th May 2014).

3.7 Data collection

3.7.1 Secondary data collection

Secondary data collection is a second analysis of information already collected in previous studies for other purposes (Kotler & Armonstrong, 2010). Bulmer and researchers (2009) sustain that “once obtained, secondary data can be analyzed to provide new or different details, interpretations or conclusions” concerning the research question. Saunder and others (2012) identify various forms of secondary data (see figure 19).

![Figure 19: Types of secondary data (Saunders et al, 2012, p.307)](image)
Due to the exploratory nature of the research question, it is important to use relevant and reliable secondary data which could help to develop and answer our assumptions. For this dissertation, secondary data was collected and includes:

- Written materials: Companies sites concerned, their annual reports (these companies are listed respectively on the NASDAQ and the NYSE, or books wrote by specialists about social media, social networks and new technologies).
- Area focused: newspapers, articles, research papers, books and publications.

The Dublin Business School Library (DBS) and its intranet provide additional information with books, articles, newspapers and electronic resources. Otherwise, secondary data such as the movie entitled “the social network” by David Fincher in 2010, was an alternative source of information for the research. However, the researcher should be careful by using the secondary data because their collection may result from a different purpose compared to this research. Also, Saunders and researchers (2012) argue that it is complicated to evaluate the reliability of the data collected.

3.7.2 Primary qualitative data collection

The methodology undertaken previously allows the researcher choose which method will be used. The purpose of the researcher is to gather information about the research question. Within the framework of the research question, the use of interviews recorded was the most appropriate method for collecting qualitative data that would be relevant and reliable.

As the nature of the research question was essentially exploratory, the interviews combine semi structured and unstructured format style interviews. In fact, in-depth interviews according to Boyce and Neale (2006, pp.2-3) generally have the advantage of providing detailed information and primary data through a more relaxed environment compared to a survey for example. Interviews are also an excellent way to understand and visualize the organizational context of the studied companies.
In order to get relevant primary data questions, semi-structured interviews are pre-determined in accordance with the jobs of participants or their experiences concerning US social network companies. Additional questions can be asked to participants, in response to the answers obtained, or if a new question appeared from a previous interview. Similar to Saunders and others (2012, p.374) some questions may vary or be omitted from interview to interview. In order to answer the research question, interviews were conducted in person or by Skype for participants.

3.8 Data Analysis

3.8.1 Secondary data analysis

Secondary sources collected could appear to be relevant at the beginning, but through a closer examination they may not be appropriate for the research question or objectives. Therefore to evaluate potential secondary data, it is necessary to consider characteristics such as the validity, reliability and the accessibility.

As the Internet provides abundant data sources, it will be important in our research to examine methods used by the author/primary users to collect data as well as any additional influencers aspects in terms of their point of view.

![Figure 20: Evaluating potential secondary data sources (Saunders et al., 2012, p.322)](image)
3.8.2 Primary data analysis

A large number of data will be collected by leading interviews. Consequently by using an inductive approach the data collected will be developed through research specific concepts that will be subsequently linked into a conceptual framework (Saunders et al, 2008). This will permit the researcher to shape the research progress in order to guide the subsequent work with more accuracy.

The qualitative data obtained from semi structured and particularly in depth interviews are characterized to not be standardized. All Interviews were audio-recorded that were later transcribed.

Exploring, clarifying the various or unclear meanings of the words is very important in forming a reliable analysis (Healey and Rawlinson, 1994). It is also important to make a record of any contextual information and to analyse the ‘participants’ non verbal communications because it can also provide alternative information for the data collected (Kvale and Brinkmann, 2009).

Following a narrative inquiry strategy, the use of a narrative analysis will keep the original essence of the story narrated by the participant. Indeed, the narrator is encouraged to integrate his experiences in the story, and preserve a chronological connections and sequence of events.

In conclusion, the primary data obtained from the various interviews allow create a new narrative that incorporates all the stories and opinions in order to answer the research question. Concerning the research question, all primary data collected from one interview are contrasted with those obtained from other interviews, so as to make a new and neutral narrative. Internal or external from these companies, the view points of the participants interviews will be analyzed and compared with one anothers.
3.9 Sample

Selecting a sample is an important step in starting the data collection. Indeed, it saves time and cost, as well as obtaining more detailed data. According to Becker (1998), a sample “should represent the full set of cases in a way that is meaningful and which could justify”.

In terms of this research, defining the “population” that will be in the sample is necessary. Through the qualitative research, a non-probability sampling technique will be used. Workers from the US social network companies were selected as the appropriate population to gain detailed data and effectuate observations because they have an internal point of view. Furthermore, people such as consultant analysts or experts, who are external to these companies, are also an interesting target sample. Obtaining different point of views from internal or external individuals allow the development of this exploratory research. In order to achieve this, the researcher carried out six in-depth interviews.

Supporting these reasons, it was necessary to interview workers who had knowledge and experience in the area of social network and new technologies. Subsequently six people working in Facebook, Linkedin, Google (for Google+) were contacted by the researcher and agreed to participate in an interview. Independent experts and consultant who specialize in these areas were contacted too. The professional social network Linkedin allowed the researcher contact the majority of these people and the free utilization of a premium account facilitated their approach.

<table>
<thead>
<tr>
<th>Actual company</th>
<th>Previous companies (relevance to the topic)</th>
<th>Actual Position</th>
<th>Interviews realized</th>
<th>Interviewee</th>
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<tr>
<td>Linkedin</td>
<td>Facebook</td>
<td>Territory manager</td>
<td>In person</td>
<td>Serden Eren</td>
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In conclusion, the methods used to conduct these interviews is similar to a self-selected sampling that is identical to the model developed from Kervin (1999); Patton (2002) and Saunders (2012).
3.10 Ethics

Compared to questionnaires, interviews appear to be more intrusive, subsequently raise less ethical concerns and risk to participants. Various ethical issues were taken into account during the research. Saunders and authors (2012, p.191) highlighted the importance of ethical issues because they can have an impact on the research. Therefore, ethical principles have been adopted by the researcher during the process of contacting participants, as well as when collecting and analyzing the data. Ethical principles like respect and honesty were considered.

In terms of this research, it was necessary when contacting the participants to respect their decisions. The researcher respected and accepted no feedback or refusals to participate as there was no pressure by the researcher (Cooper and Schindler 2008; Robson 2011).

After contacting the participants, it was essential to get their agreement by asking them to voluntarily by sign an informed consent. This gave a detailed description about the participation rights and the use of data collected. For all interviews conducted, participants did not require a written agreement from the researcher.

During the research, the anonymity/privacy of all participants and the confidentiality of the information have not been required. Furthermore, although they had the right to not respond to any question in relation with the research all participants answered the researcher’s question (Cooper and Schindler 2008).

In conclusion, the researcher ensured that participation was voluntary, that refusing to participate was respected and the confidentiality of the participants and data collected will be protected. The researcher could justify his sincerity by the fact that he has already signed several confidential clauses during his past experiences.
3.11 Limitation

During the research process when obtaining primary data, there were a number of limitations found.

The main problem of this dissertation was gaining access to information and recruiting people for interviews. Indeed, from the 55 people contacted via LinkedIn through ‘Inmail’, only 13 people answered and only 5 of them replied positively for collaboration. Without taking into account the people who did not answer, the main reason they refused to participate was: the existence of a confidentiality agreement related to their company, lack of knowledge about this sector or a lack of time. Obtaining an interview with people from Facebook was found to be extremely complicate and it was also impossible to get an interview with Twitter because of their restricted public policy.

In relation to the interviews, another problem that was encountered was related to the paradox of how the researcher interpreted the data and drawn conclusions without the influence of the researcher’s and participant’s view point. In other words, the difficulty of this research was analyzing the data from a neutral point of view. Otherwise, it is important to be aware that the outcomes of the research depended on the quality of interviews conducted.

In conclusion, the researcher found two other limitations which appeared when performing interviews: 1) time constraints which forced the researcher to shorten the length of interviews and 2) the jet-lag between the researcher and the participants (in particular two interviews were carried out by Skype with people from USA).
Chapter 4: Data presentation and analysis

4.1 Introduction

The purpose of chapter 4 will be to focus on the current research finding. An analysis on the qualitative data collected by carrying out six in-depth interviews will be reported and will include annual reports that support the data. The chapter will also compare the opinions of the participants in order to establish a reflection that may allow the researcher investigate if the elements reported could lead to business success.

The first part will describe the importance of the social, psychological and technical aspects for social network sites. The second section of this chapter highlights how Facebook, Twitter, LinkedIn and Google are doing their business. Then, the business tactics of these companies are presented in a third part. Finally, the last part concerns their business limitations and challenges.

Reminder of interviews:

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4.2 Competitive advantages

4.2.1 Human behavior, Activity and Market orientation

The six participants that were interviewed all use social network sites but their use differs greatly. Even if all of them are reading content, some are more or less publishers.
Although they use the majority to these services for professional purposes as employees or independents, their reasons for personal uses are diverse.

In the case of Facebook, Eric Delcroix pointed out that after its launch most of the people were registered and then connected in order to see what others were doing. In accordance with his investigation, the development of Facebook was closely joined with the notion of voyeurism. Adam Sadilek added that the interest of individuals in social network sites is also dependent on the number of registered and active persons that they know. Otherwise, increased attractiveness of the website was due to the emergence of games (Eric Delcroix).

The possibility of connecting with everybody worldwide is a factor that resulted in a sharp increase of Facebook user base (Damien Hiesse, Eric Delcroix and Wayne Breitbarth). Indeed, Serden Eren emphasized the importance of the long term strategy for Facebook which is to find a social graph for the world, describing all interactions between humans. For LinkedIn, the long term strategy is to create an economic graph, so as to connect all people and jobs (Serden Eren).

Accessible almost everywhere worldwide and with more than one billion active users per month, Facebook have reached the “critical mass” according to all the participants. The critical mass which corresponds to acquire the maximum number of users, is essential for the growth of social network sites because it allows Facebook support their activity by producing and sharing content. As a result, it increases the attractiveness and the popularity of the social network.

By far the largest of social network site, Facebook is the most engage in Western countries and the most interesting in term of user base (Adam Sadilek). The strength of Facebook is that it creates a community, and also emanates from the difficulty to leave it as user (Serden Eren). Indeed, choosing to leave Facebook is a huge decision because socially it is similar to an escape from the community. Otilia Otlacan pointed out that Facebook, Google+, Twitter and LinkedIn try to push their users to put and share more and more content to the detriment of conversation. The newsfeed implemented in each became a standard.

Only a few companies which are leading in this sector have reached their critical mass (Adam Sadilek). According to Otilia Otlacan, Google+ has not yet reaches the stage of a mass user social network because most of the members are registered, but they don’t actively use it.
enough. On the contrary, LinkedIn have achieved their critical mass (Adam Sadilek and Wayne Breitbarth). Concerning Twitter, it is considered more than a social network according to Eric Delcroix and Damien Hiesse. Twitter has crossed the step of a social network site, it includes the model of a social media but it is also more like a tool of geolocation, web in real time.

According to all participants, Twitter is positioned on a “niche” market. However, opinions are divergent about its potential, in particular concerning its concept. Eric Delcroix is among those who think that Twitter will not bring a “revolution” in the sector. Mostly used by marketers, journalists and news fans […], Twitter is closely linked with the term “digital curation” referring to three axes such as selecting, editing and sharing interesting and entertaining content. LinkedIn is also considered to be on a niche market due to its professional and serious aspect. Although targeting student and employees, the strength of LinkedIn nowadays is also to focus on Business to Business (B to B) (Wayne Breitbarth, Damien Hiesse, Eric Delcroix and Serden Eren).

Google+ is trying to generalize all platforms such as Twitter, Facebook, and LinkedIn (Adam Sadilek and Otilia Otlacan). Compared to Facebook, the creation of circles makes sense concerning privacy issues. However, according to Serden Eren, the launch of Google+ was not to compete with Facebook but to be present on social network segment, in particular after the failures of Google Wave in 2009 and Buzz in 2010.

The change of usage purporses and the clear disappearance of borders between private/professional lives are apparent on social network sites. This is particularly found for the young generation (Eric Delcroix). Narrated by Adam Sadilek and reported in the Facebook Annual report 2013, some indicators revealed that the young generation are ignoring Facebook and prefer to go directly to others platforms that are just emerging. From a critical perspective, the emergence of social network sites might be a generational phenomenon.

All participants agreed that the business environment of social network companies is uncertain, which is due to human behaviors. From the analysis of their answers, an important key for the business success and sustainability of these companies seems to be how well they can adapt to the changing landscape of the sector.
4.2.2 Technical Approach

Due to their uncertain environment, social network companies have to adapt their strategies by taking into account human social and psychological aspects. Indeed, because the satisfaction of their usage is essential to continue in a long term perspective, these four companies take precautions regarding new technological implementation (Serden Eren).

The difficulty for these companies emanates from the capacity to adapt to the current life of users at the present moment. In other words, social network companies have to evaluate if users are mature and are able to utilize their services. Implementing, testing or having more experience, are essential steps which allow users become more accustomed with social network sites (Otilia Otlacan).

LinkedIn, Twitter, Google+ and especially Facebook take risks concerning technological implementation. Nowadays, Facebook is more focused on the user experience and is trying to enlarge its products (Serden Eren). This is also the case for LinkedIn (Damien Hiesse and Wayne Breitbarth).

People’s behaviors and habits have changed worldwide due to the development of new technologies. Firstly, developed for desktop devices and in particular computers, social network sites are changing their strategies. With the emergence of mobile devices such as smart-phones or tablets allow individuals to connect to them more easily and quickly. Since the beginning of the present decade, social network companies and particularly Facebook, Twitter and LinkedIn favor and focus their services on these new devices through different operating system (such as Android, Mac OS X) . All narrators agreed that the future of these companies is now based on mobile devices.
The figure 21 above illustrates perfectly this new trend. The access of social network sites by mobile devices was very low in 2010 and then was found to be very popular and attractive, in particular for Facebook and Twitter. In the first quarter of 2014, Facebook was accessed by 79% users on smartphones and tablets. LinkedIn is also oriented to mobile devices but the main audience is still on desktop devices because the majority of their users are connected from offices (Wayne Breitbarth and Adam Sadilek). Therefore, LinkedIn is growing at a steadier rate than Facebook and Twitter on mobile devices, but it is not critical for its development according to Adam Sadilek. Recently launched, Google+ has taken the same approach.

The transition of the traffic to these new devices requires social network sites to take into account different factors. Due to size constraints, the design of the application has to be smooth, without any pop-up’s\(^2\) and easy to use as well as log-in (Damien Hiesse and Serden Eren). Furthermore, due to reasons of mobility, the reliability and the connectivity are also determinant for their success (Adam Sadilek). The newsfeed is very important for the popularity of social network applications because it is the first element seen by users.

\(^{2}\) Unwanted advertising window
According to Serden Eren, niche social network sites such as LinkedIn and Twitter seem
to implement their mobile devices with the same standards (used by generalists like
Facebook or Google+, like the newsfeed).

4.3 Business development and Monetization

4.3.1 Stock Exchange and Initial Public Offering

The development of the four social network sites leads to a further growth of their audience. However, to support this expansion and possible future growth, Twitter, LinkedIn and Facebook were required to increase their human and technical resources such as servers, storage, power, and data centers (Annual report of Facebook, Google, 2013, p.13 and p.29). All narrators agreed that in order for these three companies to pass from the statute of start-up to blue chip company, required more financial resources. The creation of the social network site Google+ in 2011 and its expansion required funds but were much less compared to the three others companies. Indeed, because Google+ is an entity owned by Google, it benefited from the financial, human and technical resources of the company.

LinkedIn, Twitter and Facebook have been rapidly financed by private funds and business angels in order to meet their financial needs. The greed nature of investor correlated to the financial requirement, can explain their recent Initial Public Offering (IPO) (Adam Sadilek and Otilia Otlacan). In less than ten years, the three social network companies became listed on major US stock exchanges (NYSE and NASDAQ). Many reasons can explain these IPO’s, but according to Otilia Otlacan, it is a trade-off between “control” and monetization. Indeed, in order to remain at a stable rate or to even increase their growth rate, these companies were required to trade a part of their control (in terms of decisions) for the volumes of funds for IPO collections.

According to Eric Delcroix, IPOs of Facebook, Twitter and LinkedIn did not result in a change of their strategies. Indeed, he pointed out that in spite of the funds acquired, their vision and their purposes will remain the same. Furthermore, the findings of these IPOs had a symbolic
importance because it permitted to send a signal to the market, for example for stating increases in their popularity (Damien Hiesse and Eric Delcroix).

Concerning the IPO of Facebook on May 2012, Otilia Otlacan considers that this IPO was reported late. They should have performed this a number of years ago but it was not a priority for the company. In addition, Serden Eren added that the different purposes between Facebook as an engineering company and investors could be a reason for this delay.

Twitter effectuated its IPO in November 2013 essentially for raising funds in order to further develop its services (Serden Eren). On the contrary, Damien Hiese argued that LinkedIn did not needed funds when they carried out their IPO in May 2011.

Figure 22: Share price evolution of LinkedIn (LNKD), Facebook (FB) and Twitter (TWTR) (From Yahoo Finance, May 12th 2014).

Henceforth, the value of Facebook, Google, LinkedIn and Twitter which are listed on stock exchanges, is extremely sensible and depends on the share price evolution. Thus, the speculation or an overvaluation can be a risk for these social network companies. (Eric Delcroix). Indeed, at the beginning of the 2000s the burst of the internet and communication speculative bubble has been fatal for many companies, resulting in the collapse of many.

The figure 22 above illustrates the evolution of the share price of Facebook, Twitter and LinkedIn since their IPO. By analyzing the graph, Facebook and Twitter have increased their
share price by almost 50%, which is a positive signal for investors and for their long term strategies. However, Twitter seems to have difficulties, in particular to reassure investors about the future of the company. The case of Google+ is not comparable to the three companies because the share price of Google reflects all Google’s activities. The share price of Google was found to have increased by 876% since the IPO in August 2004 from around 53$ to actually 523$ (May 12th 2014).

4.3.2 Monetization

Nowadays these social network companies are listed on stock markets and Facebook, Twitter, LinkedIn and Google have to satisfy their shareholders, particularly in terms of financial aspects (Wayne Breitbarth). Generating revenue became an important element for the financial strategy of these companies. The free access of the four social network sites caused these companies to monetize their platforms. Most of the business models of the major US social network companies are now based on the sale of advertising space. Different methods of remuneration for social network companies exist such as the cost per mile (CPM) or the cost per click (CPC). Otherwise these methods allow advertisers to estimate their return on investment (ROI). According to Otilia Otlacan, advertising on social network sites on a CPC method is in the majority of cases more efficient than a CPM method. However, from a critical perspective these methods are limited because they do not integrate the phenomenon of information diffused and network effects such as links between users and the intensity of their connections.

The monetization of Facebook is driven by their ads platform used mostly by advertisers. The revenue generated by Facebook comes from the delivery of click-based ads (Annual report 2013 of Facebook, p.44). All data collected from the wider user base, allows the advertisers using Facebook to improve their target campaigns (Otilia Otlacan). In addition Google+ is monetizing similarly but through the Google platform called “Adwords” (Annual report 2013). Adwords permit the delivery of relevant ads in function of researches effectuated by users on Google network services such as Google+ or YouTube.
Facebook and Google+ are oriented towards “Business to Consumer”, which means that advertising spending are low in spite of the large user base. On the contrary, based on “Business to Business”, LinkedIn advertisers spend more despite their smaller user base (Wayne Breitbarth, Damien Hiesse, Otilia Otlacan and Serden Eren). LinkedIn generates its revenue from advertising and also from recruitment solutions and premium subscription.

The monetization can be more or less influenced by economical aspects in some markets (Otilia Otlacan). For example in the Middle East as well as North Africa, Facebook operate mainly with large budgets from local companies (such as banks or telecoms companies).

Compared to Facebook, Google+ and LinkedIn, the advertising platform of Twitter is only recent. Adam Sadilek pointed out during an interview that the main priority of Twitter is to determine how it can monetize its traffic. Indeed, even if the advertising revenue of Twitter double every year this may not be possible as it only reported a 8.5% of advertising revenue generated in 2013.
site, Facebook is much monetized compared to LinkedIn and Twitter during the period 2010-2014. From a critical perspective, “niche” social network sites seem to have more difficulties to generate advertising revenue compared to the generalists like Facebook or Google (for Google+).

Having used Twitter’s ad platforms for professional purposes, Otilia Otlacan considered it to be expensive but could be more efficient with platform engagement. Even if an evaluation of the recent monetization of Twitter is complicated, the majority of participants thought that Twitter has potential in term of business. Twitter needs time to develop its monetization, especially to expand its business which only focuses on key countries (Adam Sadilek and Otilia Otlacan). LinkedIn, Facebook and Google+ are monetized but they have the potential to increase their revenues for the future (Serden Eren).

### 4.3.3 Active engagement and Mobile devices

*Figure 24: Survey about active usage and account ownership of social media (Source: GlobalWebindex, fourth quarter 2013)*
The monetization appeared to be essential for the business development and the sustainability of the major US social network companies. The revenue generated by these four companies depends on their user base but also user engagement. Indeed, an active usage increases the visibility and diffusion of information, which leads to an enriched social network. Therefore, a large and an engaged audience is necessary to attract advertisers.

Worldwide, the democratization of mobile devices allowed another method of gaining access to social network sites. With the introduction of advertising on these devices, the revenue of Facebook, Google+ and LinkedIn have increased sharply (Serden Eren). The high active engagement of users on mobile devices enhanced the revenue growth of these companies. As Twitter just launched its native mobile ads platform through “MoPub” in April 2014, it is not possible to evaluate its performance yet.

Although the trend is to access through mobile devices, its users are more complicated to gain (Adam Sadilek, Otilia Otlacan and Serden Eren). The cost of usage for the mobile user is three to five time higher than on desktop devices. Despite the monetization of social network sites on mobile devices being complex, there is a potential to increase their revenues (Adam Sadilek, Otilia Otlacan and Serden Eren). Monetizing the mobile ads platform is thus a driver of revenue growth for Facebook, Google+, LinkedIn and Twitter.

4.4 Business Tactics

4.4.1 Acquisitions

Since the emergence of social network sites, various progresses have been achieved in the sector (Serden Eren). Many reasons can explain this growth including: expanding into new markets, reducing competition, increasing revenues, developing new technologies, having more users, patents or talented employees (Wayne Breitbarth, Adam Sadilek, Otilia Otlacan). Also, an important competition is emerging from local competitors in countries such as China. Therefore, major US social companies have proceeded in various ways in order to not give this opportunity to their competitors (Eric Delcroix, Serden Eren).
With their large user base, these companies and in particular Facebook have reached a critical mass, in order to maintain and attract users. In fact, developing quickly allowed maintain the user base as well as technologies from other companies instead of implementing it internally which can be costly and long (Otilia Otlacan). For example, the development of Instagram in April 2012 allowed Facebook adopt their pictures to diffuse on their website.

The recent acquisition of Whatsapp costing $19 billion for Facebook (February 2014), was controversial because of its trade price. Indeed, even if Whatsapp is a new way of communicating, this is not rational according to Eric Delcroix. The acquisition of Whatsapp allows Facebook to develop quickly a mobile messaging/tchat. The huge trade price of this acquisition can reflect the potential of the acquiree, in particular its user engagement (see appendix 5) (Serden Eren). Otilia Otlacan added that because internet users utilize various social network sites and services, Facebook desire is to channel users onto a unique and monetized platform. The increasing financial resources of Facebook, Twitter, LinkedIn and Google could explain the important amount of such transaction (Adam Sadilek).

The acquisitions of companies such as Whatsapp and Instagram by Facebook follow the strategy to be developed on mobile devices. Similarly, Twitter acquired the start-up MoPub for $350 million in September 2013 in order to increase the monetization on mobile device. LinkedIn acquired some companies but less than Facebook or Google, because the acquiree have to fit with the professional aspect of LinkedIn. In other words, LinkedIn try to be in line with its business (Serden Eren). In February 2014, LinkedIn bought “Bright” a recruitment site for $120million, in order to increase the LinkedIn user base and improve the recruitment solutions (Otilia Otlacan).

For each acquisition, the services acquired by Facebook, Twitter, Google or LinkedIn can bring more value if it is incorporate into the social network sites. For example, Slideshare and Instagram respectively integrated in LinkedIn and Facebook are adding value (Serden Eren). On the contrary, the acquisition of “Oculus Rift” in March 2014 brings actually no added value to the Facebook platform.
The brand and employees from the acquiree company can also been integrated. However, in general employees operate separately in order to be more efficient and for management/cultural reasons (Serden Eren and Adam Sadilek).

4.4.2 Innovation/Culture

The uncertain business environment led the four companies to innovate [Facebook, Twitter, LinkedIn and Google (for Google+)]. The level of innovation for these social network companies is highly influenced by their culture. Engineering represent an internal resource that was found be very costly (Otilia Otlacan). Google has an engineer mindset and is extremely focused on innovation. In addition, Facebook has a culture of engineering. Indeed, for example the concept “hackathon” adopted in Facebook and further in other companies permitted the creation of the button “like” or of the instant discussion feature. The research and development expenses (R&D) of Facebook has sharply increased (+261%) between 2011 and 2012. This was due to an increase in salaries related to the new orientation of the company towards mobile devices (see figure 25). In spite of different R&D expenses between the four companies, their services tend to be more alike due to the integration of similar features.

![Research and development expenses](figure25.png)

Figure 25: Evolution of research and development expenses between 2010 and 2013 (Sources: Financial statements, Annual Reports 2012 and 2013 of LinkedIn, Twitter, Facebook and Google)
Linkedin is also innovative but with a business mindset compared to Facebook and Google (Serden Eren and Damien Hiesse). From an external point of view, the innovation strategy of LinkedIn appears to be less clear differing from Facebook or Google. Indeed, in comparison with Facebook, Twitter and Google in 2013, LinkedIn had the lowest research and development expenses (see figure 25).

Nevertheless, Damien Hiesse pointed out that the company pushed its employees to take risks. According to him, LinkedIn had the same innovation and risk culture as Facebook, Google or Twitter. Indeed, one of LinkedIn values is to: “act like an owner and take intelligent risk” (Damien Hiesse).

Google can be analyzed separately by its structural aspects with Facebook, LinkedIn and Twitter that all have a start-up culture (Serden Eren). Google+ as a Google business unit is competing with others services for internal resources, in particular for engineering and marketing resources (Otilia Otlacan). Twitter is a start-up which takes risks but proportionally less than Facebook or Google owing to its financial resources (Adam Sadilek).

Facebook, Google, Twitter and LinkedIn employees are from around the world. The mix of culture and knowledge encourage innovation. Damien Hiesse emphasized that there is a rotation of employees between these companies almost every four years. Therefore, the enterprise culture and the innovation process of these companies can be said to be identical.

4.5 Business Limitations and Challenges

Since the development of their respective platforms on mobile devices, social network companies increased their revenues. However, the growth and sustainability of their businesses can be affected by various factors.

Social networks depend on users to interact and share content. Thus, it is argued that these social networks would not exist without their users to actively engage on their sites and. The critical mass is also important for the development of these businesses. Facebook, Twitter, Google and LinkedIn depend mainly on the sociological and psychological aspects of humans. In function of the market position, the aim of these companies is to attract new users or to
maintain their current users (Otilia Otlacan). Therefore innovation is essential to satisfy and adapt to their users behaviors.

Myspace is an example of companies which declined for these reasons. In spite of the launch of the innovating service Myspace, it failed to retain their users due a number of incorrect strategies and unsufficient management (Adam Sadilek and Otilia Otlacan). Five percent of IT’s companies referred to as “the club” are claimed to be highly sustainable according to the declarations made during a conference in the US and was narrated by Damien Hiesse.

Due to the constant changes in the environment, the business models of Facebook, Twitter, Google and LinkedIn have to evolve and adapt so as to be efficient. Actually, the four social network sites are monetizing even if their potential of improvement is still high (Serden Eren, Adam Sadilek and Otilia Otlacan). Therefore, the adoption of an incorrect business model can constitute as a business limitation.

The internationalization of major US social network sites is necessary in order to develop their businesses. Indeed, LinkedIn is aiming to access the Indian market (Damien Hiesse). Facebook has the advantage of being accessible worldwide unlike Twitter which is limited to Western countries. The access of some markets is difficult for some of the four companies due to cultural, economical, competitive or political limits.

The geographical implantation of LinkedIn is for example complicated in Germany because a local competitor: “Xing” dominates the market and the Germans are reluctant to change (Eric Delcroix and Damien Hiesse). Google+ has the same problem in Russia or China because people use in particular local search engines like “Yandex” or “Baidu” instead of Google services (Otilia Otlacan). In contrast, Facebook and Twitter cannot access some countries such as China due to political reasons.

The business development of these four social network sites can be limited by economic reasons such as a decrease in advertising budgets. Be acquired by a company represent also a threat in term of business and decision-making independence.
Chapter 5: Conclusion and recommendations

The aim of the chapter 5 is to summarize the main results of this study and to draw conclusions in relation with the research question: “Are major US social network companies successful financially and is this sustainable?”. The first part of this chapter discusses the important research findings but also includes the objectives of the overall project. The second part of this chapter points out recommendations and orientations for future research.

5.1 Conclusions

5.1.1 Objectives fulfillment

The objectives achieved throughout this dissertation are listed below and include more explanations related to the data collected. Many similarities were highlighted through the comparison of Facebook, Twitter, Google (for Google+) and LinkedIn, which allowed the researcher to fulfill his objectives. In addition, the differences reported between these companies were analyzed in the discussion and allowed the exploration of various aspects.

- **Objective 1:** To understand how major US social network companies can be financially successful and sustainable.

Although the access of major US social network sites is free, the aim of these companies is to be financially successful. The business success is thus essential.

In less than ten years, social network sites became important worldwide in the daily life of many people because they are innovating and can be qualified as a phenomenon in society. As highlighted throughout the research, the activity of users and the number of users is a key factor for the business success of Facebook, Twitter, LinkedIn and Google (for Google+) leading to their financial success.
Since their creation, the four companies have evolved in an uncertain environment where each strategic change is difficult to predict. Research has shown that internally, these companies have to make the right decisions and tactics that are related to their business vision. In particular this includes innovation, management, and use of their financial resources or the monetization of their platforms. Furthermore, the culture of the four social network companies also influence their strategic orientations.

In conclusion, the financial success of these companies emanate from the correlation of the various internal and external factors studied, which define their business strategies and business models.

- **Objective 2:** To explore if their evolution and their possible business success could be comparable

Research shows that the four companies generate revenue with a similar business model and is focused mainly on the monetization of advertising space. However, data collected highlighted some differences between LinkedIn and the three others sites. The market position of LinkedIn, its business segment and its sources of revenue differ it from other major US social network companies.

Data collected revealed that Twitter and Google+ are recent compared to Facebook and LinkedIn. In addition, due to the recent monetization of the Twitter mobile platform does not provide a fair comparison to Facebook or LinkedIn who established their mobile platform earlier. Thus, the business success of these four companies cannot be compared when considering their life cycle.

Also, Google+ cannot be compared to Facebook, Twitter or LinkedIn because no distinction can be made between the Google+ business unit and the other Google services in terms of revenue and resources.

Even if Facebook, Twitter, LinkedIn and Google+ are social network sites with technical and business similarities, their financial and business success is not identical due to time scales and size differences. However, the objectives remain similar in the four companies: 1) Increase the user base and then 2) Monetize their platforms.
Objective 3: To determine their actual limits and the impacts of their business changes

Social network companies are limited in terms of increasing their user base as well as monetizing their platforms. Large amounts of financial resources are spent for developing Facebook and Google as they have the resources. The cost of acquisition is generally overvalued because it is based on the business potential of the acquiree. However, the uncertainty related to human behaviors seems to not be integrated. Therefore, the cost of acquisition does not reflect the real business of the acquiree.

For example, Facebook established new technologies and increased the user base of Whatsapp for $19 million, but not for the low revenue that it generates. Also, the financial resources used for developments reduce innovation.

The business model of Facebook, Twitter and Google is limited because these companies depend highly on their advertising revenues. Contrarily, the LinkedIn business model is more diversified with revenues generated from premium accounts and recruitment solutions. Therefore, the business and financial results of LinkedIn seem to be more sustainable compared to Facebook, Twitter or Google.

Research shows that the economical and political factors represent a limitation for the growth of these four social network companies. Indeed, some countries like China forbid or restrict their implantation. In addition, the cultural factors and the presence of popular local competitors can impede their expansion.

Strategies of the four companies are oriented nowadays on mobile device in order to adapt their business to the changing business landscape. Even if this strategic change reduces the net income of Facebook and LinkedIn in 2012 (Annual report 2012 of Facebook and LinkedIn), it allowed the increase of their financial revenue. Also, Google and Twitter are adopting the same strategies concerning mobile devices.
Objective 4: To define the various challenges and opportunities of major US social network companies

Although the business environment of social network companies is uncertain, their sustainability will depend on their decisions and strategies.

Twitter is focused mainly in Western countries and has not reached the critical mass but it is only a start up. The challenges faced by Twitter will be to expand worldwide in order to increase its user base. In addition, its financial and business success will depend on ‘how well it monetize is platform’. LinkedIn has the potential of being a professional social network, thus to do BtoB. However with the emergence of competitors, one of its challenges will be to propose new solutions and to increase its user base such as in India.

Despite Facebook reaching their critical mass, challenges include maintaining or increasing its users base and gaining access to key markets such as China. Furthermore, the diversification of its revenue will be vital and is also the case for Twitter and Google. The acquisition of Oculus Rift by Facebook highlights the strategic move to a ‘hardware business’.

Concerning Google (for Google+), it will be essential to increase the average active engagement of Google+ users. Important, the lobbying will remain necessary for the four social network companies to enter into some markets or to resolve tax optimization problems with some countries (like France).
Research question: Are major US social network companies successful financially and is this sustainable?

The analysis of the primary and secondary findings allow the researcher to conclude that these four social network companies are financially successful even when taking into account that they have only emerged recently. Furthermore, the researcher is optimistic about the financial sustainability of Facebook and LinkedIn because of their ability to innovate and to retain their users. However, the researcher is pessimistic concerning the financial sustainability of Twitter because the company is still young and the company’s potential in terms of business is unknown. Google have large financial resources, therefore the company will remain sustainable as well as the Google+ business unit. Additionally Google appears to have a desire of being an actor in the social network sites sector.

5.1.2 Limits

The conclusions made by the researcher in this dissertation are in no way proved logically and scientifically. In addition, because of time constraints, the analysis and the demonstration made through this dissertation were based from the data collected. The limited number of companies studied limits the exploration of the research because it does not include all worldwide social network companies. The research draws an overview of Facebook, Twitter, Google (for Google+) and LinkedIn without focusing on the specificities of each market. In addition, the small number of participants does not provide an overall view of the businesses in order to make a reliable conclusion. Therefore, because of the exploratory nature of the research, the conclusion drawn depends on the reader’s point of view.
5.2 Recommendations and directions for future research

The limitations previously highlighted present important elements and actions which can be implemented in future works in order to improve research reliability and effectiveness.

- Due to the time scale, future research should take into account new concepts related to social media and social network sites such as the analysis of the concept Web 3.0. Actualize the data collected will also be important in order to measure the evolution of social network companies such as Facebook, Twitter, LinkedIn and Google (for Google+) and the evolution of human behavior. In addition, a comparison with the main Asian social network companies could improve the quality of the research.

- There appears to be a limited number of studies concerning the business of social network sites due to their recent emergence. To improve our understanding of these companies, conducting interviews is necessary as it can provide relevant information. For further research, the researcher recommends performing interviews with a larger sample of participants from the companies’ studies as well as independent companies in order to produce an improved discussion.

- With the evolution of mobile devices, future research could explore if the financial success of social network companies could lead to the financial success of mobile device manufacturer and telecommunication companies. New technologies can expand the area of future research, in particular to see if for example the Google Glass can be a new driver of growth for social network companies.
Chapter 6: Self Reflection

6.1 Introduction

The “Self-Reflection” approach constitutes an important chapter of this dissertation because as a researcher it highlights my personal learning experience during the achievement of this work. The first part will present and explain the existing learning theories, followed by a reflection of the learning style that I specifically used for the current dissertation. Then, the second part presents my personal achievements, my goals and the process. The skills that I acquired or improved in term of communication and organization in particular are explored in a third part. The following part focuses on the problems that were encountered as a researcher for the achievement of the dissertation. Finally, the last part draws a conclusion of my personal learning and highlights the contribution of this research for my future learning.

6.2 Individual learning styles

The establishment of a self reflection is important because it permits the researcher to identify and clarify their personal learning. Many authors such as Kolb, Honey and Mumford have worked on learning style theories. In order to distinguish the different learning theories from other research, Kolb (1984) proposed a conceptual framework which depicts the four stages in a learning process cycle. This model includes different steps as follows: Concrete Experience (CE), Reflective Observation (RO), Abstract Conceptualization (AC) and Active Experimentation (AE). Honey and Mumford (1992), added and defined four learning style such as: activists, reflectors, theorists and pragmatists, adapted from Kolb’s model (see figure 26).
The learning styles framework designed by Kolb and adapted by Honey and Mumford allows the researcher set up a review of what they learnt. In accordance with this model, I consider myself a “pragmatist”. According to Honey and Mumford (1992), pragmatics are practical and down to earth people who like to be responsible for problems and view opportunities 'as a challenge'. In fact they learn by implanting theories into practice. By being curious by nature, the achievement of this dissertation would not have been possible because of the researchers active experimentation engaging and using the relevant social network sites. For example registered on Facebook, LinkedIn and Google+, I created an account on Twitter in relation with the dissertation topic so as to experiment and better visualize all of the features. Furthermore, even if the general academic papers provided satisfactory answers in relation with the dissertations questions, I attempted to find contradictory information in order to further continue my discussions. In fact, as defined by Honey and Mumford (1992), I followed as the pragmatic philosophies like: “There is always a better way” and "If it works it's good”.

Figure 26: Learning styles framework by Honey and Mumford (Adapted from Kolb's researches)³

³ http://executopia.com/methodology/modelstheories/kolbs-learning-cycle/
6.3 Personal Achievements

In spite of my desire to succeed, the achievement of this dissertation was found to be a challenge. Ambitious and optimist by nature, I always wanted to overcome obstacles faced during the process. Altering the research question and objectives, establishing a list of questions for interviews, contacting and conducting the interviews, then analyzing data and concluding were all found to be challenges.

Although I was achieved many reports during my studies in France, this work was new for me because the methods and the requirements differed greatly. However, the various lectures during the two semesters included in the MBA Finance program, permitted me to understand and apply the methods applicable from the Dublin Business School. In particular during the two semesters, the module “Research Skills and Analysis” was found to be very useful. Firstly to better understanding oneself and then for writing the dissertation and the proposal. The proposal was very important for the achievement of this dissertation because it allowed me obtain an assessment of the research. Furthermore, the module taught me the relevant tools needed to succeed such as expanding the research on a subject that interested me and by providing the methods to be used.

In comparison with my previous experiences, I observed that it is also important in the professional life to develop and keep a network of contacts. Participants from my research are part of these contacts and I remain connected with them through the professional social networking site LinkedIn. Also, this work was enriching culturally because exchanges with participants were not only focused on my research area. In addition, I want to point out that the MBA course helped me to meet and collaborate with people from around the world, who, became friends with and that are nowadays part of my personal and professional network. Overall, my MBA program was a humanly, culturally and a personally a rewarding experience that had to my achievement of conducting this dissertation.

Ambitious and hard-worker, I made many efforts to obtain reliable and valuable data in order to generate added value for this research. I hope that this work will be used for further research as well as being useful for my future career.
6.4 Skills development

The purpose of this section is to show the number of skills that I acquired or improved throughout the research. Composed of many step, the establishment of the dissertation permitted the researcher to gain or develop various personal skills. Many times I surpassed myself in order to accomplish specifics objectives. In fact, I exceeded my own limitations in a vector in terms of individual improvement and growth.

➢ Organizational and management skills

Being organized and establishing a plan were critical factors for the success and achievement of this dissertation. Firstly, before to start I evaluated and analyzed all the resources in my possession in order to have an overview of the situation. In addition, because of time constraints, it was essential to manage the time required for the different steps of the research process. The use of the Gantt chart (see appendix 3) allowed me to manage and control the tasks planning until the deadline. This tool was very useful for the improvement of the research effectiveness as well as efficiency. In general, even if the progress of the dissertation was adequate, there was pressure and in particular difficulty finding interviewees.

➢ Communication and relationship skills

Throughout the research, I improved on my communication, relationship and languages skills. Contacting people by “Inmail” through LinkedIn has been enriching because it required strong written communication skills. Indeed, the first “Inmail” needed to clearly ask the reader to agree to an interview. Otherwise, I noted the advantage of not being intrusive by contacting through “Inmail”. Therefore, I improved my language and relationship skills. In hindsight, performing the six interviews highlighted the requirement of needing good communication skills, as well as requiring an open-mind and curious personality.

The majority of the academic papers and four of the six interviews conducted were in English. As a result, I argue that the dissertation carried out in Ireland improved my oral and written English level.
Analytical and technical skills

All readings and interviews included in this dissertation allowed me to gain expertise about social network sites. In addition, due to the wide and exploratory nature of the study, I improved my analytical sense. In particular concerning the interpretation of figures in financial statements. Overall, this work enhanced the clarification and the synthesis of ideas.

Adaptation skills

Adaption is an important skill that I particularly developed while living in Ireland and that I had to face in order to achieve in terms of the current dissertation. As previously mentioned, the methods used were not similar to those in France. Therefore, the researcher adapted and employed the relevant requirements applicable from the Dublin Business School and in the Liverpool John Moores University.

I also highlighted some adaptive skills when conducting interviews in order to meet the preference of participants in term of hours. I conducted for example one interview during the night due to a jetlag of 8 hours.

6.5 Problems encountered

Overall, the researcher was faced with very few problems during the process of the dissertation. The major problem that was encountered was about recruiting the interviewees.

The first problem that I had to overcome was finding participants in a short amount of time in order to performing interviews. Without knowing anyone from the area of social networking sites, I decided to find my contacts through the use, of a premium account on LinkedIn.

Before the proposal result, I performed two interviews so as to take some advance. Due to my desire to include all view points, I searched employees from the four companies. However, it was easier to perform interviews with independents and people from LinkedIn and Google, compare to Facebook and Twitter. I did not consider that the workers could
have confidential agreements with their companies. Although the process was long when organizing an interviews with people from Facebook, I did not receive any positive answers from a Twitter employee in the last three months. Despite these setbacks, I did not stop the research.

The second problem reported during an interviews conducted was a technical issue. I had the misfortune of having an audio recording problem due to a bug on my software. As a result, I collected less data but I planned to resolve this problem for the subsequent interviews, by installing two audio recording devices. Four out of the six interviews were on Skype and the others two were performed face to face.

The translation of the interviews from French to English was also a problem too. As the researcher is thinking in French when writing ideas throughout this dissertation, I am convinced that the quality of this paper could be improved if I was a native speaker. Therefore, the researcher reflected that one personal goal would be to improve his level of English.

6.6 Conclusions

Chapter 6, allowed a reflection and a critical analysis in terms of learning and new or improved skills found during this research work. Throughout the chapters, I highlight my learnings, my personal achievements and the skills that I improved or acquired. In addition, the problems encountered during the research process are also presented. In fact, this self-evaluation is a very useful experience from a personal and professional perspective because it allows me to judge the performance of my work. Without the requirement of this dissertation, I would never realized this self reflection. Nevertheless, I recommend to all researchers to conduct a dissertation because this work allowed me to identify and improve skills that I will employ surely in my personal and professional life.

In conclusion, the current research work was found to be a positive experience. Also, by gaining expertise and weight in the social networking area may help me for when I apply for jobs in financial services of these social network companies.
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Appendices

Appendix 1: Main social networks websites and their positioning (Adapted from Balagué and Fayon, 2012)

<table>
<thead>
<tr>
<th>Social Network</th>
<th>Main market position of social network</th>
<th>Date of creation</th>
<th>Number of monthly active members * (in millions)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>Private and professional</td>
<td>2004</td>
<td>1028</td>
<td>Open to the public in 2006. Utilization for both personal and professional. Multitude of application built around (approximately 500 000). 65 million of actives groups.</td>
</tr>
<tr>
<td>Google+</td>
<td>Private and professional</td>
<td>2011</td>
<td>359</td>
<td>Occurs as a competitor of Facebook and Twitter. Integrate other Google services such as Gmail.</td>
</tr>
<tr>
<td>Linkedin</td>
<td>Professional</td>
<td>2003</td>
<td>187</td>
<td>Primarily intended for executives. Possibility to import contacts from Yahoo!, Live, Gmail and AOL.</td>
</tr>
<tr>
<td>Twitter</td>
<td>Micro-blogging</td>
<td>2006</td>
<td>255</td>
<td>Integrate the video blog platform Seesmic, which is repositioned and offers various applications around.</td>
</tr>
</tbody>
</table>

*In March 2014
Note: In this table, each social network is positioned on its main area of expertise, even if their usages extend beyond.

Appendix 2: Access restriction concerning Twitter and Facebook in March 2014
### Appendix 3: GANTT chart for research project

<table>
<thead>
<tr>
<th>Activity</th>
<th>October</th>
<th>November</th>
<th>December</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>Key Dates</th>
</tr>
</thead>
<tbody>
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<td>Exams / Holiday</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>21</td>
<td>3, January 2014: Submit dissertation proposal</td>
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<tr>
<td>Read literature</td>
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<td></td>
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<td></td>
<td></td>
<td>20</td>
<td>23, May 2014: Submit dissertation</td>
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<tr>
<td>Finalise objectives</td>
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<td></td>
<td></td>
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<td></td>
<td>19</td>
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<td></td>
<td>18</td>
<td>Dissertations Proposal</td>
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<td>Develop methodology</td>
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<td>Develop interviews questions</td>
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<tr>
<td>Search interviews participants</td>
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<td></td>
<td></td>
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<td>Contact participants</td>
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<td></td>
<td></td>
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<td>Realise interviews</td>
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<td></td>
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<td></td>
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<tr>
<td>Enter data into computer</td>
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**Legend:**
- Green boxes indicate activities to be completed.
- Red boxes indicate milestones.
- Blue boxes indicate key dates.

**Notes:**
- Activities are color-coded for easier visualization.
- Key dates are marked with specific milestones.
- The chart is updated weekly to reflect progress and upcoming deadlines.
Appendix 4: Comparison of Account Ownership and Active Usage between Chinese and US social networks companies (Quarter 4, 2013)

[Chart showing account ownership and active usage between various social networks in China.]

Question: Which of the following services have you used or contributed to in the past month using any type of device? e.g. PC/Laptop, Mobile phone, tablet, etc. Source: GlobalWebIndex Q4 2013 Base: Internet users aged 16-64, China

Appendix 5: Evolution of monthly active user account of selected services (Source: CNET website)

[Graph showing the growth in monthly active user accounts of selected services.]
Appendix 6: Questions for the in depth six-interviews

1. Can you please tell us about your background, and especially your experience about social network?

2. Are you a user of social networks? (If yes, which ones? Do you use frequently? On mobile devices or computer?)

3. According to you, what are the actual success factors of Facebook, Linkedin, Google+ and Twitter? What are their competitive advantages? What is your opinion about the potential of US social networks?

4. Do you think that social networks companies such as Facebook, Twitter, Google+ and Linkedin have clearly identified their long term strategy?

5. Are social network companies prepared to a quick change of user behaviors, like a loss of interest, which could lead to a decline such as the case of MySpace?

6. Linkedin is a professional social network, do you think that the website is more sustainable than Facebook, Google+ or Twitter due to its professional side/aspect?

7. With Google+, it’s possible to add friends and professional contacts, do you think it is a mix between Facebook and Linkedin?

8. According to you, US social networks companies evolve in a certain or an uncertain environment?

9. Can the strategies of these companies be metamorphosing permanently in order to adapt to new users behaviors and expectations?

10. Do you think that mergers and acquisitions (M&A) are necessary for the sustainability of Facebook, Linkedin, Google and Twitter?

11. What do you think about the acquisition of Whatsapp by Facebook?

12. Linkedin have a serious aspect, do you think that they could acquire any company, at any price?

13. Do recent IPO’s of social networks companies such as Twitter, LinkedIn or Facebook means a strategic evolution or a consecration for the branding?

14. Do you think that the growth of incomes on mobile devices could lead to an evolution of the business model?

15. Do you think that all of these social networks are using perfectly monetization?