

Czech University of Life Sciences Prague

Faculty of Economics and Management

Department of Economics



Bachelor Thesis

Economic Analysis of LinkedIn, Twitter and Facebook

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CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

BACHELOR THESIS ASSIGNMENT

Xeniya Kirillova

Business Administration

Thesis title

Economic Analysis of LinkedIn, Twitter and Facebook

Objectives of thesis

The aim of this bachelor thesis is to analyze the social networks Facebook, Twitter and LinkedIn, to estimate which of them are good choice to invest and which are not. The bachelor thesis is divided into two main parts. The theoretical part plays a role of introduction to the topic for a reader. The practical part includes analysis itself and the interpretation of results.

Methodology

Theoretical part will be composed of introduction, body, implications for further research and conclusion.

Practical part (analysis) will be done by using methods of comparative analysis as well as methods of fundamental and technical analysis

The proposed extent of the thesis

40 pages

Keywords

Social networks, Facebook, Twitter, LinkedIn, Stocks, Fundamental analysis, Technical analysis

Recommended information sources

Goldfarb, A.; Greenstein, S.; Tucker, C. Economic Analysis Of The Digital Economy; 1st ed.; University of Chicago Press,: Chicago, 2015. Print

Hafer, R.Hein, S. The Stock Market; 1st ed.; Greenwood Press: Westport, Conn., 2007. Print

Kirkpatrick, D. The Facebook Effect; 1st ed.; Virgin Books: London, 2011. Print

Ting, I.; Wu, H.; Ho, T. Mining And Analyzing Social Networks; 1st ed.; Springer-Verlag Berlin An: Berlin, 2010. Print

Expected date of thesis defence

2017/18 SS – FEM

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Declaration

I declare that I have worked on my bachelor thesis titled "Economic Analysis of LinkedIn, Twitter and Facebook" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the bachelor thesis, I declare that the thesis does not break copyrights of any their person.

In Prague on 12.03.2018 _____

Acknowledgement

I would like to thank Ing. Petr Procházka, MSc, Ph.D., the supervisor of my bachelor thesis for his patience, guidance and recommendations while working on my bachelor thesis.

Ekonomická analýza LinkedIn, Twitter a Facebook

Souhrn

Tato bakalářská práce je psána za účelem ekonomické analýzy nejpoužívanějších sociálních sítí, jako jsou LinkedIn, Twitter a Facebook, a získání užitečnější informace o jejich akcích.

Bakalářská práce je rozdělena do dvou částí: teoretická část a analytická část. Teoretická část poskytuje čtenáři obecné znalosti týkající se tématu, jako je úvod do analýzy vybrané pro praktickou (analytickou) část a stručnou historii společností.

Praktická část obsahuje samotnou analýzu a uzavírá výsledky pro společnosti, zda LinkedIn, Twitter, Facebook je dobrou volbou jako investice.

Klíčová slova: Facebook, LinkedIn, Twitter, ekonomika, investice, analýza, sociální sítě

Economic Analysis of LinkedIn, Twitter and Facebook

Summary

This bachelor thesis was written to analyze three of the most popular social networking corporations such as LinkedIn, Twitter and Facebook, and to get more useful information of their stocks.

The bachelor thesis is divided into two parts: the literature review and the analytical section. Literature review exists to give the reader general knowledge related to the topic such as an introduction to the analysis chosen for the practical (analytical) part and the brief history of the companies. The practical section includes an analysis itself and concludes results for the companies whether LinkedIn, Twitter, Facebook is a good choice as an investment.

Keywords: Facebook, LinkedIn, Twitter, Economics, Investing, Analysis, Social Networks

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1. Introduction

Since the inception of the Internet it is developing quite rapidly. The Internet has always been used to facilitate social interaction. Therefore, one of the main components of the World Wide Web are social networking services. During the first decade of the 21st century, there was an evolutionary leap in the social component of web use. Nowadays social networking sites are becoming increasingly popular. The number of social network users has exceeded 2 billion. (Source: statista.com) One result of the interaction of people through such networks is to obtain a vast amount of information in various formats: text, images, audio, video, etc. For today's generation, these sites have replaced television, newspapers and magazines. People can easily read the latest news on Twitter, make like-minded friends on Facebook and find a new promising job on LinkedIn. People become addicted to the social networking sites. This bachelor thesis will not tell the reader is it good or bad for the human beings.

The author of the particular thesis is going to analyze and compare the stocks of such corporations as Facebook, LinkedIn and Twitter and answer the questions: "Are these companies the good choice for investment or not?"

2. Thesis objectives and Methodology

2.1 Objectives

The aim of this bachelor thesis is to analyze the social networks Facebook, Twitter and LinkedIn and the factors affecting the companies' income, to estimate which of them are good choice to invest and which are not. The bachelor thesis is divided into two main parts. The theoretical part plays a role of introduction to the topic for a reader and provides whole information relating to companies and general knowledge about investment and stocks, to help the reader understand the practical part of the thesis. The practical part includes analysis itself and the interpretation of results.

2.2 Methodology

Theoretical part will be composed of introduction, body, implications for further research and conclusion.

Practical part will be done by using methods of fundamentals analysis as well as methods of technical analysis.

3. Literature review

The methods of synthesis, induction and deduction will be used in theoretical part of this research.

3.1 What is Social networking service?

Social networking service (SNS), in technology parlance, is a platform, website that allows users create their own profile with personal information. Through these profiles users grow relationships by sharing, emailing, instant messaging and commenting.

Social networks could be created for different purposes and people engaged in it, depending on their interest, may be doing a personal or a business endeavor. For example, the most popular sites for a personal purpose are Facebook, Google+, Twitter etc. (Margaret Rouse, 2013)

Few examples of social networking sites:

Facebook – social networking platform, which allows registered members to create a profile with a photo and information about yourself, invite friends, exchange messages with them, change status, post on their own and other walls, upload photos and videos, create groups (communities of interest). It is possible to create Facebook applications. (Margaret Rouse, 2014)

Twitter – social networking microblogging service, which allows registered members to broadcast short posts (with limited 140 characters) called tweets. Twitter users can also follow other member s' tweets. (Margaret Rouse, 2015)

LinkedIn – social networking site specialized for the business reasons. Site allows registered members to place and establish networks with people they know professionally. (Margaret Rouse, 2016)

Instagram – social networking photo-sharing platform and online application, which allows registered members to edit and upload photos and videos within a mobile application. From 2012 Instagram belongs to Facebook. (Margaret Rouse, 2017)

3.2 What is LinkedIn

LinkedIn can be described as the largest social networking service for recruitment and business communication, where users post their professional information, experience and can connect with others. (Art Sobczak, 2013)

The main goal of the site is to unite specialists around the world for their professional activities more effective and successful. Joining LinkedIn, the user gets access to information about people, vacancies, news updates and other valuable information that helps user in the professional activity. (LinkedIn.com, 2017)

3.2.1 A Brief History of LinkedIn

LinkedIn is one of the oldest social networking sites. It was founded on December 28, 2002, and launched on May 5, 2003, by Reid Hoffman, Allen Blue, Konstantin Guericke, Eric Ly and Jean-Luc Vaillant in California, U.S.

The main mission of the company was keyed to connect world's professionals and make them more successful and productive. LinkedIn had a total 4,500 users in the network at the end of May 2003. (James Potter, 2015)

At the start of the 2004, since the start of partnership with American Express to promote their offerings attractiveness of LinkedIn began to expand and it took membership up to 1,217,647. In 2005 LinkedIn launched its first paid options: Jobs and Subscriptions. The company moved into a big office. Total number of users had scaled up to 4 million (4,192,941).

2006 was the year that brought to the company its first profit and at the beginning of the year there were 5,093,823 members. This year LinkedIn launched public profiles as a record of your past careers.

At 2007 membership scaled up to 17 million (17,131,764). After 4 years as CEO Reid Hoffman focused on running the product and Dan Nye started lead the company. Also, LinkedIn opened the Customer Service center in Omaha and moved to Stierlin Court.

In 2008 LinkedIn started to extend away from its US base and became a global company with opening its first International office in London, United Kingdom and launching French and Spanish versions of the site. This led the increase of users up to 32 million at the end of the year.

In 2009 Jeff Weiner joined LinkedIn team as President and then became CEO. He focused on clarifying company’s mission and values to set some strategic priorities. Membership had reached more than 55 million. (James Potter, 2015)

2010 was the year of a big growth, by the end of the year LinkedIn reached 90 million members. It already has 10 offices around the world and over 1,000 employees.

In 2011 company celebrates its eighth anniversary. This year LinkedIn has been listed in the New York Stock Exchange and hosted a town hall meeting with President of the United States – Barack Obama. At the last quarter of 2011 LinkedIn had already 145 million users.

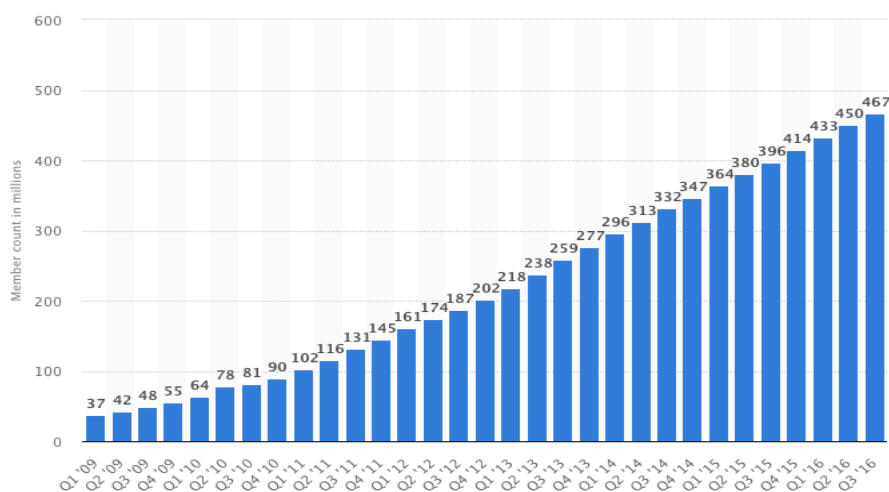
2012 was the year of the interface change. For Jeff Weiner, the goal was to simplify LinkedIn, to enable growth and to make it more every day for everyone. And to this end released completely re-architected site with a new profile layouts. There were more than 200 million at the end of the year.

In 2013 company celebrated its tenth birthday with over 225 million members around the world. LinkedIn lowered the age of entry and targeted graduates and junior staggers.

2014 LinkedIn has 5,400 employees, offices in 27 cities in more than 200 countries, 347 million users.

2015 LinkedIn closed with 414 million members. (James Potter, 2015)

Figure 1: Monthly active users of LinkedIn



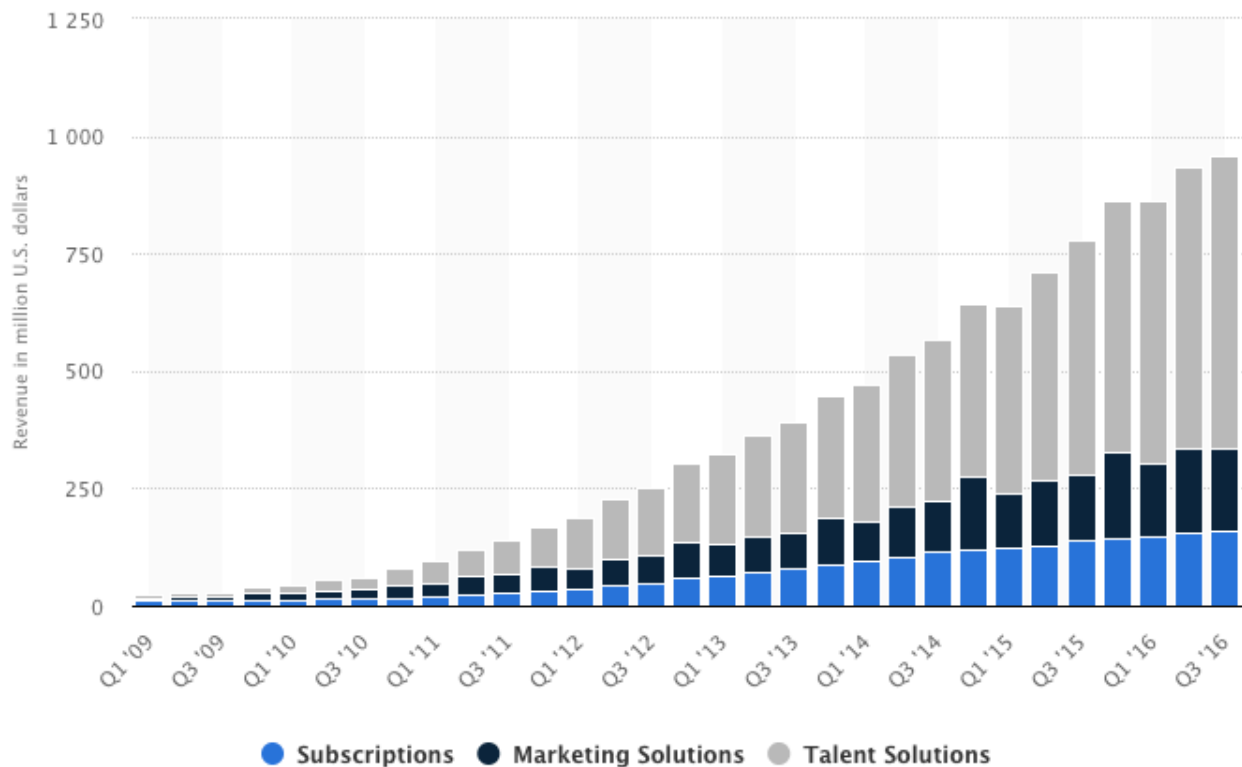
Source: (Statista.com, 2018)

3.2.2 How does LinkedIn make money?

LinkedIn is the professional networking service and segments of the site's revenue are selling advertising (marketing solutions), recruitment services (talent solutions) and premium subscriptions.

Based on statistics from the Figure 2, LinkedIn's total revenue for the 3rd quarter of 2016 amounted \$959.79 million, where 622.69 million, which is 65% came from talent solutions. On the second place are marketing solutions with 175.48 million, accordingly in percentage it makes 18%. LinkedIn subscriptions accounted for 17% of total revenue, or \$161.62 million.

Figure 2: LinkedIn's revenue by segment, (1st quarter 2009 - 3rd quarter 2016)



Source: (statista.com, 2016)

3.2.3 Microsoft LinkedIn deal

Microsoft negotiated with LinkedIn for two months. The report, submitted by LinkedIn to the US Securities and Exchange Commission, states that on May 4, Microsoft made a preliminary bid to purchase a social network for cash at a price of \$160 per share. Nine days later, Salesforce made an alternative bid, offering \$160-165 per share in the combination of cash and own shares. As result, Microsoft raised the offer price several times. Even when LinkedIn management entered exclusive negotiations with Microsoft, Salesforce left its offer in force. LinkedIn quotes grew, the value of the potential deal increased, and Microsoft had to raise the offer price.

After receiving preliminary bids from Microsoft and Salesforce, LinkedIn informed both sides that it would start exclusive negotiations with one of them who would agree to raise the price to \$ 200 per share. None of the companies went for it, and between them began a war of offers, which ended Microsoft's victory.

In June 2016, the parties agreed on a price of \$26.2 billion, or \$196 per share, a 50% premium over LinkedIn's last closing price. (Jay Greene, 2016)

3.3 What is Twitter

Twitter can be described as a free social networking microblogging service, where users can broadcast and follow other users' short posts so-called "tweets". It allows registered users to read and post their tweets by using multiple platforms such as the website, short message service (SMS), and mobile application. The concept of Twitter is that posts are limited to 140 characters. Users are also able to upload images and short videos in their tweets. (Margaret Rouse, 2015)

The mission of the company: *"Give everyone the power to create and share ideas and information instantly, without barriers."* (Twitter Inc., 2018)

Twitter, Inc. offers various products and services, including Twitter itself; and Periscope, a mobile application that allows users to broadcast and watch live videos. Company also offers products and services such as promoted tweets, accounts, trends. That kind of products enable its advertisers to promote their brands. In addition, it provides subscription access to public data feed for data partners. (S&P Global Market Intelligence)

Twitter is a private company with 3,583 employees. Key Executives for Twitter, Inc. are Jack Dorsey – Chief Executive Officer, Omid R. Kordestani – Executive Chairman, Vijaya Gadde

Esq. – Director of Communications, General Counsel and Secretary. (S&P Global Market Intelligence)

3.3.1 A Brief History of Twitter

Twitter is a blogging platform, which was launched on March 21, 2006 by programmers who worked at the podcasting company Odeo Inc. The founders are Biz Stone, Ev Williams, Jack Dorsey and Noah Glass. Company is headquartered in San Francisco, California, USA. They were trying to find a way to send text on their cellphones and reinvent a dying company. And the communications revolution was started from Jack Dorsey's first-ever tweet "just setting up my twttr" on March 21, 2006, 9:50 p.m.

The name was inspired by a photo-sharing service Flickr. The definition of twitter is "a short burst of inconsequential information." Jack Dorsey said that twitter is a perfect name because *"that's exactly what the product was."*

The concept of Twitter are short posts called tweets with 140 characters' length (280 characters from 2017). The main reason for this was the SMS carrier limit, which is 160 characters, and 20 characters founders wanted to leave for a username. (Andre Picard, 2017)

From November 2017 limit was doubled to 280 characters for all languages except of Chinese, Japanese and Korean. Company explained this decision that compared to English or Spanish speaking users, people tweeting on these languages can express double amount of information in a single character. (Sarah Perez, 2017)

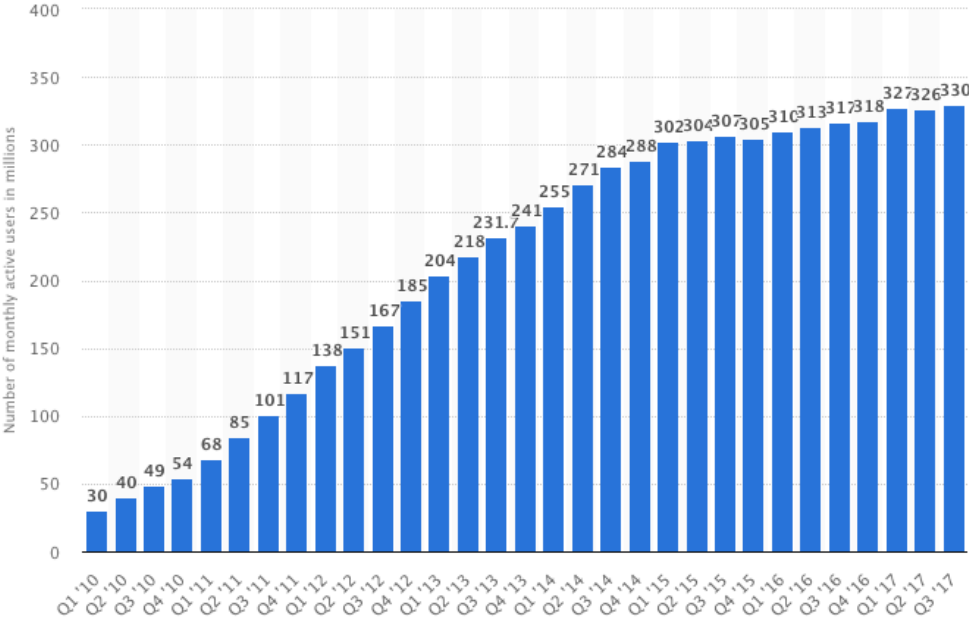
After Twitter became so popular, it has changed not just the media. News stories that arise, from a plane crash to a tsunami, arrives from accounts we follow on Twitter.

It has changed the way of communication between customers and consumers in business, as well. Unsatisfied customer can easily spread the word and do damage for a big brand with a few tweets. Business in real time can communicate with a customer it wants to reach. The one-way transmission of information has been transferred into two-way interaction. (Andre Picard, 2017)

Nowadays Twitter has 330 million monthly active users worldwide and more than 460,000 new accounts opened daily. About 140 million tweets are sent daily and more than 1 billion weekly. (Statista.com)

Statistic on figure 3 shows the amount of Twitter MAU (monthly active users) worldwide. As we can see the MAU increased tenfold from the beginning of 2010 to the end of 2017.

Figure 3: Monthly active users of Twitter



Source: (Statista.com, 2018)

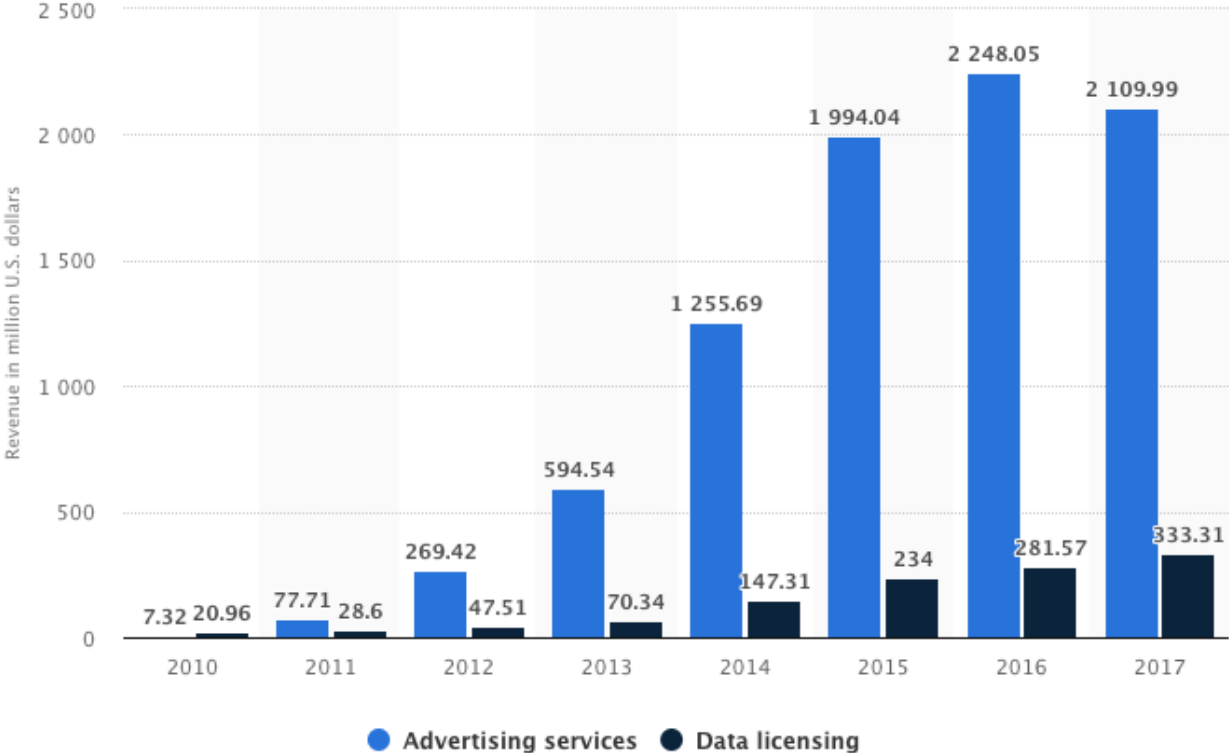
3.3.2 How does Twitter make money?

Approximately 86% of company’s revenue Twitter earns from advertising. Company uses promoted tweets, accounts and trends. Promoted tweet, within the special company’s advertising algorithm, shows at the right time, location of the target user who will see the tweet in their feed. Promoted account is an advertising module that is placed on the recommended accounts tab and is shown to those users who might be interested. Promoted trend allows the advertiser to choose one of the popular requests and pin his tweet at the top of search results.

Another part of Twitter’s revenue is data licensing. Twitter allows to marketers direct access to all tweets database. Companies acquire this information to analyse consumer trends and conduct research, they can monitor consumers' attitudes toward their brand or product. For the fiscal year of 2017 it was 6% reduction of the advertising revenue compared to 2016. However, for the same 2017 data licensing and other revenue increased 18% and company finished with 3% decrease in total revenue. (Brian Beers, 2018)

Graph bellow illustrates both segments of Twitter’s revenue in period 2010-2017.

Figure 4: Twitter's Revenue by segment, (2010-2017)



Source: (statista.com, 2018)

3.4 What is Facebook

Facebook is the most popular social networking site that allows registered users create the account and communicate with other members through the messages or uploading photos and

video. The site is free and available in 37 languages. Facebook has different public features such as: Marketplace, Groups, Events, Pages, Presence technology. (Margaret Rouse, 2014)

There are several main networking components in each Facebook personal profile. One of them is the Wall, which is a virtual bulletin board.

Facebook, Inc. provides different products for personal computers, mobile devices, and other surfaces. Besides Facebook website and mobile application, company also provides: Instagram social network for sharing photos and videos; Messenger a messaging application for the Facebook users; and WhatsApp a mobile messaging application. As well, Facebook, Inc. offers to the people Oculus virtual reality technology and content platform. (S&P Global Market Intelligence)

3.4.1 History of Facebook

There is not a secret, that nowadays almost everyone you know has a profile on Facebook. It became a priori the standard. Based on the source Statista.com there were more than 2.2 billion active Facebook users on the fourth quarter of 2017 (figure 3) and the World population on 2017 is 7.5 billion (source: Worldometers). Based on this data the author could say that 29 percent of the world population can be found on Facebook. That is insane! But how it all started?

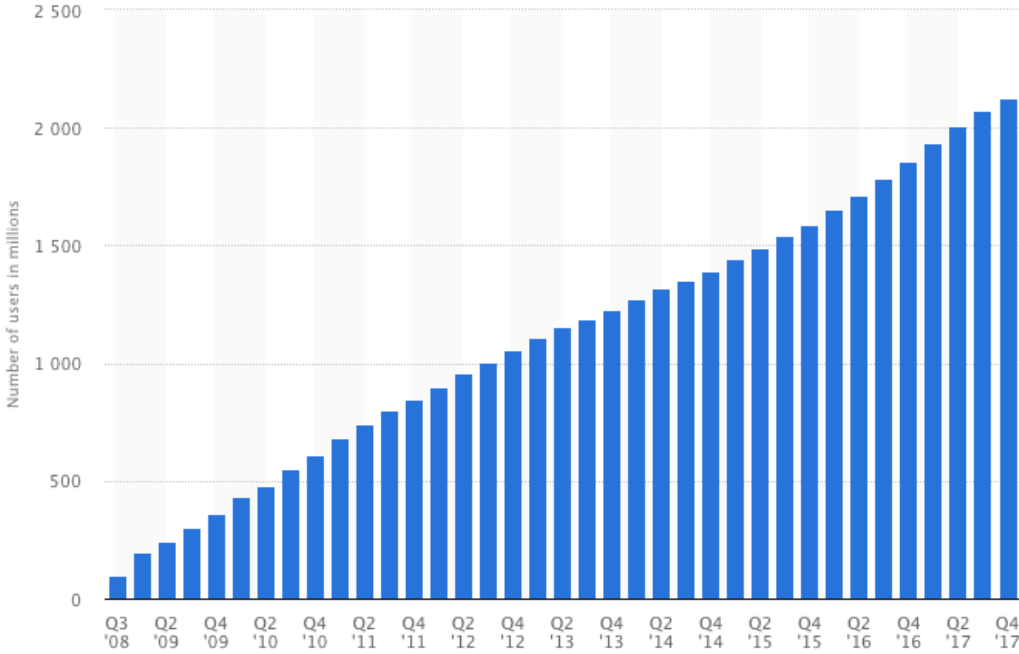
It all started in February 4, 2004 when Mark Zuckerberg launched with a new site called “Thefacebook”. The site was named after the directories that were handed out to students to get them know each other better. At first membership was restricted only to Harvard students. Later Zuckerberg invited his fellow students Eduardo Saverin, Dustin Moskovitz, Andrew McCollum and Chris Hughes. With their help TheFacebook was expanded to additional universities and colleges. (Mary Bellis, 2017)

After their launch - TheFacebook got discovered by the co-founder of Napster Sean Parker, who started to advise informally. Peter Theil, the founder of PayPal, was the first private investor, who get 10.2% of the company for \$500,000. The network has reached over one million registered members by December 30, 2004. (Daniel Zeevi, 2013)

In 2005, after Sean Parker became the president company purchased the domain name facebook.com for \$200,000 and the site’s name has changed from TheFacebook to just Facebook. This year, Accel Partners invested \$12.7 million in Facebook - that enabled to create a version of the network for high school students and later for employees of companies. And finally, Facebook announced their network for everyone who is at least 13 years old and have email address in September 2006. Based on the analytics site Compete.com, Facebook had turned to the most used social networking service in the World by the end of 2009. (Mary Bellis, 2017)

The company’s domination continued to grow. As a beginning Facebook acquired news aggregator FriendFeed in August 2009. Later in April 2012, Facebook made a big sensation in the market and acquired photo and video sharing social networking application Instagram for almost \$1 billion. (Daniel Zeevi, 2013)

Figure 5: Monthly active users of Facebook



Source: (Statista.com, 2018)

3.4.2 How does Facebook make money?

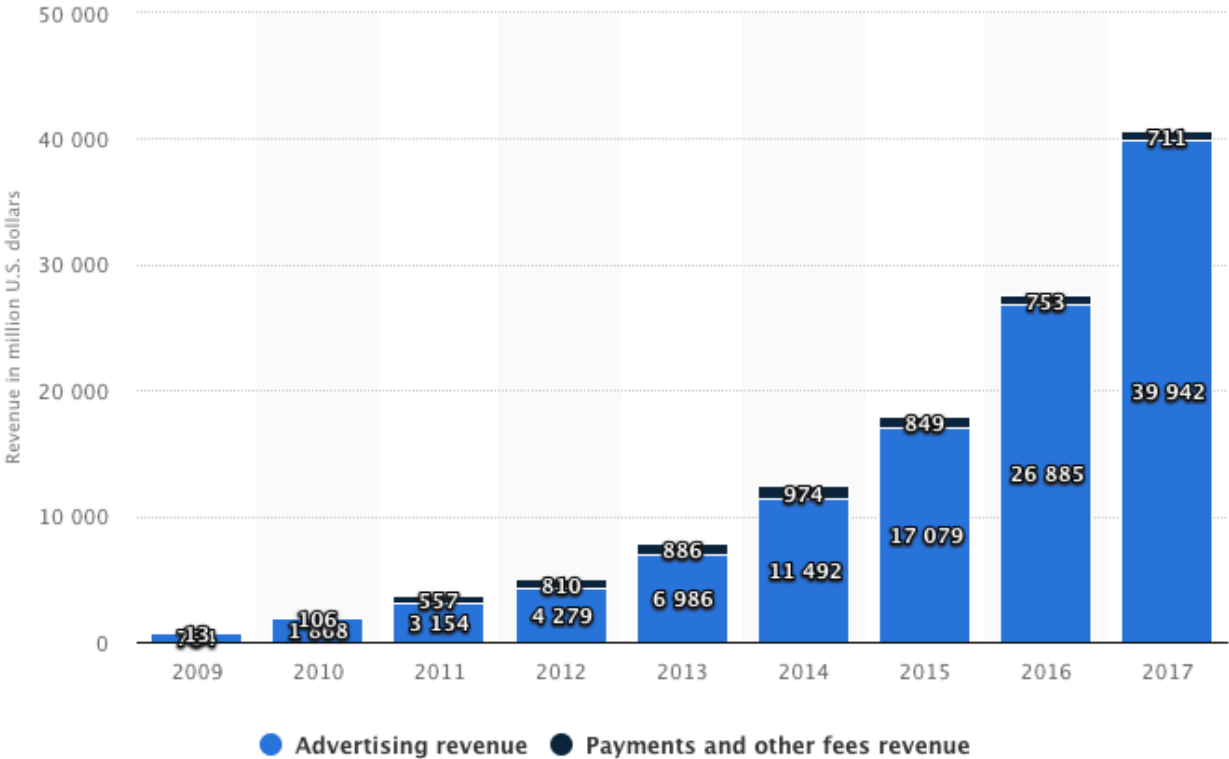
The big part of Facebook’s revenue it earns from digital advertisement. Company’s value proposition is targeted advertising. It represents for advertisers an opportunity to utilize users’ personal data. However, company declares that the personal data is anonymous and advertisers get information in custom demographic buckets. They can target users based on income, region, religion, political affiliation, etc. Also, Facebook’s profit increased by such acquired companies as Instagram and WhatsApp, which have significant popularity and number of users.

Another part of company’s revenue videos and live broadcasts from Facebook Live platform, which daily watch time has grown by approximately 4 times.

Facebook also investing into future sources of revenue such as virtual reality and connecting to internet the parts of the world without it. Mark Zuckerberg underlined “Over the next 10 years, we are developing consumer use cases around technology that are a big part of our future but won't be a big part of our business for a long time.” (Rakesh Sharma, 2017)

Graph bellow represents the revenue of Facebook by segment in period 2009-2017.

Figure 6: Facebook's Revenue by segment



Source: (statista.com, 2018)

3.5 Fundamental and Technical analysis

When it comes to analyzing the financial markets, there are two main schools of thought: Technical analysis and Fundamental analysis. Technical analysis looks at the price itself, when Fundamental analysis looks at all economic and financial factors that influence a business. In this chapter I would like to consider deeper on the differences of these two analysis and explain how fundamental and technical analysis can be used together.

3.5.1 Fundamental Analysis

Fundamental analysis is a type of investment analysis which measuring security intrinsic value by examining related economic, financial and other qualitative and quantitative factors. The strategy assumes that the market price will sooner or later equal the genuine one. (Ben McClure, 2003)

Fundamental analysis answering on questions about the company, such as:

- Is its revenue growing?
- Is it making a profit?
- Is it able to beat out its competitors in the future?
- Is it able to pay back its debts?

But in fact, these questions boil down to the main one: Is the company's stock a good investment? (Ben McClure, 2003)

To answer this question fundamental analyst looking at several fundamental factors, which can be categorized into: quantitative and qualitative.

- **Quantitative factors** can be measured or expressed in numerical terms. These factors include various instruments such as revenues, earnings, return on equity and future growth, profit margins and other public data to determine a company's underlying value and possibility of future growth. In case of stocks, it considers on financial statements of a company, which include revenue, expenses, assets, liabilities etc. Using this

information fundamental analyst can do a quantitative part of analysis, which affects looking at numbers and financial aspects of a company.

- **Qualitative factors** are based on the quality or character of something, usually opposed to its size or quantity. The basics of this view are: Business Model, Competitive Advantage, Management, Corporate governance.

Source: (Ben McClure, 2003)

Business model

Before looking at a company's financial statements there is the main question that should be asked: "What exactly does the company do?" This indicate how a company makes money and can be called the business model. (Ben McClure, 2003)

Business model could be simple and very easy to understand for anybody, as McDonalds, which is selling food – make money. Or it could be more difficult such as Boston Chicken Inc., which didn't make money from selling chicken it made money from franchisees and royalties. (Ben McClure, 2003)

Competitive Advantage

Another essential of the qualitative view is competitive advantage. A long-term success of a company is directly depending on its ability to maintain a competitive advantage and keep competitors one step behind. Brand name such as Coca Cola or Microsoft domination of the personal computer operating system are powerful competitive advantages. If a company can achieve this kind of excellence from competitors, its shareholders will be well reward for decades. (Ben McClure, 2003)

Management

Management is one the main aspects for investing in a company. Because as every army needs a leader in the person of general, every company needs a leader in the person of CEO

and key executives. Without a good manager or leader, even the best business model can be doomed. (Ben McClure, 2003)

Corporate governance

Corporate governance characterizes the policies, relationships and responsibilities between directors, management and shareholders in an organization. The goal of corporate governance policies is to make the illegal and unethical activities not possible for everyone. So, the purpose of the fundamental analyst is to determine if a company respects all its governance policies and applicable government regulations (Sarbanes-Oxley Act of 2002, for example) to protect the company's shareholders and investors. (Ben McClure, 2003)

3.5.2 Technical Analysis

Technical analysis is a method of examining and predicting price movements in the financial market, based on charts and other tools to identify useful patterns for investment decision. When fundamental analysis starts with a company's financial statements, technical analysis based on price asset's charts. External factors as well as intrinsic value are not taken into account. Supporters of this analysis considered on the fact that the stock price already includes all necessary information and there is no need to analyze a company's income statement, balance sheet and cash flow statement. (Justin Kuepper, 2017)

Technical analysis is based on 3 postulates:

1. The market discounts everything.
2. Price moves in trends.
3. History tends repeats itself

(Source: Investopedia Staff, 2006)

Trend in Technical Analysis

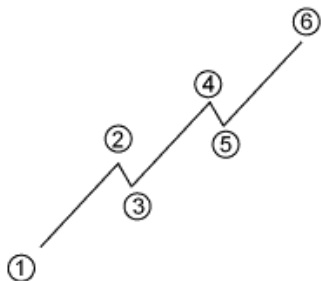
According to businessdictionary.com the definition of a trend sounds like: “A pattern of gradual change in a condition, output, or process, or an average or general tendency of a series of data points to move in a certain direction over time, represented by a line or curve on a graph.”

The usage of a trend in technical analysis is one of the main concepts. The importance of it for technical analysts is illustrating in two sayings “the trend is your friend” and “don’t buck the trend” (Justin Kuepper, 2017)

There are 3 types of trends in addition to their direction:

1. Uptrend – on a figure 7 it can be seen the typical example of an uptrend. Each of the high points of the trend – 2,4,6 – are higher than the previous high. The same with the low points – 3 and 5 – are higher than the previous low.

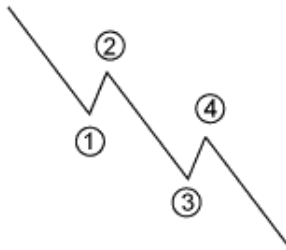
Figure 7: Uptrend Example



Source: (Investopedia Staff, 2006)

2. Downtrend – as can be seen on a figure 8 a downtrend is a vice versa of uptrend.

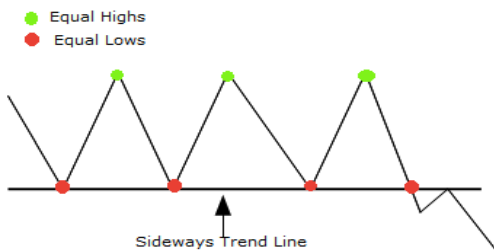
Figure 8: Downtrend Example



Source: (Investopedia Staff, 2006)

3. Sideways / Horizontal Trends – also known as a neutral trend, because horizontal trend is the absence of any readable trend in either direction. As can be seen on figure 9 sideways trend are connected by two or more equal lows.

Figure 9: Sideways Trend Example



Source: (Tutorials.topstockresearch.com)

Trends can be also classified by their lengths:

- Short-term trends – appear for a timeframe of less than one month.
- Intermediate-term trends – appear for a timeframe from one to three months.
- Long-term trends – appear for a time frame of longer than one year.

Source: (Investopedia Staff, 2006)

Figure 10 is an example how these three trends combined into one chart

Figure 10: Trend Comparisons



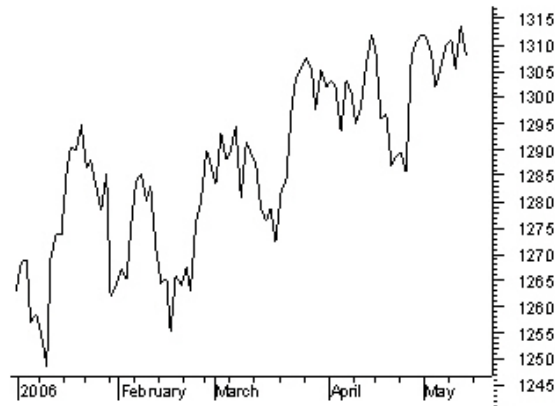
Source: (Investopedia Staff, 2017)

Charts in Technical Analysis

There 4 different types of charts:

- *Line Chart* – is basic chart, which represents only the closing prices. The line is built by connecting the closing prices for a period of time. The drawback of this type of chart that it does not provide an understanding of intraday price fluctuations such as open, high and low price for a certain period. But Line charts facilitate the identification of trends, due to the lack of a large amount of “noise” compared to other types of charts. (Justin Kuepper, 2017)

Figure 11: Line chart example



Source: (investopedia.com, 2017)

- *Bar Chart* – this type includes open, high, low and close prices so it is a sort of expansion of a line chart. Bar chart consist of a series of vertical lines with a horizontal dash example of which can be seen on figure 12. Upright line represents the price range for the trading time. Left side horizontal dash shows the opening price and right side dash is the closing price. (Justin Kuepper, 2017)

Figure 12: Example of a line in Bar Chart

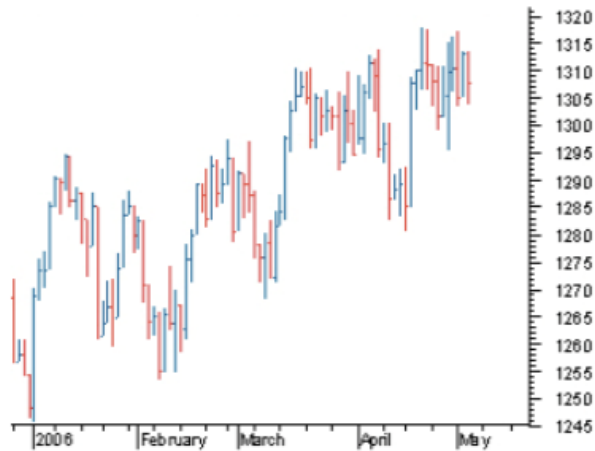


Source: (Investopedia.com, 2017)

If the closing price (the right dash) is higher than the opening price (the left dash), line will be colored black to represent an increasing period. Red line's color represents

reverse decreasing period, when the opening price is higher than the closing one. (Justin Kuepper, 2017)

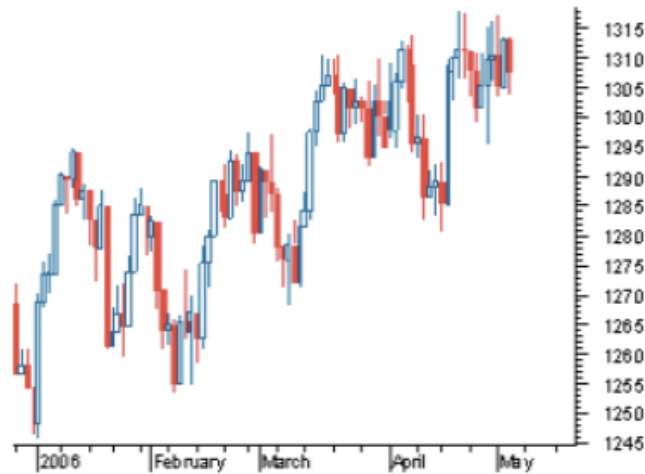
Figure 13: Bar chart example



Source: (Investopedia.com, 2017)

- *Candlestick Chart* – similar to a bar chart, consists of vertical lines, which showing the price range for a given period. But the difference between bar and candlestick charts is in the indicators of the opening and closing prices. Every period shaded different colors. The period of rise has a white or clear candlestick body. A red or black candlestick body is typical for the falling period. And there are not any wide body or rectangle for the neutral period, when open and close prices are equal. (Justin Kuepper, 2017)

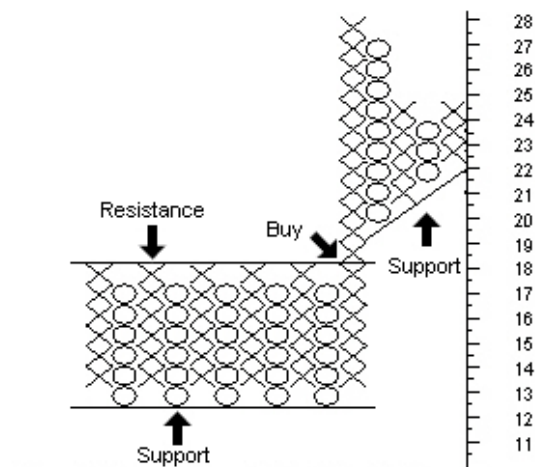
Figure 14: Candlestick chart example



Source: (Investopedia.com, 2017)

- *Point and figure Chart* – is not really useful at the moment, but it has long history background of use by the first technical traders. This chart shows only price movements without time and volume. (Justin Kuepper, 2017)

Figure 15: Point & Figure chart example



Source: (Investopedia.com, 2017)

4. Analytical Section

4.1 LinkedIn as an investment

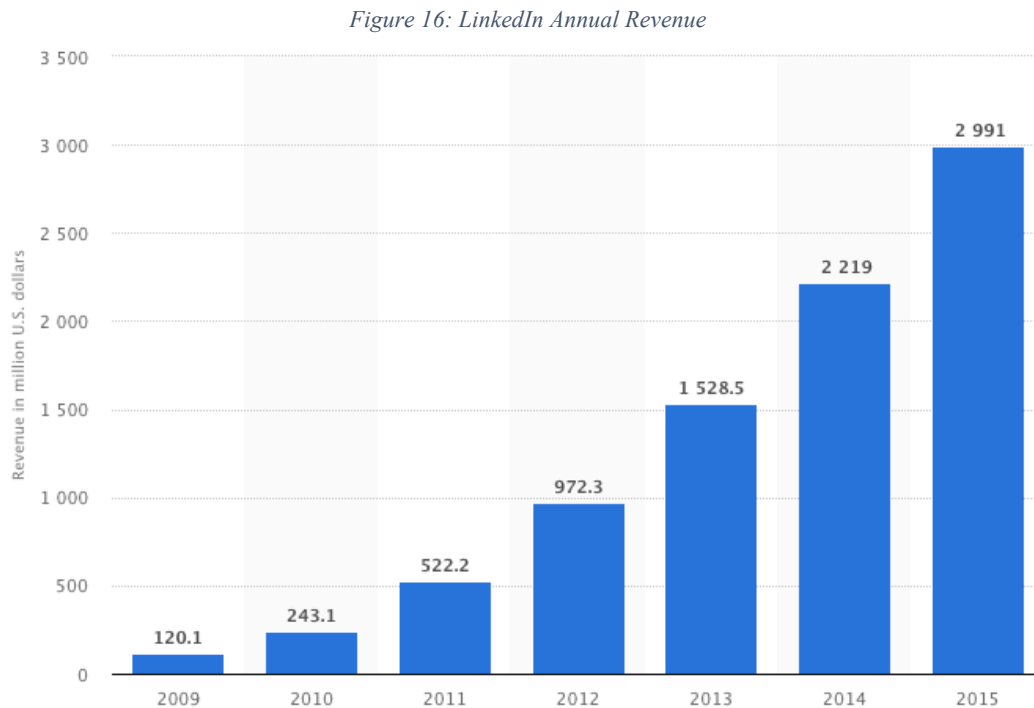
LinkedIn was acquired by Microsoft in December 2016 for \$26 billion, LinkedIn results are now part of Microsoft's Product Revenue and Service and Other Revenue segment. Since the last reported period of LinkedIn as a company was 3rd quarter of 2016, it is possible for the author to answer to the question WAS LinkedIn a good choice as an acquisition for Microsoft.

4.1.1 Who are LinkedIn's competitors?

Starting from the fact that LinkedIn is the professional social network, which is dominant since its beginning in 2003, now it is established in more than 200 countries, has over than 467 million users worldwide and 100 million unique users a month. It hasn't faced the real competition in this field. Yes, there are a lot of recruitment sites, for example which are based on location such as Xing in Germany and Viadeo in France; or millennial focused: Jobr and Debut. But the number of their users is miserable and is not even comparable to LinkedIn's global popularity. Nowadays, 60% of U.S. companies use it to hire employees and this is phenomenal market share.

October 2016 Facebook was launched their new product – professional social network Workplace by Facebook. Before the launch some analysts predicted that now LinkedIn will face a real competition, as Facebook has the brand power to challenge it. Facebook's explained their new professional site: "Workplace by Facebook lets you create a work account that is separate from your personal Facebook account. With a Workplace account, you can use Facebook tools to interact with co-workers. Things you share using your work account will only be visible to other people at your company." So, in fact, there are two different fields as LinkedIn exists as a recruitment site for users and organizations, while Workplace's goal is inner organization communication. (Jorgen Sundberg, 2016)

4.1.3 Was its revenue growing?



Source: (statista.com, 2016)

Graph illustrates LinkedIn's annual revenue from year 2009 to 2015. As it could be seen, revenue was growing constantly. In period of 2009-2010 company's revenue increased about 2 times, as well as 2010-2011. In 2013 it was reached more than \$1.5 billion mark. And in 2015 it exceeded \$2.9 billion, which is increase of \$772 million, compared to previous 2014.

And based on the chart and summary provided the answer on the question "Was LinkedIn's revenue growing?" is "Yes, it was clearly growing"

4.1.4 Was it making profit?

Table 1: LinkedIn's selected income statement items, short-term trends

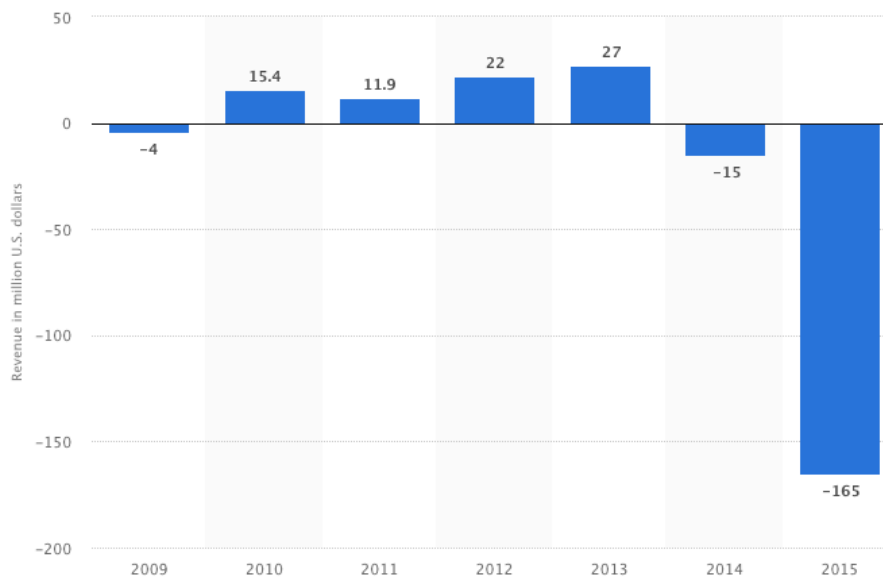
(In millions, except for per share amounts)	Three months ended Dec 31,		Twelve months ended Dec 31,	
	2015	2014	2015	2014
Revenue	\$861	\$643	\$2 990	\$2 218
Income from operations	\$-15	\$14	\$-150	\$36
Operating Margin	-2%	2%	-5%	2%
Net Income	\$-7	\$3	\$-164	\$-15
Diluted Earners per Share	\$-0.06	\$0.02	\$-0.13	\$-1.29

Source: compiled by author based on LinkedIn Annual Reports (news.linkedin.com)

The data in table above shows a big decrease in company's Net Income. \$3 million of net income for the 4th quarter of 2014 changed to \$7 million of net loss for the last quarter of 2015. The same with the annual, for 2014 net loss was \$15 million and it amounted to \$164 million in the end of 2015.

Based on this information it can be concluded that LinkedIn wasn't made any profit in 2015 neither in 2014.

Figure 17: Annual LinkedIn's Net income, long-term



Source: (statista.com, 2016)

And even looking on the graph above, which illustrates annual net income of LinkedIn for the long-term period 2009-2015, the numbers are not looking good. The statistic starts with negative \$4 million net income in 2009, the next 2010 was a good year for the company, net income increased by \$19.4 million year-over-year and amounted \$15.4 million. However, in 2011 there was decrease of \$3.5 million. Period of 2012-2013 it started to growing again and reached \$27 million of net income in 2013.

Together with the next 2 years of the catastrophe in LinkedIn’s net income, the author able to conclude that company wasn’t indeed profitable and it doesn’t look like it will in the future.

4.1.5 History of LinkedIn’s stock

Figure 18: LinkedIn Stock Chart history



Source: (investing.com)

LinkedIn was started trading on May 19, 2011 with a price of its initial public offering (IPO) \$45 per share.

Graph illustrates the whole movement of LinkedIn stock from the beginning of IPO to the last day. It shows a stable growth pattern and early investors get decent returns. Overall trend of the movement is upward, but it also shows low swings. The sharpest drop in stock prices was in early 2016, where the stock tumbled by 40%. That is easy to explain LinkedIn lowered its expectations for the year's growth in revenue and adjusted earnings, what we already know from the analysis made earlier. But by the end of 2016 LinkedIn managed to gain all the losses back and Market closed with the stock price \$195.97.

4.2 Twitter as an investment

4.2.1 Who are Twitter's competitors?

From the very beginning, Twitter worked to assemble a set of valuable services. Since 2007, the service has become a place where users allowed to publish news, photos and to send personal or public messages. On this basis Twitter continues to sell advertising.

Twitter's competitors are working to deprive the service of a whole package of tools. Now Twitter has two most stable values: public live broadcasts and a network of celebrities (politicians, athletes and journalists) who use the platform for public discussions.

Facebook always was the first and main competitor to Twitter. The social network has slowed the growth of microblogging service due to the constant development and creation of an algorithmic news feed. Facebook is growing faster and it became the place where most users share links. But a social network still cannot provide information in real time, as microblogging does. Twitter remains the platform for breaking news.

Facebook is competing with the company in this sphere. On March 21, Reddit announced the introduction of personal profiles, which show user publications in reverse chronological order, as well as the "subscribe" button. The update came in Twitter's 11th birthday. But Reddit wasn't the only one, in early March, Twitch streaming service, which belongs to Amazon, announced the launch of Pulse, a news feed similar to the main microblogging service tool.

At the same time Instagram creates more and more tools that will help the service to build its network of celebrities. The application is constantly introducing new features and is gaining a large number of users.

Being under pressure, the microblogging service tried to create a new business model around the online broadcasts, which only showed how Twitter's earnings model had fallen into decay. Among the Twitter fans there is a belief that the service is indispensable, but the truth is that Twitter is already being replaced. (Casey Newton, 2017)

To determine Twitter's competitive advantage to Facebook the author uses profitability analysis based on the Financial ratio analysis of Twitter (Table 3) and Facebook (Table 5) for the year of 2017.

Condition: the higher the percentages, the better.

Gross Profit: Twitter 65% < Facebook 87%

Operating Profit Margin: Twitter 0.4% < Facebook 51%

Net Profit Margin: Twitter -4% < Facebook 39%

Cash Flow Margin: Twitter 34% < Facebook 60%

Return on Assets: Twitter -1% < Facebook 19%

Return on Equity: Twitter -2% < Facebook 21%

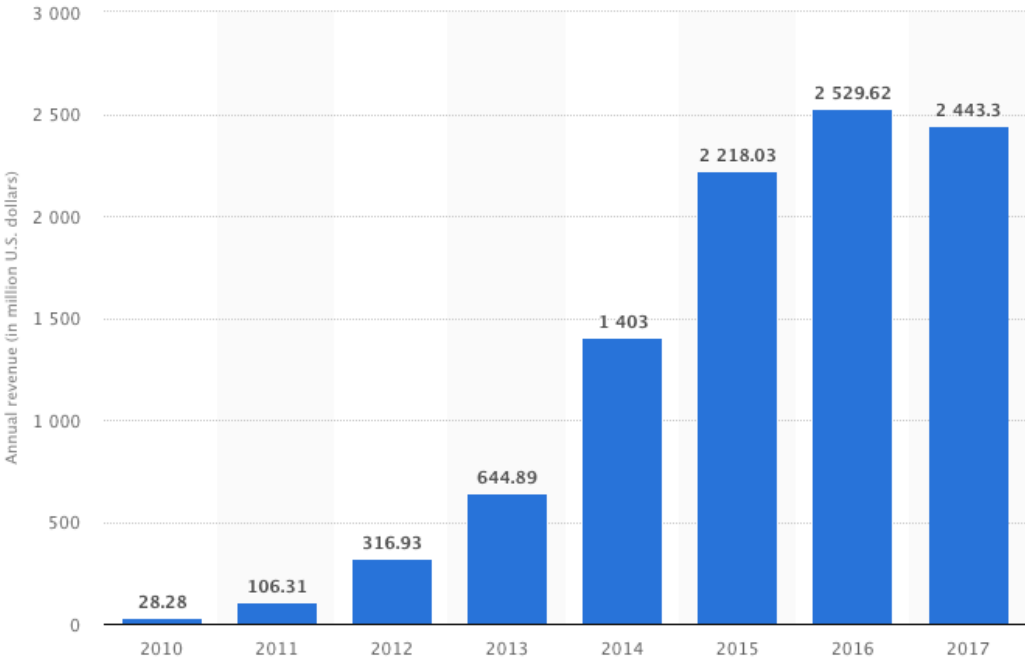
Cash Return on Assets: Twitter 11% < Facebook 29%

In all ratios Twitter shows smaller numbers, unlike Facebook. According to the comparison above it can be concluded that Facebook is doing clearly better and still has a big competitive advantage to Twitter. But still we should take into account the difference between these two. Twitter is a smaller and more primitive social media platform while Facebook is much larger and has much more recognition.

4.2.2 Is its revenue growing?

The graph on the Figure 19 represents Twitter’s annual revenue from 2010 to 2017. As it could be seen from 2010 revenue was systematically growing including the fiscal year of 2016, but in 2017 there is 86.32 million reduction compared to the previous year.

Figure 19: Twitter Inc., Revenue for the selected period 2010-2017, long-term trend



Source: (Statista.com, 2018)

4.2.3 Is it making a profit?

Table 2: Twitter inc., selected income statement items, short-term trends

(In millions, except for per share amounts)	Three months ended Dec 31,		Twelve months ended Dec 31,	
	2017	2016	2017	2016
Revenue	\$731	\$717	\$2 443	\$2 530
Income from operations	\$110	\$-144	\$39	\$367
Operating Margin	15%	-20%	2%	15%

Net Income (Loss)	\$91	\$-67	\$-108	\$-457
Diluted Earners per Share	\$0.19	\$0.11	\$0.44	\$0.37

Source: Compiled by author based on data from Twitter Inc. Annual Reports
(investor.twitterinc.com, 2018)

Table 2 illustrates Net Loss for the both fiscal years 2016 and 2017. Net loss for 2017 was \$108, which is decrease of \$349 million, compared to \$457 million in 2016

Other financial highlights from Twitter Inc. Annual Report:

- 86 million decrease in total revenue for the fiscal year of 2017, which was \$2.4 billion compared to \$2.5 billion last year. In percentage, there is reduction of 3% year-over-year.
- GAAP net loss restricted to \$108 million and a net margin of (4%) in 2017, compared to \$457 million and a net margin of (18%) in 2016.
- Adjusted EBITDA for 2017 was \$863 million with a 35% margin compared to \$751 million and 30% margin for 2016.
- Annual stock-based compensation expense decreased 29% year-over-year to \$434 million, or 18% of total revenue, down from \$615 million, or 24% of total revenue in 2016.
- GAAP net cash provided by operating activities in the period was \$831 million, an increase from \$763 million in the previous year.
- Capital expenditures were approximately \$281 million for the full year of 2017, a decrease of 12% from 2016.
- The company generated \$550 million in annual adjusted free cash flow compared to \$444 million in 2016, and ended the year with \$4.4 billion in cash, cash equivalents, and marketable securities.

Table 3: Financial ratio Analysis of Twitter

Margin ratios	2017	2016	2015
Gross Profit Margin (Gross Profit/Net Sales)	65%	63%	67%
Operating profit margin (EBIT/Net Sales)	0,4%	-13%	-20%
Net Profit Margin (Net Income/Net Sales)	-4%	-18%	-23%
Cash Flow Margin (Cash Flow from operating activities/Net Sales)	34%	30%	17%
Returns Ratios	2017	2016	2015
Return on Assets (Net Income/Total Assets)	-1%	-7%	-8%
Return on Equity (Net Income/Stockholder's Equity)	-2%	-10%	-12%
Cash Return on Assets (Cash Flow from operating activities/Total Assets)	11%	11%	6%

Source: Own Calculation Based on Twitter Inc. Annual Reports

Gross profit Margin over the 3 years has decreased from 67% to 65% . It shows how well Twitter controls the cost of its products and subsequently pass on the costs to its customers. Operating profit margin increased from -20% to 0.4\$. It measures a total operating efficiency, including all the expenses of daily business activity.

Net Profit Margin Ratio increased over the 3 years from -23% to -4%, but still negative. The ratio shows how much of every sales dollar shows up at net income.

Return on Assets also increased from -8% to -1%. It shows the amount of profit earned relative to the firm's level of investment in total assets.

Return on Equity increased from -12% to -2%. This is the most important ratio for us, because it shows the return of the money, which the stockholders have invested to the company.

Cash Return on Assets increased from 6% to 11%.

According to this data author cannot conclude that Twitter is currently making profit.

4.2.4 History of Twitter’s stock

Figure 20: Initial Public Offering of Twitter



*Delayed - data as of Mar. 6, 2018

Source: (Nasdaq.com, 2018)

The chart above illustrates the history of twitter’s stock value from 2013 (the beginning of IPO) to the present time. It can be clearly seen how successful was the start of the company. By early 2014 the stock price was at its peak and very sharply fell down. In period 2015-2016 the stock price fell extremely low. From 2017 it’s starting to raise, but still doesn’t even reached the first price, with which Twitter has started. The general trend of the movement is downward sloping,

and that is explainable as company struggling with its budget and doesn't make any profit over the years.

4.3 Facebook as an investment

4.3.1 Who are Facebook's competitors?

There are hundreds of social networking services on the internet, but bellow is the list of sites that compete directly with Facebook:

1. Instagram (owned by Facebook) – probably the main competitor of Facebook as a social network, not as a company. They are competing for the number of users and the time user spend on platforms, not for revenue. Instagram is more popular for younger generation.
2. LinkedIn – not that popular, but since it is the main professional site and having LinkedIn profile is a must for people seeking employment in the future and for companies seeking for the real professionals.
3. Google – competing with Facebook in the web advertising space. Google has its own social network called Google+, but the number of users is not comparable with Facebook.
4. Twitter – competes for the number of users and their engagement. Income is heavily dependent on advertising revenue

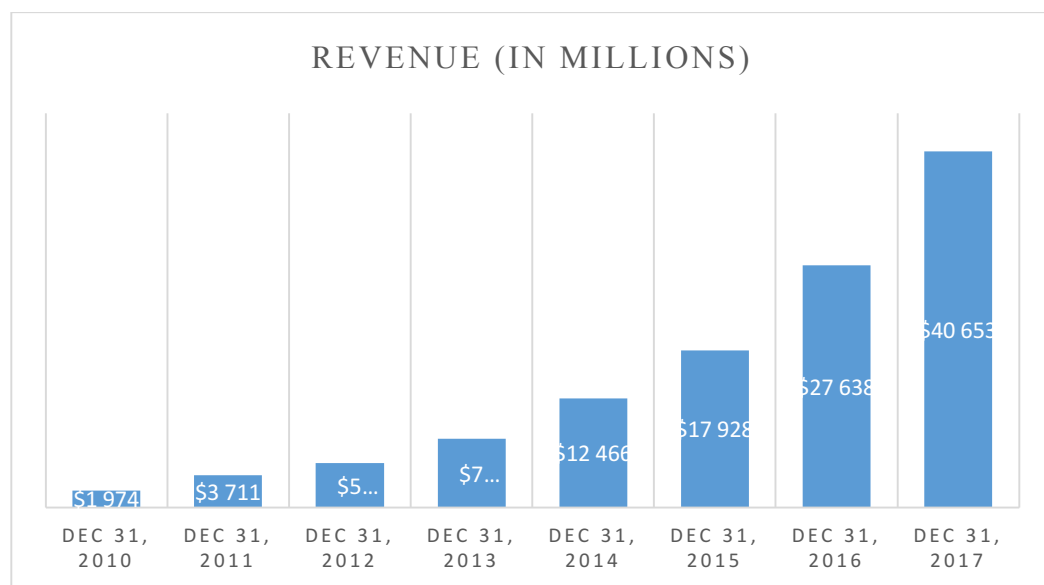
Source: (Billy Cheung, 2018)

Proceeding from the fact that Instagram is acquired by Facebook and LinkedIn by Microsoft the author is excluding them from the competitors. As well as “Google doesn't make sense in this comparison” - Petr Prochazka.

In this analysis of Facebook Inc. competitors remain Twitter Inc. The author already has compared these two companies and concluded that Facebook wins in every ratio compared and has a big competitive advantage.

4.3.2 Is its revenue growing?

Figure 21: Facebook Inc., Revenue for the selected period 2010-2017, long-term trend



Source: Compiled by author based on data from Facebook Inc. Annual Reports (Investor.fb.com, 2018)

In the graph, could be seen that company's revenue is systematically increasing from December 2010 to the following 2017. Within seven years the number has increased approximately 20 times. 2016-2017 growth in revenue was \$13 billions.

Proceeding from this data, the author can firmly affirm, that the revenue is growing.

4.3.3 Is it making a profit?

Table 4: Facebook Inc., selected income statement items, short-term trends

(In millions, except for per share amounts)	Three months ended Dec 31,		Twelve months ended Dec 31,	
	2017	2016	2017	2016
Revenue	\$12,972	\$8,809	\$40,653	\$27,638
Income from operations	\$7,352	\$4,566	\$20,203	\$12,427
Operating Margin	57%	52%	50%	45%
Net Income	\$4,268	\$3,568	\$15,934	\$10,217

Diluted Earners per Share	\$1.44	\$1.21	\$5.39	\$3.49
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Source: Compiled by author based on data from Facebook Inc. Annual Reports (Investor.fb.com, 2018)

The data in the Table 3 shows increase in company's net income for the 4th quarter from the previous 2016 year \$3,568,000,000 to the following 2017 \$4,268,000,000.

Other financial highlights from Facebook Inc. Annual Report

- Daily active users increased (DAU) 14% year-over-year, Facebook has reached 1.40 billion DAUs on average for December 2017.
- Monthly active users increased (MAU) 14% year-over-year to a total of 2.13 billion for December 31, 2017.
- Mobile advertising revenue represented approximately 89% of advertising revenue for the fourth quarter of 2017, up from approximately 84% of advertising revenue in the fourth quarter of 2016.
- Capital expenditures were \$2.26 billion for the 4th quarter and \$6.73 billion full year 2017.
- Cash and cash equivalents and marketable securities were \$41.71 billion at the end of the fourth quarter of 2017.
- Number of employees increased 47% year-over-year and was 25,105 for December 31, 2017.

Source: (Investor.fb.com, 2018)

Table 5: Financial ratio Analysis of Facebook

Margin ratios	2017	2016	2015
Gross Profit Margin (Gross Profit/Net Sales)	87%	86%	84%

Operating profit margin (EBIT/Net Sales)	51%	45%	35%
Net Profit Margin (Net Income/Net Sales)	39%	37%	20%
Cash Flow Margin (Cash Flow from operating activities/Net Sales)	60%	58%	58%
Returns Ratios	2017	2016	2015
Return on Assets (Net Income/Total Assets)	19%	16%	7%
Return on Equity (Net Income/Stockholder's Equity)	21%	17%	8%
Cash Return on Assets (Cash Flow from operating activities/Total Assets)	29%	25%	21%

Source: Own Calculation Based on Facebook Inc. Annual Reports

Gross Profit Margin growing every year. Over the 3 years it increased from 84% to 87%.

Operating Profit margin increased from 35% (2015) to 51% (2017).

Net Profit Margin shows an increase from 20% to 39%, which means that every 39 cents from each sales dollar shows up at Facebook's net income.

Return on Assets increased from 7% to 19% over the 3 years and for 2017 19% of profit earned relative to the Facebook's level of investment in total assets.

Return on Equity increased from 8% in 2015 to 21% in 2017. Facebook returns 21% of the money, which the stockholders have invested to the company, for 2017.

Based on the data above it can be concluded that Facebook is truly profitable.

4.3.4 History of Facebook's stock

On February 1, 2012 Facebook officially registered for an initial public offering (IPO). The preliminary prospectus announced that Facebook was seeking to enhance \$5 billion in investment capital. The company declared having approximately 845 million active users and

over 2.7 billion likes and comments on the website. The IPO's underwriters valued company's shares price at \$38 each, pricing Facebook at \$104 billion, the largest valuation ever for a new company going public. (Daniel Zeevi, 2013)

Facebook went public on May 18, 2012 and first minutes of trading were injured by technical glitches at the NASDAQ. Moreover, the stock petered out almost immediately. On the second day of trading the price of stock fell below its IPO price and it took more than one year to return it back above that mark. First months the company being public, investors doubted in Facebook's ability of making money on smartphones. Now, approximately 85% from total advertising revenue came from mobile and there are about one billion only mobile devices' users on Facebook. Now, 5 years after, Facebook transformed itself into Wall Street darling. (Seth Fiegerman, 2017)

Figure 22: Stock chart of Facebook



*Delayed - data as of Mar. 6, 2018

Source: (Nasdaq.com, 2018)

The chart above illustrates the history of company's stocks from the day Facebook became public on May 18, 2012 till present day of March 8, 2018. It is clearly seen in the graph how the price fell twice, right after the start. In the beginning of 2013 the price was almost equal to the first price, but then began to fall again till the middle of 2013. Middle 2013 - early 2014 was a sharp jump up in prices. From 2014 to the present day the trend is growing as a steady pace. Even from the end of 2017 during these incomplete 3 months of 2018 price increased by approximately \$65. On March 8, 2018, market was closed with the price of \$180.4 per share that is about 4.7 times more than \$38 per share with which Facebook was started.

Based on the provided information it can be concluded that stock price of Facebook has been increasing for more than four years. Accordingly, the author can assume that this trend will continue.

Using technical analysis in the chart below we can find out when it will be good to buy or sell Facebook stock.

Figure 23: Stock price chart of Facebook, short-term



Source: Investing.com (Own Calculation)

The first arrow is showing to buy stocks; the second arrow also is indicating to buy stocks. The third arrow is pointing out to sell stocks. The fourth arrow is indicating to buy stocks as well as the fifth is also shows to buy.

4. Findings from the analysis

4.1 LinkedIn

The analysis showed that at the time of Microsoft's acquisition the company's financial statements haven't looked as a good choice for investment. Concerning on competitive advantage, LinkedIn as a site hasn't any serious competitors at the moment, as well as in the near future. But, being a leader in professional networking services LinkedIn didn't make any profit and were just losing money for the last 2 years analyzed. What makes the whole industry of professional networking sites not really attractive.

Based on these findings author can conclude, that LinkedIn wasn't a good choice as an investment and Microsoft will not collect a positive net present value on its investment, at least in the near future.

4.2 Twitter

To answer the question "Is Twitter currently a good investment?" it was analysed several factors: Twitter's competitive advantage, company's financial statements and the stock history. In relation to its main competitor Facebook, all factors analyzed lead to the conclusion that Twitter is clearly behind. Financials showed that for a few years company struggling with its budget and is not making any profit. The consequence of this is company's price stock, which movement in general is downward slopping.

All of these findings lead to the conclusion that Twitter is not currently a good investment.

4.3 Facebook

Through the analysis of whether Facebook Inc. is a good current investment or not author was explored company's financial statements such as: Income statement, Balance sheet and Cash Flow. It was necessary to make Financial ratio analysis and to calculate margin and return ratios. The main findings from the analysis is that Facebook's revenue was increased from the previous year and is systematically growing through the past 7 years, company is clearly making profit. In comparison with its competitors Facebook was showed leading position for the industry. The stock's history showed that the shares are constantly growing, the social network has a profit and this profit (unlike other Internet companies) is significant.

In this case, author can accurately infer that Facebook is currently a good choice as an investment.

5. Conclusion

This thesis should have assisted the reader in becoming more educated on the topic of LinkedIn, Twitter and Facebook, as well as its sub topic such as Social Networking Services. The reader should have been introduced to two types of analysis, that were introduced during the literature review section of the thesis and learned all about them. Then the reader was introduced to the analytical section with a practical question which of the companies will be a good investment and which are not. The reader was then given information regarding questions and on the basis of information that we see from results above, we can conclude that only Facebook Inc. is currently a good choice as an investment.

6. References:

- About.twitter.com. (2018). *Twitter - Company*. [online] Available at: https://about.twitter.com/en_us/company.html [Accessed 7 Mar. 2018].
- Bellis, M. (2017). *Learn the History of How Mark Zuckerberg Invented Facebook*. [online] ThoughtCo. Available at: <https://www.thoughtco.com/who-invented-facebook-1991791> [Accessed 7 Mar. 2018].
- Facebook, I. (2018). *Facebook, Inc.: Private Company Information - Bloomberg*. [online] Bloomberg.com. Available at: <https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=20765463> [Accessed 7 Mar. 2018].
- Fiegerman, S. (2017). *5 years after rocky IPO, Facebook is stronger than ever*. [online] CNNMoney. Available at: <http://money.cnn.com/2017/05/18/technology/facebook-ipo-anniversary/index.html> [Accessed 8 Mar. 2018].
- Greene, J. (2016). *Microsoft to Acquire LinkedIn for \$26.2 Billion*. [online] WSJ. Available at: <https://www.wsj.com/articles/microsoft-to-acquire-linkedin-in-deal-valued-at-26-2-billion-1465821523> [Accessed 7 Mar. 2018].
- Kuepper, J. (2017). *Basics Of Technical Analysis*. [online] Investopedia. Available at: <https://www.investopedia.com/university/technical/> [Accessed 7 Mar. 2018].
- McClure, B. (2003). *Fundamental Analysis*. [online] Investopedia. Available at: <https://www.investopedia.com/terms/f/fundamentalanalysis.asp> [Accessed 7 Mar. 2018].

- Newton, C. (2017). *Twitter is being unbundled before our eyes*. [online] The Verge. Available at: <https://www.theverge.com/2017/3/23/15039062/twitter-unbundling-twitch-reddit-instagram> [Accessed 7 Mar. 2018].
- Perez, S. (2017). *Twitter officially expands its character count to 280 starting today*. [online] TechCrunch. Available at: <https://techcrunch.com/2017/11/07/twitter-officially-expands-its-character-count-to-280-starting-today/> [Accessed 7 Mar. 2018].
- Picard, A. (2017). *The history of Twitter, 140 characters at a time*. [online] The Globe and Mail. Available at: <https://www.theglobeandmail.com/technology/digital-culture/the-history-of-twitter-140-characters-at-a-time/article573416/> [Accessed 7 Mar. 2018].
- Potter, J. (2015). *The History of LinkedIn*. [online] linkedin.com. Available at: <https://www.linkedin.com/pulse/history-linkedin-james-potter> [Accessed 7 Mar. 2018].
- Rouse, M. (2013). *What is social networking? - Definition from WhatIs.com*. [online] WhatIs.com. Available at: <http://whatis.techtarget.com/definition/social-networking> [Accessed 7 Mar. 2018].
- Rouse, M. (2014). *What is Facebook? - Definition from WhatIs.com*. [online] WhatIs.com. Available at: <http://whatis.techtarget.com/definition/Facebook> [Accessed 7 Mar. 2018].
- Rouse, M. (2015). *What is Twitter? - Definition from WhatIs.com*. [online] WhatIs.com. Available at: <http://whatis.techtarget.com/definition/Twitter> [Accessed 7 Mar. 2018].

- Rouse, M. (2016). *What is LinkedIn? - Definition from WhatIs.com*. [online] WhatIs.com. Available at: <http://whatis.techtarget.com/definition/LinkedIn> [Accessed 7 Mar. 2018].
- Rouse, M. (2017). *What is Instagram? - Definition from WhatIs.com*. [online] SearchCIO. Available at: <http://searchcio.techtarget.com/definition/Instagram> [Accessed 7 Mar. 2018].
- Sobczak, A. and Leżoń, M. (2013). *Smart calling*. Warszawa: ICAN Instytut.
- Sundberg, J. (2016). *Why Doesn't LinkedIn Have Any Serious Competitors?*. [online] Undercover Recruiter. Available at: <https://theundercoverrecruiter.com/linkedin-competitors/> [Accessed 7 Mar. 2018].
- Twitter, I. (2018). *Twitter, Inc.: Private Company Information - Bloomberg*. [online] Bloomberg.com. Available at: <https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=35962803> [Accessed 7 Mar. 2018].
- Zeevi, D. (2013). *The Ultimate History of Facebook [INFOGRAPHIC]*. [online] Social Media Today. Available at: <https://www.socialmediatoday.com/content/ultimate-history-facebook-infographic> [Accessed 7 Mar. 2018].