The Story Behind Social Media Valuations

by

Jesse Shemen

An honors thesis submitted in partial fulfillment

of the requirements for the degree of

Bachelor of Science

Undergraduate College

Leonard N. Stern School of Business

New York University

May 2013

Professor Marti G. Subrahmanyam

Professor Aswath Damodaran

Faculty Adviser

Thesis Adviser

The Story Behind Social Media Valuations

Abstract: This paper explores the valuation techniques and data investment banks use to value eight of the publically traded social media companies. Based on my thorough analysis of equity research reports, there is no clear preference for one valuation methodology over another. In terms of the data they use to formulate their assessments of social media business, banks consider a wide range of statistics and figures and do not concentrate on typical technology metrics. My in-depth analysis of the reports on each individual company suggests that banks do not form their evaluations based on industry wide conventional metrics but instead focus on data that is relevant to each specific company.

Acknowledgments: I would like to thank my thesis adviser, Professor Aswath Damodaran, for his support throughout the research and writing process for this paper. I appreciate your guidance and expertise which facilitated the last eight months of work for me.

I would also like to thank Marti Subrahmanyam and Jessie Rosenzweig for coordinating the Omaha trip in April, it was a tremendous experience.

Contents

Introduction	4
Structure of Thesis and Research	6
Structure of Thesis	6
Structure of Research: Equity Research Reports	7
Structure of Research: Interviews	
Summary of Output	
Section I: Valuation Methods	11
Section II: In-Depth Company Analysis	
Facebook	17
Commonplace Value Identifiers	
Core Data	
Anticipated Future	20
Groupon	21
Commonplace Value Identifiers	21
Core Data	21
Anticipated Future	24
Kayak	24
Commonplace Value Identifiers	25
Core Data	25
Anticipated Future	27
LinkedIn	28
Commonplace Value Identifiers	28
Core Data	28
Anticipated Future	30
Netflix	31
Commonplace Value Identifiers	31
Core Data	32
Anticipated Future	
Pandora	34
Commonplace Value Identifiers	34
Core Data	35
Anticipated Future	
Yelp	37

Commonplace Value Identifiers	37
Core Data	38
Anticipated Future	39
Zynga	40
Commonplace Value Identifiers	40
Core Data	41
Anticipated Future	42
Section III: Ratings Analysis	43
Conclusion	45
Appendix	49

Introduction

At the time of its initial public offering (IPO), Facebook was expected to achieve a valuation ranging from \$75 to \$100 billion. The popular social media company with 850 million users (at the time of its IPO) was supposedly worth a tremendous amount despite its relatively meager 2011 revenue of \$3.7 billion. Another nascent online company, Groupon, which has witnessed a wildly fluctuating stock price over the last year, has garnered valuations ranging from over \$14.5 billion (February 2012) to a current valuation of around \$2.25 billion.²

Young social media companies seem to be generating astronomical valuations relative to those garnered by seasoned corporations in other industries (throughout this paper, social media company is a loosely defined term that includes a range of companies that offer online networks and or consumer services, and that have gone public since 2000). Many ask: are these companies deserving of such generous estimates? Could these companies intrinsically be worth as much as well established profit generating companies? These questions belie the underlying pessimism that many of us have: are we experiencing yet another tech bubble?

However, these concerns may be considered premature. A young company requires a considerable amount of time in order to justify or substantiate its valuation. It needs time to build its revenue base and cost system and only then can it demonstrate its capacity and worth. To definitively claim that the fledgling social media companies are contributing to 'a bubble' would be untenable considering a majority of these young companies are still within their formative years. Consequently, the 'bubble' topic is unwarranted at this point in time.

¹ Revenue statistic is taken from Facebook's 2012 10K SEC filings.

² The current enterprise value (EV) calculation from February 2013 will be explained below. The February 2012 EV is listed on ycharts.com, a financial terminal on the web that records historical EVs using the following formula: Enterprise Value = Market Capitalization + Current Portion of Long Term Debt + Notes Payable + Long Term Debt + Book Value of Preferred Stock + Book Value of Minority Interest - Cash and Cash Equivalents.

A more relevant and pressing question to ask is as follows: what data and metrics do banks and funds use to value social media companies? As opposed to accepting the bank and fund estimated enterprise values (EV) at face value, it is important to understand what data comprises the foundation of these valuations. In determining an EV of over \$74 billion for Facebook, what data points and metrics do Morgan Stanley and J.P. Morgan find most critical? Do banks use the same data points when valuing each social media company? After conducting in-depth research, I found intriguing answers.

When considering the valuation of public social media companies, banks (equity research reports) refer to a particular set of metrics and data points that is most relevant to each individual company.³ As opposed to deriving a value based on generic metrics that can be used for technology sector companies as a whole, banks value growing social media companies using a more defined valuation technique that is based on specific data directly related to each individual company.

Granted, the data that drives the valuations and company projections today may look drastically different from the data that will be used in just a few years once the social media companies have developed. However, this paper offers insight as to how these companies are valued before they have morphed into stable profit generating companies (for those that are successful). It can help us understand how banks even begin to evaluate social media companies that do not have fully developed business models or any sort of comparables. This paper gives some substance to the hype surrounding the neophyte companies and starts explaining The Story Behind Social Media Valuations.

³ Throughout the paper, I refer to banks and analysts interchangeably. It is the analysts at various investment banks and research firms that write the equity research reports and calculate the enterprise values.

Structure of Thesis and Research

Structure of Thesis

In order to clearly articulate my thesis, I structure the paper into three sections: in the first section, Valuation Methods, I define the valuation tools used in equity research reports to calculate the social media company valuations (the reports are from February 2013 or earlier). I explain which method is used most frequently and why analysts maintain this preference.

In the second section, In-Depth Company Analysis, I outline the core data used in the equity research reports for the valuations and for general company assessments (i.e. the data used to evaluate a company's current and expected future performance). This section is broken down into three subparts for each company. First, in Commonplace Value Identifiers, I describe the commonplace data points typical investors and media outlets use to evaluate a given social media company. In order to research the typical data that is referenced by 'everyday investors,' I sifted through numerous articles for each company, spoke with fund managers, and discussed the topic with professors and students at New York University (although this is not a foolproof strategy, broadly speaking, I was able to infer the most basic metrics that a typical investor focuses on). In the second subpart, Core Data, I define the metrics analysts most frequently cite in their equity research reports when discussing the value and future of a particular social media business. This analysis manifests the data points that are most crucial to analysts' valuations and projections. In the last subpart, Anticipated Future, I talk about the future of a given company based on the viewpoints supported in the research reports (these future outlooks often reference the primary data points discussed in the Core Data section).

⁴ In this paper, a typical investor is defined as a passive investor who does not have an in-depth understanding of social media stocks from a valuation perspective.

In the third section, Breakdown of Ratings, I offer a detailed breakdown of the ratings given by the research analysts and explain why such ratings resonate with the nature of the fledgling social media companies. I conclude the paper with a discussion about my findings, adding in information gathered from research reports and from the conversations I had with analysts and directors at banks and venture capital funds. This framework will offer a lucid explanation of the primary data used in social media valuations and will clearly illustrate the deviation from industry wide conventional metrics.

Structure of Research: Equity Research Reports

In order to analyze the data behind social media valuations, I completed a comprehensive analysis of the information used in equity research reports. Equity research reports were the primary source that I used for my analysis. For each company researched,⁵ I carefully studied a minimum of seven reports (each of which originated from different banks and research companies) and analyzed the following information: estimated enterprise value, target share price, valuation methodology and analyst conclusion. Additionally, I determined the primary data points and metrics each report uses to calculate enterprise value and to project the future of each company. Here is a sample of the output produced from my analysis, I explain each category below.

⁵ Facebook, Groupon, Kayak, LinkedIn, Netflix, Pandora, Yelp, and Zynga

⁶ I chose seven as the minimum because I could only obtain seven recent reports on certain companies and I wanted the comparison to remain consistent throughout.

Chart '	I:	Sample	Company	Snapshot
CHUIT C.	_,	Duilipic	Company	

Company Snapshot	Groupon
Mean Valuation	\$2,242
Mean Target Price	\$5
Most Common Valuation Method	Multiples
Most Frequent Conclusion	Neutral
Most Common Data	Fundamentals

Mean Valuation: I recorded the enterprise value produced by each individual report on a company and took the average value calculated by a minimum of seven reports (for a list of the banks that produced reports used in my research, please see Table I in the Appendix). In order to derive the EV, I either recorded the explicit enterprise value written in the report (usually given when a DCF analysis was used), or I calculated the EV based on the multiples given. For instance, Piper Jaffray valued LinkedIn on a multiples basis and calculated a value of 40 X 2014 estimated EBITDA (earnings before interest, taxes, depreciation and amortization). As such, I simply multiplied Piper Jaffray's projected 2014 estimated EBITDA by 40 to obtain the bank's projected LinkedIn enterprise value. After obtaining the EV for each report, I calculated the average and listed this value in the Company Snapshot (similar to Chart I above).

Mean Target Price: The mean target price represents the average of the target share prices listed in the reports.

Valuation Methodology: For each research report, I tracked the valuation method used to calculate EV and then found the most commonly used technique amongst the different research

⁷ For example, in determining the average EV for Groupon, I used reports from Piper Jaffray, Deutsche Bank, Morgan Stanley, J.P. Morgan, Macquarie Capital, Credit Suisse, and RBC Capital Markets.

reports. The valuation method is the technique a bank uses in order to value a company. Chart I illustrates that the most common method used for Groupon is a multiples analysis. An in-depth discussion of the valuation tools can be found in the first section of the paper.

Most Frequent Conclusion: Each research report offers a recommendation, such as a Buy or Hold rating, which indicates how an analyst expects a stock to perform in the near future (a list of the analyst recommendations with their explanations can be found in Table II of the Appendix). I determined the most frequent analyst conclusion for each company and discuss a breakdown of this analysis in the third section of the paper.

Most Common Data: The analysis of the data used in the equity research reports forms the crux of this paper. I reviewed and recorded the primary data points each report uses to arrive at a firm enterprise value and the data used to project the future of a company. I then aggregated the primary data points from the reports on each company and examined which pieces of data were most commonly used for the assessments of a particular company. In order to facilitate a comparison amongst companies, I categorized all the different types of data points found throughout the research reports into eight different groups (which are described in Table III of the Appendix). As listed in Chart I above, for example, the most common data used for Groupon is Fundamentals (this will be explained further in Section II). This painstaking method of research allowed me to thoroughly analyze the data that forms the basis of the evaluations of each company. As my results will suggest below, I was able to derive meaningful conclusions that shed light not only on the data used for company assessments, but also on the social media space as a whole.

Structure of Research: Interviews

The research reports proved to be an extremely valuable resource. However, I wanted to add more color to the paper by including input directly from those actually involved in the valuations and company projections. I spoke with numerous analysts and directors at venture capital funds and boutique investment banks and asked them about company valuations. I centered my questions on the data they use to value and assess young social media companies. The information gathered is interspersed throughout the last section of the paper.

Summary of Output

Before delving into each section, I provide a summary of my analysis for the eight companies researched. This output includes the variables discussed above and will be useful in understanding the primary sections of the paper.

Chart II: Summary of Output

Company Snapshot	Facebook
Mean Valuation	\$73,620
Mean Target Price	\$33
Most Common Valuation Method	DCF
Most Frequent Conclusion	Buy
Most Common Data	Ads

Company Snapshot	Kayak
Mean Valuation	\$1,290
Mean Target Price	\$32
Most Common Valuation Method	DCF
Most Frequent Conclusion	Acquired
Most Common Data	Industry specific

Company Snapshot	Groupon
Mean Valuation	\$2,242
Mean Target Price	\$5
Most Common Valuation Method	Multiples
Most Frequent Conclusion	Neutral
Most Common Data	Fundamentals

Company Snapshot	LinkedIn
Mean Valuation	\$18,265
Mean Target Price	\$157
Most Common Valuation Method	DCF
Most Frequent Conclusion	Overweight
Most Common Data	Growth Prospects

Company Snapshot	Netflix
Mean Valuation	\$9,371
Mean Target Price	\$153
Most Common Valuation Method	DCF
Most Frequent Conclusion	Overweight
Most Common Data	Number of users

Company Snapshot	Yelp
Mean Valuation	\$1,485
Mean Target Price	\$23
Most Common Valuation Method	DCF
Most Frequent Conclusion	Neutral
Most Common Data	Growth Prospects

Company Snapshot	Pandora
Mean Valuation	\$2,330
Mean Target Price	\$13
Most Common Valuation Method	Multiples
Most Frequent Conclusion	Outperform
Most Common Data	Ads

Company Snapshot	Zynga
Mean Valuation	\$1,033
Mean Target Price	\$3
Most Common Valuation Method	DCF
Most Frequent Conclusion	Hold
Most Common Data	Number of users

Section I: Valuation Methods

Valuation methods are the techniques by which banks, funds, researchers and investors calculate the value of a firm. Although describing the intricacies of the various methods is beyond the scope of this paper, I do discuss valuation techniques in the context of my research.

Originally, I intended on writing about the different valuation techniques equity research reports use to value social media companies. However, after completing a considerable amount of research, I discovered little diversity amongst the reports in terms of valuation methods and decided instead to shift my focus to the core data used in the reports. Nonetheless, there are few noteworthy observations that are worth mentioning. Chart III provides a basic summary of my findings regarding valuation techniques.

Chart III: Breakdown of Valuation Techniques

Method	Percent of Total Reports	Frequency
Multiples	39.29%	22
DCF	60.71%	34

^{*}Frequency is the total number of reports that use each respective technique

Banks do not exhibit a strong predilection for one method over another. Around 60% of all the reports utilize a DCF analysis while the remaining percentage uses a multiples approach. Most of the companies surveyed have only a small differential in the amount of reports that use a multiples approach compared to those that use a DCF technique.⁸

The banks seem comfortable with the conventional valuation approaches and avoid any other techniques. In terms of using a multiples or DCF approach, banks may slightly favor the latter because it yields a more defendable enterprise value. A multiples approach bases a company's value on the value of comparable firms. In the social media space, this can be a misleading approach because the peers (comparable companies) are constantly fluctuating in value and can thus distort the valuation of the company at hand. In comparison, a DCF approach produces a value that is based on the fundamentals of a company, irrespective of the performance of its peers. Some of the reports explicitly state their reasoning for choosing a specific method. A J.P. Morgan report comments: "Given Yelp's high revenue growth and margin expansion trajectory, we prefer to employ a DCF to derive our price target, as we think a multiple-based approach likely doesn't appropriately factor in the company's early-stage growth trajectory." In certain cases, a peer based assessment may not be appropriate.

Similarly, however, a DCF analysis may also produce a questionable valuation. The core variables involved in a DCF (which include future income statements and free cash flows) are difficult to estimate for social media companies because their future performances are almost

⁸ The one exception was LinkedIn. All of the reports for LinkedIn adopted a DCF approach aside from one report. Of all the companies to have such an imbalance in regards to valuation methods, LinkedIn seems most fitting. Perhaps banks prefer to value LinkedIn by DCF analysis because the company's financials are simpler to estimate compared to those of its peers (a DCF analysis requires the prediction of future cash flows). The professional networking site has arguably the most well defined business model amongst the social media companies and has solidified a strong revenue base through its subscription service and impressive advertisement capabilities. As such, because LinkedIn's financials are relatively simple to project, valuing the company based on a DCF approach may produce a more precise valuation compared to the results of a multiples analysis. ⁹ J.P. Morgan. "Yelp Equity Research Report." Review. 07 February 2013.

impossible to accurately predict. In fact, the discrepancy between the valuations calculated by a multiples approach and those by a DCF approach is not significant. As is evident from Chart IV, there is not a substantial difference between the values calculated by both methods. 10

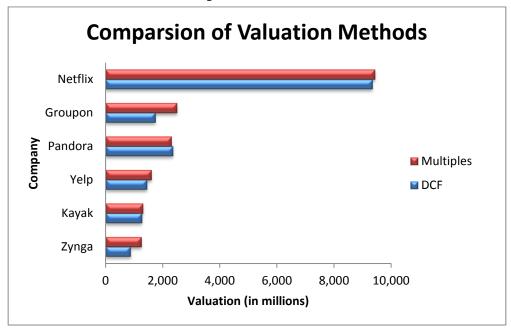


Chart IV: Comparison of Valuation Methods

* These are the average EVs (expressed in US dollars) from my analysis. I did not include Facebook and LinkedIn (the two largest social media companies as measured by EV) as it would have been difficult to appreciate the values of the smaller companies had I included the largest EV companies. Table IV in the Appendix shows a comparison of valuation methods for Facebook and LinkedIn.

Although banks do not heavily favor one valuation technique over another, there is a clear tendency for those reports using a multiples approach to use the typical EV/EBITDA multiple.11

¹⁰ It should be noted that it is nearly impossible for an investor to know which approach was actually used in a research report. An analyst may have calculated a value using one technique and then presented that value under a different technique in order to give an impression of sophistication.

¹¹ EV/EBITDA is a valuation approach that calculates a firm's value by applying an industry average multiple to the firm's EBITDA (earnings before interest, taxes, depreciation and amortization).

Multiple	Percent of Multiples Based Reports	Frequency
EV/EBITDA	71.43%	15
EV/Sales	28.57%	6

Of the 39% of research reports that use a multiples analysis, 71% use a multiple of EV/EBITDA while 29% use EV/Sales. Even more compelling is that three of the reports that use an EV/Sales approach are reports on Pandora. A rationale behind this trend could be that banks hesitate to use an EV/EBITDA approach for Pandora because its business model is in flux and has yet to be developed to a great extent. Estimating the earnings (EBITDA) for the internet radio company is therefore much more difficult than projecting its revenue. Consequently, an EV/Sales approach is much simpler. 12

Regardless of the approach used, valuation of social media companies is an arduous, and sometimes even arbitrary task. Because many of the companies lack a developed business model and are void of the fundamentals that form the basis of valuation, the equity research reports' calculated firm enterprise values can seem difficult to justify. Many reports outwardly express this type of uncertainty with their projections. A Macquarie report on Netflix cautions that "As difficult a business as this is to forecast, it's even harder to value. Normal valuation metrics don't really apply." Similarly, a J.P. Morgan assessment of Yelp acknowledges that "We [J.P. Morgan think the nascent nature of Yelp's business model creates significant upside/downside risk to our estimates." ¹⁴ Clearly, many of the banks struggle with social media valuations while

¹² However, reports on other companies that have yet to develop their business models do not frequently use an EV/Sales multiple. Evidently, this rationale may explain the trend for reports on Pandora but not for those on other companies.

¹³ Macquarie Research. "Netflix Equity Research Report." Review. 24 January 2013.

¹⁴ J.P. Morgan. "Yelp Equity Research Report." Review. 07 February 2013.

these companies continue to define and amend their business models. This uncertainty provokes a question: considering the inapplicability of typical valuation metrics to social media companies, what data do the banks use to determine their projections and valuations? In the next section, I discuss in detail the primary data points reports use in order to evaluate social media companies and I explain common themes and trends.

Section II: In-Depth Company Analysis

This section examines the core data used in equity research reports. While analyzing the reports, I categorized the primary data the banks use according to the eight groups listed in Chart VI and in Table II of the Appendix. As my research suggests, the reports did not base their evaluations on typical metrics but instead considered multiple different data classes for the social media companies. In other words, as Chart VI illustrates, the reports did not fixate predominantly on number of users or advertisement capabilities for each company, but rather considered a wider spectrum of data.

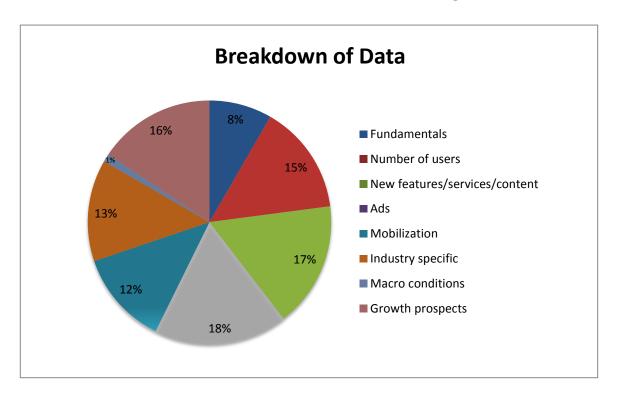


Chart VI: Distribution of Data across Data Categories

This chart represents a breakdown of the data used in the research reports for all of the social media companies. After exploring the reports on each company, I analyzed which data was most commonly used for the assessments across all of the research reports. For instance, a majority of the reports on Yelp concentrate on the company's ability to grow internationally. For this particular company, its primary data point is therefore listed as 'Growth prospects.' After recording this information for all of the companies, I aggregated all the primary data points and analyzed the distribution across the different data categories. Clearly, there is no data group that is much more dominant than all the others. 15

¹⁵ If a report emphasizes two or more different categories of data, I tried to judge which category was more important to the bank's assessment and labeled it as a primary data point.

The reason behind this equal distribution is because the reports construct their evaluations based on data that is relevant to each individual company. Instead of migrating towards a few typical data categories for the social media company assessments, the banks focus on data that is relevant to each particular company. These specialized assessments led to the even distribution throughout the data classes. I outline the unique data points by discussing the following for each of the eight companies: Commonplace Value Identifiers, Core Data, and Anticipated Future.

Facebook

Commonplace Value Identifiers

The most frequently mentioned data point for a majority of social media companies is Number of users. The number of users is sometimes erroneously considered a direct and clear indication of value. Granted, cultivating a sizeable user base is pivotal to a social media company's success; however, it is not necessarily a representation of its value. Particularly with Facebook, everyday investors and media outlets tend to directly correlate Facebook's value with the size of its user base. A considerable amount of attention was paid to Facebook's achievement of over one billion users as many were convinced this was a signal the company is destined for tremendous success. However, as my analysis indicates, the research reports focus on data other than Facebook's user base when evaluating the company.

Core Data

Chart VII: Facebook Snapshot

Company Snapshot	Facebook
Mean Valuation	\$73,620
Mean Target Price	\$33
Most Common Valuation Method	DCF
Most Frequent Conclusion	Buy
Most Common Data	Ads

There are three main data categories research reports consider when rating Facebook: advertisement capabilities, Mobilization and New features. 16 Most, if not all the reports I analyzed highlight the social network's ad prowess. To many of the analysts, the main source of monetization and profitability for Facebook is advertisements. The company has the potential to leverage its extensive user base and capitalize on lucrative advertising opportunities. With over 600 million daily active users (DAU's)¹⁷ that expose their likes, dislikes and current moods (amongst a myriad of other information), Facebook has cultivated a data rich user base that is very attractive to advertisers. As such, when considering the company's value, banks look at the social network's ability to generate sustainable profits through advertisements.

A few of the reports are slightly pessimistic and hesitate to attribute a high valuation to Facebook based on advertisements—a Morningstar report observes that "Facebook is building the foundation to revolutionize online advertising. However, lack of near-term visibility and cloudy advertising metrics may temporarily stall revenue and profit growth." ¹⁸ Many analysts believe the success of the world's largest online social network may be stalled due to the difficult task of developing of a robust advertising base.

¹⁶ New features is equivalent to the data category 'New features/services/content.'

¹⁷ Deutsche Bank Research, "Facebook Equity Research Report," Review, 31 January 2012.

¹⁸ Morningstar, "Facebook Equity Research Report," Review, 17 May 2012.

Aside from advertising, the banks also focus on the company's mobilization initiative and its creation of new features. A Morgan Stanley report comments: "The proliferation of Internetconnected mobile devices is driving a rapid shift in consumer time spent towards mobile, strongly benefitting Facebook's mobile engagement levels. Facebook is the most downloaded app on every major mobile platform, and we view mobile as a significant long-term opportunity." With over 600 million mobile users, Facebook is poised to exploit this smartphone trend.²⁰ However, many reports admonish that the mobile trend is not a simple and rewarding transition for Facebook. Smaller smartphone screens experience less user interaction and may yield lower advertising revenue than does desktops. These next few quarters will dictate whether or not the company can effectively shift towards mobile while still maintaining its dominance on desktop computers. Clearly, Facebook's ability to monetize its mobile presence will impact banks' valuations of the company.

The last data category the reports emphasize is New features. User engagement, which is propelled by new appealing features, indicates how involved users are with Facebook. The more involved users are, the more opportunities there are for monetization. The research reports mention several different features that can improve engagement: Newsfeed, Facebook Gifts, Graph Search and others. These innovations, along with those currently in Facebook's pipeline, can improve user engagement and can provide a base for future monetization. Analysts factor in how these new products and features will improve monetization and thereby alter Facebook's valuation.

¹⁹ Morgan Stanley. "Facebook Equity Research Report." Review. 02 January 2012.

Chart VIII shows the range of values for Facebook based on the different data categories. Meaning, for example, the green bar is the average valuation of those reports that emphasize ads as the core data point. For some companies, such as Facebook, the valuation graph illustrates more core data points than were discussed in the core data section of that company. The ancillary categories, whatever they may be, are emphasized in the reports, but not to the same extent as are the categories listed in the core data section.

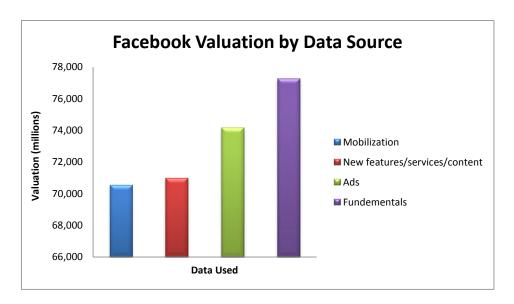


Chart VIII: Facebook Valuation by Data Source

Anticipated Future

The general tone regarding Facebook's future is positive. My analysis shows that the most common analyst conclusion is a Buy, indicating a sense of confidence. Many analysts have confidence in the social network and believe there are multiple monetization opportunities for the company that will be realized in the coming months. The main concerns, on the other hand, involve increasing privacy regulations and the inability of advertisers to accurately measure the

return on their advertising investments (which could potentially drive down the primary source of revenue for Facebook). The common belief is that Facebook's new features and mobilization initiative will offset these concerns and will help the company form into a sustainable and profitable business.

Groupon

Commonplace Value Identifiers

Many consider Groupon's value to be dependent on the number of deals listed on the daily deals site. While this does drive monthly active users, it does not connote real value. It is indisputable that the number of deals contributes to the overall success of the daily deals site, but more concrete metrics need to be analyzed for an assessment of Groupon. Number of users is also a misapplied metric for a similar reason. Groupon's 200 million users²¹ do give an impression of the company's size relative to its peers', but it does not directly translate into profitability and value.

Core Data

Chart IX: Groupon Snapshot

Company Snapshot	Groupon
Mean Valuation	\$2,242
Mean Target Price	\$5
Most Common Valuation Method	Multiples
Most Frequent Conclusion	Neutral
Most Common Data	Fundamentals

²¹ J.P. Morgan, "Groupon Equity Research Report," Review, 09 November 2012.

The most common data used in the evaluations of Groupon is Fundamentals. As explained in Table III of the Appendix, Fundamentals includes a focus on basic business strategy, revenue & cost structure, and competitiveness in the industry. A Deutsche Bank report emphasizes that "At this point, investors are assigning little value to Groupon's ability to turn its business around. At 5.6x EBITDA, sentiment is approaching rock bottom, as are fundamentals."22 Before delving into number of users or merchant statistics, analysts are primarily concerned with the fundamentals of Groupon's business model.

The three chief concerns the reports underline are the company's international performance, the growth of formidable competition, and the introduction of new services that may cannibalize Groupon's core revenue sources (all three of these fall under the Fundamentals data category). In terms of international performance, the daily deals site has made a substantial push towards expansion in Europe. However, as the reports stress, the company has not yet tailored the deals to specific country preferences and customers' experience has lagged tremendously. One of Groupon's principal investments, which is supposed to drive the company to profitability, is severely struggling.

Another issue is the emergence of other competitive daily deal sites such as, LivingSocial, Google Offers, and Amazon Local. In such a populated and condensed market, Groupon may experience reduced revenues and margins. The reports mention that unless the company can differentiate its services, the daily deals site will continue to stumble.

Another call for concern is the company's introduction of Groupon Goods. This is a service that offers deals on niche high quality products such as expensive watches and smartphones. The problem is that this lower margin product category, with minimal barriers to

²² Deutsche Bank Research. "Groupon Equity Research Report." Review. 19 November 2012.

entry, has cannibalized the profits of the typical Groupon deals. Many banks, such as Credit Suisse, articulate this issue several times: "While management noted again that it actively chose to grow the goods business at the expense of the daily deals (given limited capacity within daily emails), we believe this dynamic introduces a heightened level of uncertainty within the story." Many question the efficacy of this service that was intended to differentiate Groupon from its competitors and believe this is yet another setback for the suffering daily deals site. These three concerns that analysts emphasize throughout their reports highlight the banks' focus on fundamentals when evaluating Groupon.

Chart X shows the range of values for Groupon based on the different data categories.

Although most of the reports focus on fundamentals, the difference in valuation between the alternative categories is relatively flat.

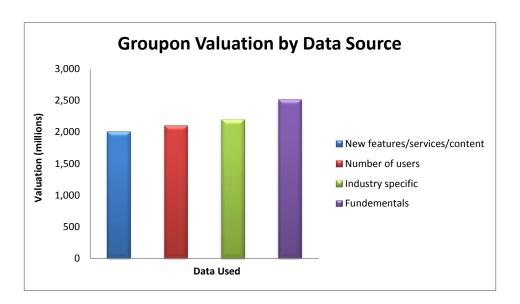


Chart X: Groupon Valuation by Data Source

²³ Credit Suisse. "Groupon Equity Research Report." Review. 09 November 2012.

Anticipated Future

The outlook for Groupon is bleak. Considering its lackluster performance outside of North America and the looming competition that is gaining momentum, the daily deals site faces a difficult path ahead. A Macquarie research report cautions that even Groupon's domestic branch is struggling: "GRPN's core N.A. local deals biz is decelerating sharply, and it remains difficult to call a bottom to its current trajectory." Despite the negative outlook, the analyst ratings seem to reflect ambivalence. The most common rating amongst the reports I surveyed was Neutral (as opposed to an expected Sell rating). It seems this underlying ambivalence is due to the unpredictability surrounding the fundamentals of the business. Will Groupon continue to falter or can it successfully turnaround its business? Some believe the former will ultimately prevail. As Google, Amazon and other major technology players leverage their current networks and solidify their positions in the daily deals field, it will be very difficult for Groupon to persevere.

Kayak

On November 8, 2012, Priceline.com, the largest online travel agency as measured by market cap, purchased Kayak.com for \$1.8 billion.²⁵ This purchase price valued the company at a hefty 28% premium relative to its previous day's closing price of \$31.04. Although Kayak was acquired last year, I was still able to analyze equity research reports written prior to the transaction and was able derive the same meaningful data that I gathered from the other companies.

²⁴ Macquarie Research. "Groupon Equity Research Report." Review. 09 November 2012.

²⁵ "Priceline Buys Kayak for \$1.8 Billion Expanding in Travel." Bloomberg. 9 Nov. 2012. http://www.bloomberg.com/news/2012-11-08/priceline-buys-kayak-for-1-8-billion-expanding-in-travel.html>.

Commonplace Value Identifiers

Kayak's valuation is thought to be directly associated with the number of flights listed on the online travel search engine. The theory is that the more flights the company lists on its site, the greater the number of users that will choose to book travel plans through its online system (because of a greater variety of airlines, travel times and ticket prices). While this logic can absolutely lead to increased site bookings, it does not necessarily signify value nor does it provide a clear picture of the company's chances of future success.

Another misused metric is number of users. Due to low switching costs, a typical Kayak user can seamlessly switch to another online travel aggregator (Expedia, Skyscanner, Cheapflights, etc.) or can choose to book directly through the airlines themselves. As such, simply looking at Kayak's number of users will not produce an accurate valuation or projection of the company's future.

Core Data

Chart XI: Kayak Snapshot

Company Snapshot	Kayak
Mean Valuation	\$1,290
Mean Target Price	\$32
Most Common Valuation Method	DCF
Most Frequent Conclusion	Acquired
Most Common Data	Industry specific

Instead of focusing on more general social media metrics (such as number of users or advertising dollars), analysts emphasize industry specific data when considering the future and value of Kayak. In terms of online travel search specific data, banks predominately look at

'queries.' Queries are the search for, but not necessarily the actual purchase of, travel bookings.²⁶ Analysts measure the monthly and yearly query levels and growth rates when formulating their assessments. The reason I believe for using this precise data point when considering the company's valuation is because on a comparative basis, it can illustrate people's preference for one flight search engine over another. Meaning, if Kayak's monthly queries far exceeds Expedia's, for example, it might be an indication that travelers prefer the former's online flight aggregator for its superior and simpler technology. In such a competitive industry, product differentiation and customer preferences are crucial. The simple and efficient online travel search engine will see more queries and eventually more bookings (revenue). Although the exact reason for utilizing a specific metric is not explicitly stated in the reports, this reasoning gives a practical explanation.

Another key data point the reports consider for Kayak is Mobilization. Due to the widespread adoption of smartphones and tablets, the mobile travel search race has picked up. Kayak created an efficient mobile app that allows users to mimic the exact same searches they would conduct on a desktop. In conjunction with the previously mentioned metric, analysts emphasize Kayak's *mobile* query levels and growth rates. These two data points form the basis of the research reports' evaluations of Kayak.

Chart XII shows the average valuation for Kayak based on the different data categories.

The two primary data classes are Industry specific and Mobilization.

²⁶ If I simply search for a flight to London or for a hotel in Venice on a particular date, both would constitute as queries.

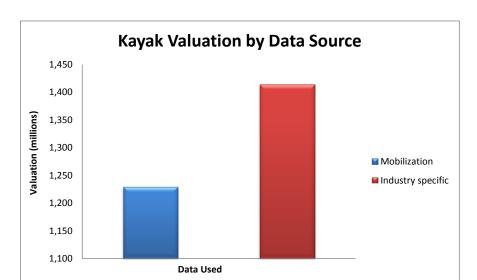


Chart XII: Kayak Valuation by Data Source

Anticipated Future

Kayak has been one of the leaders in online travel search because of the website's simplicity and proficiency. Its superior ability to aggregate flights and hotels efficiently is difficult to reproduce and is a strong competitive advantage. However, as the more dominant players enter the online travel search field, they can leverage their well established networks and virtually unlimited resources to create a competitive product. Kayak can very well be a lucrative acquisition for Priceline; but for the company to maintain its strong query growth, it will need to continually innovate and create products and services that directly respond to its users' demands.

LinkedIn

Commonplace Value Identifiers

In 2012, LinkedIn generated around \$972 million in revenue. This number is based on the company's three core revenue sources: Premium Subscriptions, Marketing Solutions and Talent Solutions. The paid subscription is a type of membership that grants users more capabilities across the online professional network than does the basic account. The Marketing Solutions serves as an advertising platform while the Talent Solutions provides a dynamic recruiting system for companies searching for talent. Considering the various sources of LinkedIn's revenue, a typical investor would value the professional network based on its number of users (namely premium subscriptions). However, this type of analysis may be unfitting for LinkedIn considering that less than .5% of its total users fall under the category of paid subscriptions.²⁷ Although the number of users does contribute to the company's network effect and therefore makes the recruiting and marketing platforms more valuable, equity research reports choose to focus on other metrics.²⁸

Core Data

Chart XIII: LinkedIn Snapshot

Company Snapshot	LinkedIn
Mean Valuation	\$18,265
Mean Target Price	\$157
Most Common Valuation Method	DCF
Most Frequent Conclusion	Overweight
Most Common Data	Growth Prospects

²⁷ Wunderlich Securities. "LinkedIn Equity Research Report." Review. 27 February 2013.

²⁸ As defined by Investopedia, a network effect is: "A phenomenon whereby a good or service becomes more valuable when more people use it."

^{(&}quot;Network Effect." Definition. 1 Apr. 2013 http://www.investopedia.com/terms/n/network-effect.asp.)

The equity research reports for LinkedIn center around two principal data points: Growth Prospects and New features/services/content. LinkedIn is one of the few social media companies discussed in this paper that has developed a sound and sustainable business model. The recruiting and advertising platforms form a dependable revenue stream in combination with the subscription service. The market (as well as valuation analysts) seems to have a better understanding of LinkedIn's business compared to the uncertainty surrounding those of companies such as Groupon and Zynga. It is possible that LinkedIn's transparent and robust business model propelled the company to a mean enterprise value of \$18.63 billion (which values the company as second most valuable in this paper behind Facebook).²⁹

Because LinkedIn has already established its core business to a certain extent, research analysts are not concerned with the company's fundamentals or its number of users as much as they are with the company's growth prospects. Assuming that LinkedIn has the core structure necessary to excel within its industry, analysts focus on different initiatives that can propel its growth rate.

In addition to growth potential, analysts also focus on the professional network's ability to create new and engaging services and content. A Wunderlich Securities report comments "We view LinkedIn with a very large competitive moat around its platform given strong network effects, a highly visible revenue stream, and the ability to rapidly innovate with new products." In order to expand this 'moat' and increase user engagement, the company needs to develop content and services that demand the attention of its users.

²⁹ \$18.63 billion is the mean EV for LinkedIn listed in Chart XIII.

³⁰ Wunderlich Securities. "LinkedIn Equity Research Report." Review. 27 February 2013.

My research finds similar core data points for other well developed companies. Reports on Facebook and Netflix, two of the more well established companies discussed in the paper, also focus on the companies' abilities to grow through content and product innovation (amongst other data points). Evidently, based on the progression of a social media company's business model, analysts seem to focus on different data points when analyzing the value and future of a company. For LinkedIn, these core data points include Growth Prospects and New features.

Chart XIV illustrates the range of values attributed to LinkedIn based on the different data groups.

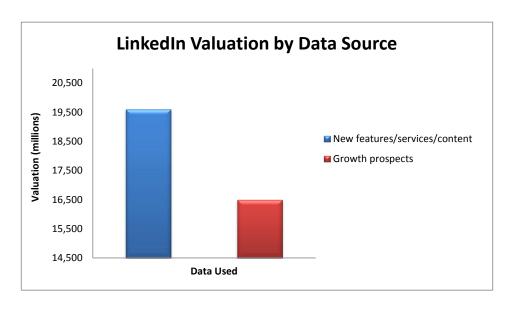


Chart XIV: LinkedIn Valuation by Data Source

Anticipated Future

The general tone surrounding LinkedIn is positive. Many of the banks, such as Piper Jaffray, are bullish on the company and believe it has great growth potential: "We believe LinkedIn may provide one of the best, if not the best, growth profiles for the \$10 billion + market cap companies under our coverage."³¹ The company has clearly established itself at the forefront of the professional network space. With its strong business model, LinkedIn is well positioned to transition into a sustainable and profitable company in the long run.

Netflix

Commonplace Value Identifiers

When assessing the value and future of Netflix, everyday investors frequently cite the size of the company's user base and the scope of its content selection. Number of users is more applicable to Netflix's value than it is to other companies' because the former supports a subscription based service. Considering all of its subscribers pay a monthly rate, number of users directly translates into revenue and can therefore be a clear performance indicator.

The latter metric is also applicable because Netflix delivers a content driven service. Users will be attracted to a particular streaming service if it can match their demand for a wide variety of quality TV shows and movies. Judging Netflix based on its content is appropriate because the success of the online streaming and DVD rental company is contingent on its selection of media.

³¹ Piper Jaffray. "LinkedIn Equity Research Report." Review. 08 February 2013.

The Story Behind Social Media Valuations

Core Data

Chart XV: Netflix Snapshot

Company Snapshot	Netflix
Mean Valuation	\$9,371
Mean Target Price	\$153
Most Common Valuation Method	DCF
Most Frequent Conclusion	Overweight
Most Common Data	Number of users

The two core data points for Netflix are Number of users and New content. Of all the equity research reports analyzed in my research, only those on Netflix and Zynga emphasize the number of users as a core data point. Many of the reports on Netflix focus on US subscriber growth and look at the number of users added through the company's international expansion strategy. In the context of its business model (a tiered subscription service), evaluating the company based on its user base appears to be appropriate.³² The only means by which the company can generate sales is by increasing its user base.

The second primary data point is new content. Most, if not all of the reports discuss content differentiation, addition of new premier shows and movies (i.e. House of Cards), and the signing of new content deals (such as the Walt Disney Co. contract). Content is a crucial data point because it forms the basis of Netflix's services. The greater the selection a streaming service supports, the more users it can attract. Netflix justifies the pricey contracts with media networks (starting in 2016, Netflix will pay Disney up to \$350 million per year according to a

³² Based on the amount of content a user wants to stream and or rent, Netflix charges a monthly subscription price.

Bloomberg article)³³ by claiming that the network deals will generate more users. Evidently, looking at Netflix's content base and its number of users is crucial when evaluating the company.

Chart XVI displays the range of values for Netflix based on the different data categories.

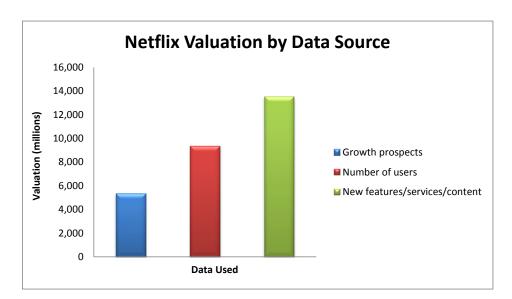


Chart XVI: Netflix Valuation by Data Source

Anticipated Future

The most common recommendation for Netflix from my analysis is Overweight. While this indicates optimism, a few of the banks remain doubtful—a Macquarie research report remarks: "On DCF we likewise struggle to justify the current pricing level, unless our forecasts are simply too low, or investors pile on the Netflix story as a repeat of the new force in TV that it was perceived to be in 2010-11."³⁴ The negativity surrounding Netflix is due to the critical risks the company faces. These include the company's inability to strike content deals, the possibility

 [&]quot;Disney's Netflix Deal Gives Top Billing to Online Movies." Bloomberg. 5 Dec. 2012.
 http://www.bloomberg.com/news/2012-12-05/disney-s-netflix-deal-gives-top-billing-to-online-movies.html.
 Macquarie Research. "Netflix Equity Research Report." Review. 24 January 2013.

that Internet Service Providers will cap data usage, and the emergence of real threats to Netflix (including Redbox, Amazon and Apple). Although the company has cultivated a reputable name in the online streaming industry, the threat from competitors is very real. If Netflix continues to add to its streaming selection and is capable of differentiating its content from that of its peers, the company has the potential to succeed in the online streaming and rental industry.

Pandora

Commonplace Value Identifiers

As are most of the other companies, Pandora is identified by the size of its user base. The internet radio company's 66 million active users represent a sizable user base that has witnessed a 38% increase since last year. 35 Everyday investors tend to think businesses will perceive a more lucrative opportunity to advertise on Pandora the more users the internet radio supports. Similar to the analysis on the other companies, however, this metric does not necessarily translate into actual value. While it does provide a general impression of the size of the company, it does not signify the company is profitable or has a bright future.

Another often cited data point is number of songs. Content diversity is undeniably important, but it does not carry as much weight as it does for a company like Netflix. It seems that listening to radio is more of a passive leisure activity while video streaming is much more engaging. TV and movie streamers may demand a more extensive selection than would radio streamers because the former are more involved with their media. ³⁶ Because the sheer size of

³⁵ J.P. Morgan. "Pandora Equity Research Report." Review. 06 February 2013.

³⁶ This is not an idea presented in the research reports; it is my personal understanding of the differences between radio listeners and video streamers.

Pandora's song catalog is not absolutely crucial, this metric may not help form a concrete analysis of the company.

Core Data

Chart XVII: Pandora Snapshot

Company Snapshot	Pandora
Mean Valuation	\$2,330
Mean Target Price	\$13
Most Common Valuation Method	Multiples
Most Frequent Conclusion	Outperform
Most Common Data	Ads

The reports on Pandora center on two data points: Ads and Industry specific data. The central revenue source for Pandora is advertisements. In 2012, around 87% of the company's revenue was derived from ads (the remaining 13% was from subscriptions).³⁷ The company has built an impressive advertising platform that incorporates display and audio ads on its web application. Additionally, the successful mobilization of its service allows the company to exploit the smartphone radio ad market. The combination of Pandora's dynamic advertising platform and its strong mobile presence has incentivized businesses to advertise on the radio's service. Because advertising forms the basis of Pandora's revenue, analysts pay close attention to different ad metrics.

The second key data point is Industry specific. A majority of the reports on Pandora cited listening hours as an important performance measure. The greater the number of listening hours, the more attractive Pandora is as an advertising platform. Canaccord Genuity estimates that a

³⁷ Canaccord Genuity. "Pandora Equity Research Report." Review. 28 February 2013.

total of 4.1 billion hours of media were consumed on Pandora in the fourth quarter of 2012.³⁸ Wells Fargo projects that the number of listening hours will increase by over 120% by 2014 (as compared to 2012 statistics).³⁹ These example data points provide a concrete idea of how

measurable growth. Clearly, this industry specific metric is essential for evaluating Pandora and

Chart XVIII shows the range of valuations for Pandora based on the different data

engaged users are with the service and indicate whether or not the company is achieving

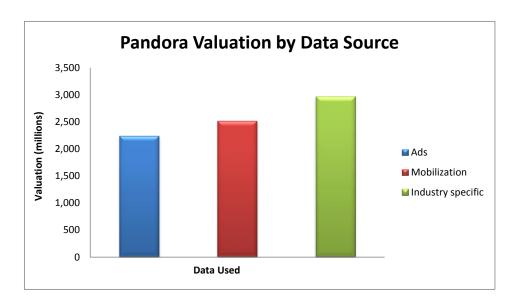


Chart XVIII: Pandora Valuation by Data Source

determining its value.

categories.

³⁹ Wells Fargo Securities. "Pandora Equity Research Report." Review. 28 February 2013.

Anticipated Future

The underlying tone throughout the equity research reports on Pandora is slightly positive. The reports attribute Pandora's position as a leader in the internet radio field to its robust advertising platform and its successful mobilization. Nonetheless, the company is challenged by three basic risks. First, the company needs to diversify its revenue sources because the mobile and desktop radio ad markets may not grow as rapidly as expected. Second, if the company is unable to negotiate favorable royalty rates with the music artists, its long-term profitability may come into question. Lastly, Pandora faces increased competition from players, such as Spotify and Apple, who threaten the company's control of the market. However, provided that the company can respond to the competitiveness within the industry and can increase the appeal of its advertising platform, Pandora can remain as a dominant player in the internet radio field.

Yelp

Commonplace Value Identifiers

Ever since its inception, Yelp has largely been associated with its review base. According to a Wedge Partners research report, Yelp increased its number of reviews by 45% to 36 million total reviews in 2012. 40 Users flock to the site to sift through hundreds of reviews in order to help them finalize a product or service purchase decision. Seeing that the company is built upon its review base, it seems reasonable to value Yelp and assess its future based on the number of reviews the site has accumulated. This metric, along with the number of users who visit the site (86 million average monthly unique users according to Wedge Partners), encapsulates the entire

⁴⁰ Wedge Partners. "Yelp Equity Research Report." Review. 07 February 2013.

business. Users and reviews should translate into advertising dollars for Yelp. While this notion of value seems reasonable, equity research reports focus on different metrics.

Core Data

Chart XIX: Yelp Snapshot

Company Snapshot	Yelp
Mean Valuation	\$1,485
Mean Target Price	\$23
Most Common Valuation Method	DCF
Most Frequent Conclusion	Neutral
Most Common Data	Growth Prospects

The three core data points for Yelp include Growth Prospects, Mobilization, and Ads. The reports do not focus on the number of reviews or users because the analysts seem to think Yelp has already cultivated a strong review and user base. Now that the company has established its foundation, the analysts are concerned with its growth prospects. Can Yelp successfully apply its business model internationally and form a strong network effect across US boarders? Are there other growth opportunities aside from advertising revenue? These questions reflect the primary data category, Growth prospects.

Yelp's growth potential directed analysts' attention to the second data point, Mobilization. Yelp's ability to capitalize on mobile and tablet growth is crucial for the company to succeed. However, it is difficult for the review based company to monetize its mobile platform. Yelp's bottom line suffers as its service shifts to mobile because businesses are less willing to pay high prices for smartphone advertising. The perceived limited benefits from mobile advertising do not justify the expensive rates desktop ads demand.

This mobile discussion leads to the third data point, Ads. Analysts focus on Yelp's advertising revenue as this is the main source of cash flow for the business. The reports mention that it will be difficult for the company to solely depend on advertising revenue to create a profitable business, especially considering the implications of a shift towards mobile. Evidently, Yelp's mobile initiative and its advertising revenue are two key metrics that analysts consider important for the company's valuation.

Chart XX displays the range of values for Yelp based on the different data categories discussed above.

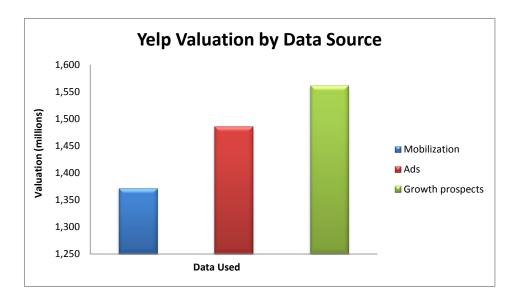


Chart XX: Yelp Valuation by Data Source

Anticipated Future

The most common rating from my analysis is Neutral. This uncertainty stems from questions regarding Yelp's growth prospects. If the company is unable to grow at a considerable rate and fails to find alternative sources of revenue, its profitability will come into question. A

Wunderlich Securities report adds other risks the company faces: "[W]e believe the stock is fully priced at 5.9x EV/S for 2013 given the nascent and uneven profitability ramp and significant competitive threats."⁴¹ The market for local business information can conceivably become more dense and populated as other larger technology companies invest in the space. Unless the company discovers other lucrative revenue opportunities and capitalizes on the mobile trend, Yelp may not transition into a successful company.

Zynga

Commonplace Value Identifiers

The most common metric typical investors apply to Zynga is number of games. As Zynga is a provider of online social media games, analyzing the extensiveness of the company's collection of games seems sensible. However, the quantity of games supported on the site is not necessarily indicative of the company's value or performance. With just a few attractive games at any given point in time, Zynga has the potential to produce a substantial amount of revenue. There might not be a strong correlation between the company's value and the number of games that it supports. Instead, research reports focus on three different data points when determining Zynga's value.

⁴¹ Wunderlich Securities. "Yelp Equity Research Report." Review. 27 February 2013.

Core Data

Chart XXI: Zynga Snapshot

Company Snapshot	Zynga
Mean Valuation	\$1,033
Mean Target Price	\$3
Most Common Valuation Method	DCF
Most Frequent Conclusion	Hold
Most Common Data	Number of users

The research reports on Zynga center on Number of users, Industry specific data, and Mobilization. In assessing the company's performance, analysts look at number of users in conjunction with 'bookings,' an industry specific data point. Bookings are the total dollar value of virtual goods sold to users in a given period (compared to revenue which is amortized over the life of the virtual good). The reports pay close attention to this metric because it indicates how involved users are with each respective game. The more engrossed users are with the company's social games, the more virtual goods that are purchased, and the more revenue Zynga generates. By looking at number of users and bookings, analysts have a concrete idea of how popular each game is and how captivated the users are. These two metrics are therefore important for analysts' evaluations of Zynga.

The third data point, Mobilization, is crucial because users have an increasing tendency to play games on their smartphones and tablets. For the company to perform well, Zynga needs to form a strong mobile presence and must attract a high number of active users that are willing to purchase virtual goods. As it is with many other companies, Mobilization is clearly a key data point for Zynga.

Chart XXII illustrates the range of values for Zynga based on the different data categories.

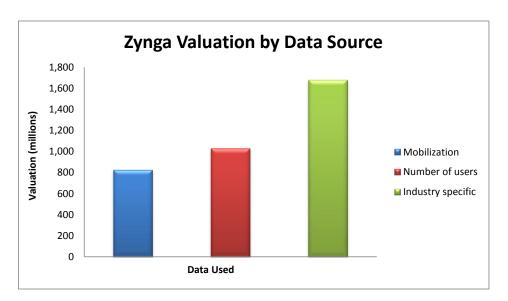


Chart XXII: Zynga Valuation by Data Source

Anticipated Future

Generally speaking, analysts seem pessimistic about Zynga. This negativity originates from the three primary risks the company faces going forward. The first issue is that the company's collection of games is predominantly desktop based. It may prove to be difficult for Zynga to transfer the functionality and appeal of its games to mobile. A BMO Capital Markets report elaborates on the issue: "[W]hat continues to give us pause is that we see challenges around the company's ability to maintain its massive market share as it migrates from social to mobile.",42

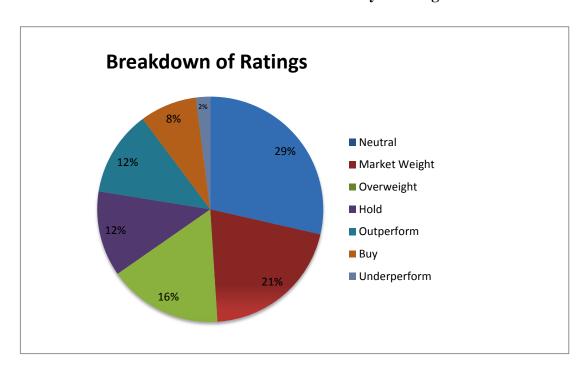
The second issue is Zynga's reliance on Facebook. Since the company's founding, a majority of its revenue has been generated from Facebook's platform. The expiring exclusivity agreement and the need to transition to other platforms may put Zynga in a precarious situation.

⁴² BMO Capital Markets. "Zynga Equity Research Report." Review. 06 February 2013.

Section III: Ratings Analysis

The equity research reports in my analysis offer ratings for each of the social media companies. Based on his or her assessment of a particular company, an analyst provides a recommendation that indicates how the analyst expects the company to perform in the near future. Chart XXIII illustrates a breakdown of the ratings for the social media companies studied in this paper. A description of each rating can be found in Table II of the Appendix.





In Chart XXIV, I offer a more simplified version of Chart XXIII by categorizing each rating as either 'Confident,' 'Neutral,' or 'Pessimistic.' This combines the different rating terminologies used by the banks and gives a clearer breakdown of the ratings.

Breakdown of Ratings ■ Confident ■ Neutral Pessimistic

Chart XXIV: Breakdown of Analyst Ratings

61% of the reports determined a neutral rating for the social media companies. This 'ambivalence' is not surprising considering the difficulty of projecting the future performance of social media companies. In Section II, it is clear that many analysts averted firm ratings (i.e. Buy or Sell) because it remains uncertain if the companies will successfully transition into sustainable and profitable ventures. The reports frequently cite many conditions that would need to be fulfilled in order for a company to succeed, such as international expansion, mobilization, or the creation of new products and services. For example, a large majority of the reports on Groupon

offered neutral ratings because the daily deals site is still in the midst of defining its business model and developing its expansion strategy.

Contrastingly, the ratings for Facebook and LinkedIn were largely confident. These two companies have arguably the most well established business models in comparison to those of all the other social media companies studied in this paper. As a result, analysts are more assertive with their ratings for these companies. It is clear that because many of the nascent social media companies are still in the process of fine-tuning their businesses, a majority of the reports hesitate to form a definitive recommendation.

Conclusion

The objective of this paper is to analyze the data that is used to formulate assessments of public social media companies. More specifically, it explores the data that is used to project the future of social media companies as well as the metrics used to calculate the companies' enterprise values. In order to explore the topic, I completed a thorough examination of multiple equity research reports on each individual social media company and I spoke with professionals in the banking and venture capital industries.

Before delving into the data behind the valuations, the paper discusses the valuation tools used by banks to calculate enterprise values. Based on my research, banks do not exhibit a strong preference for one valuation methodology over another. Around 60% of the reports employ a DCF analysis, while around 40% use a multiples analysis. Those that used the latter methodology tend to use a multiple of EV/EBITDA compared to EV/Sales.

These findings did not lead to any substantive conclusions. In fact, many of the banks reiterate their distrust with these valuation methods because they require analysts to project

financials for social media companies which frequently oscillate in value and which have yet to solidify consistent revenue streams. An analyst at Raptor Ventures, a venture capital firm based in New York, explained that the valuation process for social media companies becomes even more nebulous the earlier the company is in its development process. However, he explained that a multiples analysis would yield a more reasonable value than would a DCF analysis for both private and public social media companies. Using comparable metrics avoids the need to fully flesh out future financials and calculates a value that is defendable in relation to that of similar companies. Nevertheless, the valuation process for social media companies is somewhat imprecise due to the ambiguity involved with estimating financials for companies that have yet to fully develop their business models.

The paper then discusses the type of data that is used to form an overall assessment of a social media company. The data that is used to formulate the evaluations of social media businesses varies from company to company. Chart VI demonstrates that banks do not predominantly analyze a few conventional data points across all of the companies. We tend to see typical metrics and data points applied to companies in more mature and developed industries whereas this tendency does not exist in the unseasoned social media space. Based on my research, there were many company specific data points that are used in the assessments. For instance, Pandora reports focus on 'listening hours,' while Kayak reports look at 'queries,' and reports on Zynga analyze 'bookings.' For the remaining companies as well, reports did not apply any one conventional metric but instead looked at data that is relevant to each specific company.

Echoing this idea, a mutual fund manager working for a firm based in New York explained that no typical metrics can be used to assess the nascent social media companies. It is crucial, he explained, to evaluate each company individually and to understand the specific value drivers for each business. However, all of the professionals I spoke with also emphasized the importance of looking at a few core metrics; namely, revenue growth, user growth and engagement statistics. Referring to these core metrics allows for a simple comparison between companies. Nonetheless, the diversity of the data used in the reports suggests that analysts find it important to evaluate data relevant to each individual company.

There are a few noticeable trends in the data that is used for social media company assessments. For those companies that are at a crucial transition period in their development process, analysts focus on their core business metrics and fundamentals. For example, reports on Groupon, Pandora, and Zynga center on data that is associated with the companies' core business models. These companies are somewhat unstable as they have yet to define their core business strategies. On the other hand, reports on Facebook, LinkedIn, and Netflix focus on data that is related to the companies' growth prospects. Instead of analyzing the core business metrics, the reports on the latter companies (three of most profitable social media companies) consider how these businesses can grow their revenues through new innovative features or through alternative revenue sources.

Another distinct trend in the data is the constant emphasis on mobilization. A majority of the reports across all of the companies talk about each business's ability to seamlessly replicate its service on mobile platforms. Considering the rapid adoption of smartphones on a global level, analysts consider a strong mobile presence to be crucial to a company's success.

After the data discussion, I offer a breakdown of the analyst ratings. A considerable majority of the reports on social media companies suggest a neutral rating. Because many of the social media businesses are in flux and have yet to reach a stable level, analysts avoid definitive recommendations and refrain from projecting the futures of these companies. The professionals I spoke with were similarly uncertain about the future of social media companies. A director at Sparring Partners Capital, a boutique investment bank that specializes in growth stage technology companies, voiced his uncertainty but also explained how he chooses the 'winners.' According to the director, those companies that have dynamic management teams that can be flexible will end up persevering. Netflix's transition from distributing DVD's to becoming the leader of online streaming is a testament to the benefits of adaptability. Nevertheless, evaluating the future of each company is difficult while they are still young and continue to define their businesses.

Whether it is embedded within the Wall Street Journal or found on a popular tech blog, there is an ongoing discussion involving the valuation and performance of social media companies. The glaring question people ask: can each of the social media companies really be worth billions of dollars? Not only do the enterprise values for a few of the companies seem inflated, but also the disparity in valuations amongst the companies appears uncharacteristically large for an emerging industry.

The difficulty is, we cannot ascertain over or undervaluation in the present, but instead can only do so in retrospect. However, as this paper strives to achieve, we can analyze the data that supposedly drives these valuations and analyses today. That is to say, this data is bound to change in the coming years as the companies develop into stable businesses; but this paper gives some substance to the current evaluations of social media businesses. It describes the data that is most essential to the company assessments and allows us to begin understanding The Story Behind Social Media Valuations.

Appendix

Table I: List of Banks Used in Research: The reports I used for my research were produced by the following banks:

List of Banks (Alphabetical Order)		
Albert Fried & Company	Macquarie	
Barrington Research	Oppenheimer	
Canaccord Genuity	Piper Jaffray	
Cantor Fitzgerald	RBC Capital Markets	
Credit Suisse	Trefis	
Deutsche Bank	Wells Fargo	
Jefferies	Wunderlich Securities	
JP Morgan		

The Story Behind Social Media Valuations

Table II: Breakdown of Equity Research Ratings: Because many banks define their rating systems differently, I listed below the rating explanations of Investopedia, a third party online investment dictionary.

Fundamentian of Analyst Decommendations				
	Explanation of Analyst Recommendations			
Buy	A recommendation to purchase a specific security. A buy rating from an analyst or research firm is a recommendation to purchase the security, with the implied insistence that the security is undervalued in some fashion.			
Sell	In investment research, "sell" refers to an analyst's recommendation to close out a long position in a stock because of the risk of a price decline.			
Hold	An analyst's recommendation to neither buy nor sell a security. A company with a hold recommendation generally is expected to perform with the market or at the same pace as comparable companies.			
Outperform	An analyst recommendation meaning a stock is expected to do slightly better than the market return.			
Underperform	An analyst recommendation that means a stock is expected to do slightly worse than the market return.			
Neutral	If an investor has a neutral opinion, that is, he or she feels a security or index will neither increase nor decrease in value in the near future.			
Overweight	Overweight will usually signify that the security is expected to outperform either its industry, sector or, even, the market altogether.			
Underweight	Underweight will usually mean that the security is expected to underperform either its industry, sector, or even the market altogether.			
Market Weight	The marketweight rating indicates that the current credit spread of an instrument is in line with expectations. Being marketweight is similar to having a hold rating.			

Table III: Explanation of Data Categories: I grouped the data points from the equity research reports into the following categories:

Explanation of Data Categories		
Fundamentals	This category denotes an emphasis on the basics of a business model. The reports that primarily concentrate on fundamentals frequently cite metrics related to a company's revenue base and revenue growth, cost structure and cost reduction abilities, and overall business strategy (such as its ability to expand and maintain a profitable business).	
Number of Users	The most familiar data point used in valuation and company assessments is number of users. This is an easily understood metric that connotes the size of a company and the strength of its network effect.	
New Features/Services/Content	This category represents a focus on a company's ability to generate new features, services, and content which can increase a company's user base, enhance user experience, and improve user engagement. This in turn can contribute to the overall performance and valuation of a firm.	
Ads	Another recognizable data point is advertisements. Considering the widespread use of internet on computers, smartphones and tablets, research reports are focusing on a company's ability to leverage its user base and generate advertising revenue. A considerable portion of social media companies' revenue is advertising dollars.	
Mobilization	Considering the ubiquitous use of smartphones on a global level, analysts are concentrating on a company's ability to transition its products, services and content to a profitable mobile platform.	
Industry Specific	For certain companies, analysts focus on data that is particular to the industry the company is in. For example, research reports fixate on Kayak's ticket query growth, a metric that is specific to the online airline ticket industry.	
Macro Conditions	This category suggests that analysts pay close attention to the impact macroeconomic conditions have on a company or industry.	
Growth Prospects	Considering that many of the social media companies have yet to fully establish themselves, many research reports focus on the companies' abilities to grow in the future. The analysts focus on growth prospects from a revenue standpoint and from an international expansion point of view.	

Table IV: Comparison of valuation methods for Facebook and LinkedIn

