LinkedIn

Chenash, Mauro, Pelosi, Pinheiro, Sun
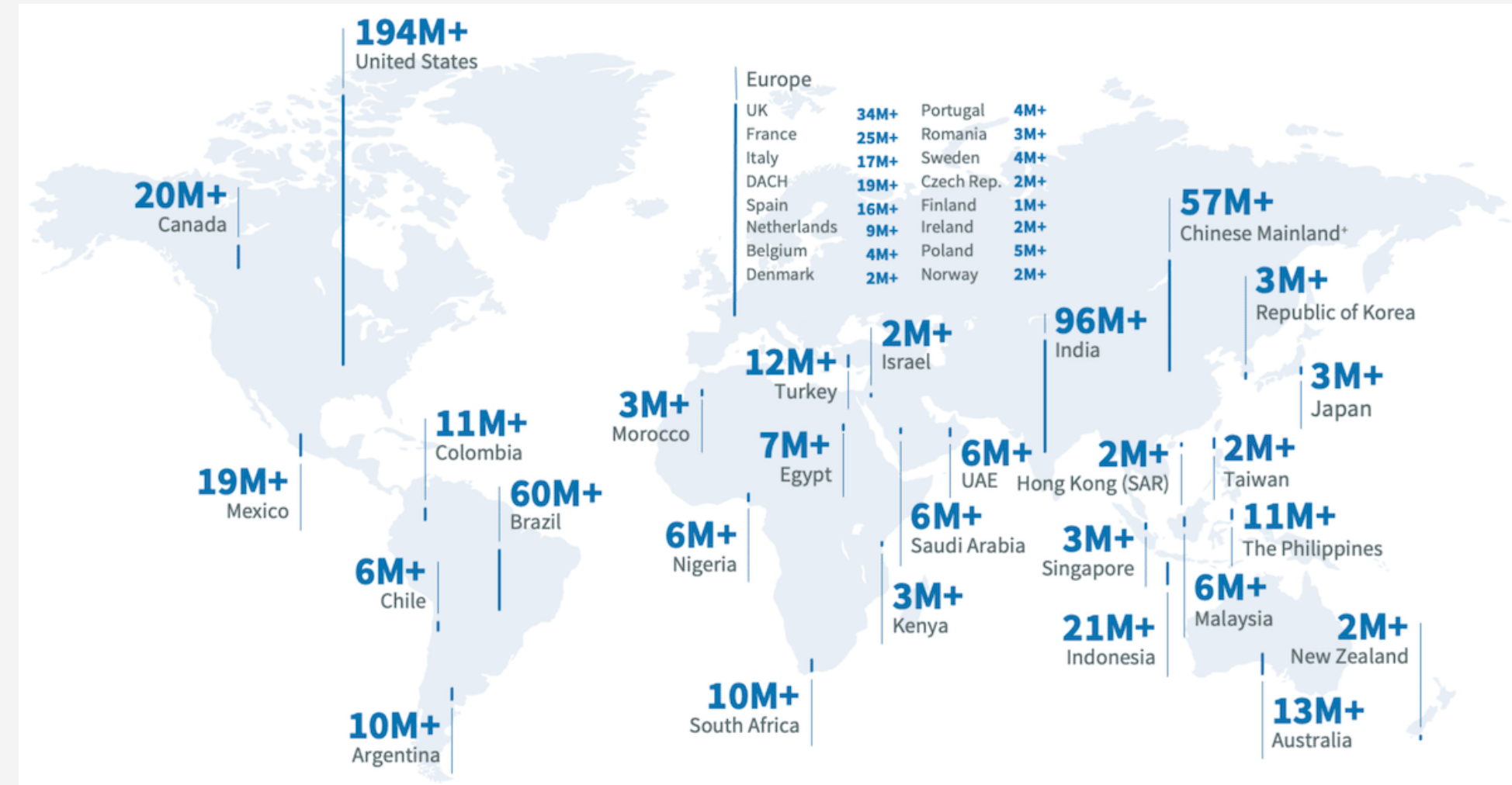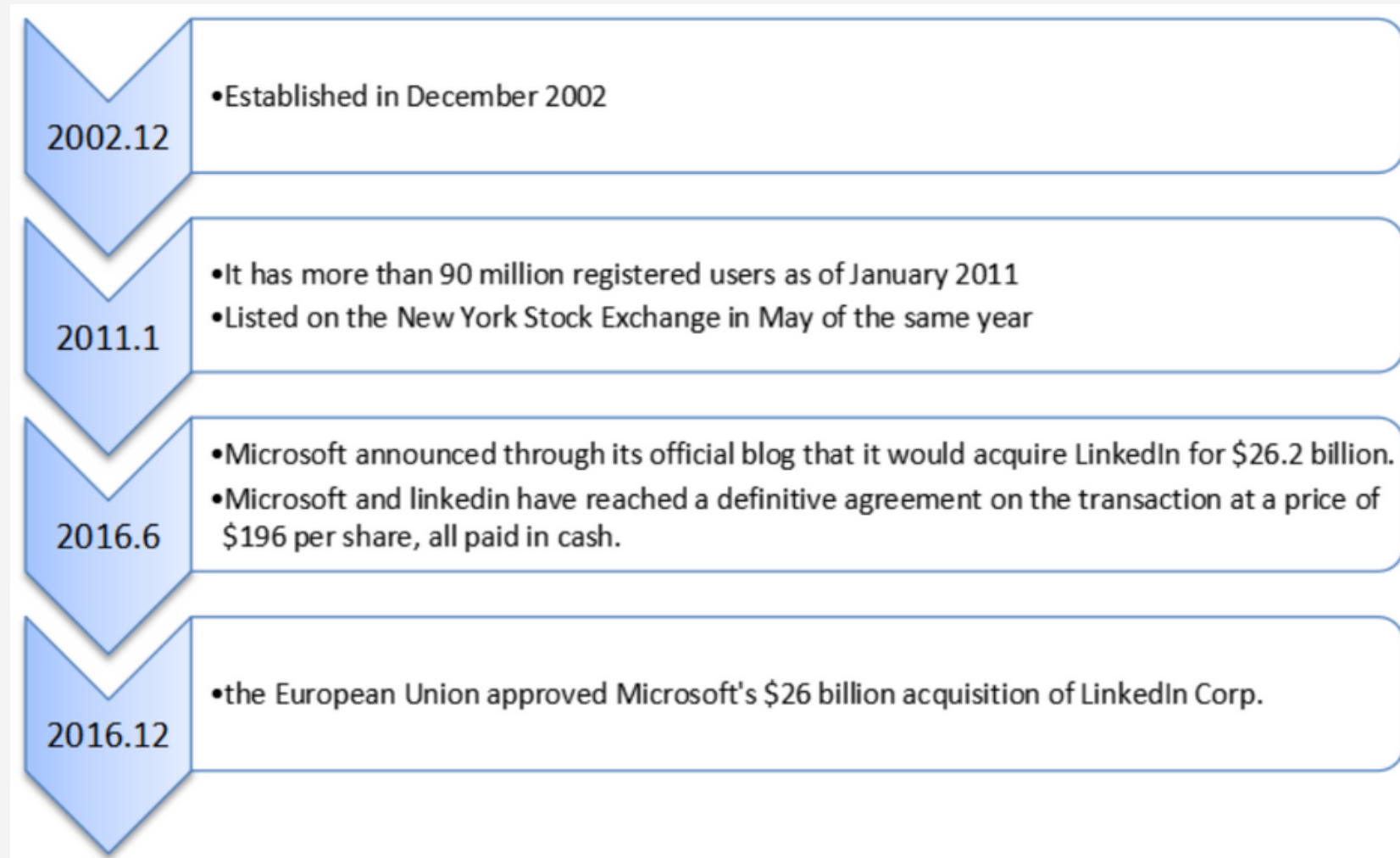June 2023

LinkedIn

Summary

Company introduction

LinkedIn

- Social media platform
- Focus: professional networking
- 930 million members worldwide
- Go-to platform for:
  - Job seekers
  - Recruiters
  - Businesses looking to expand network

- IPO in January 2011
- First shares on May 19, 2011

Development before acquisition and user distribution

LinkedIn

2002.12	• Established in December 2002
2011.1	• It has more than 90 million registered users as of January 2011 • Listed on the New York Stock Exchange in May of the same year
2016.6	• Microsoft announced through its official blog that it would acquire LinkedIn for $26.2 billion. • Microsoft and linkedin have reached a definitive agreement on the transaction at a price of $196 per share, all paid in cash.
2016.12	• the European Union approved Microsoft's $26 billion acquisition of LinkedIn Corp.

194M+ United States

20M+ Canada

Europe

UK	**34M+**	Portugal	**4M+**
France	**25M+**	Romania	**3M+**
Italy	**17M+**	Sweden	**4M+**
DACH	**19M+**	Czech Rep.	**2M+**
Spain	**16M+**	Finland	**1M+**
Netherlands	**9M+**	Ireland	**2M+**
Belgium	**4M+**	Poland	**5M+**
Denmark	**2M+**	Norway	**2M+**

57M+ Chinese Mainland⁺

3M+ Republic of Korea

2M+ Israel

96M+ India

12M+ Turkey

3M+ Morocco

3M+ Japan

19M+ Mexico

11M+ Colombia

7M+ Egypt

6M+ UAE

2M+ Hong Kong (SAR)

2M+ Taiwan

60M+ Brazil

6M+ Nigeria

6M+ Saudi Arabia

3M+ Singapore

11M+ The Philippines

6M+ Chile

3M+ Kenya

6M+ Malaysia

2M+ New Zealand

10M+ Argentina

10M+ South Africa

21M+ Indonesia

13M+ Australia

IPO Conditions - P&L Statement

At the time of the IPO LinkedIn **7,840,000 shares** were issued at **$45 per share**

Question:

Was this a good price to buy the shares ?

		Year Ended December 31,			Nine Months Ended September 30,	
		2007	2008	2009	2009	2010
				(in thousands, except per share data)		
Consolidated Statements of Operations Data:						
Net revenue		$ 32,486	$ 78,773	$ 120,127	$ 80,794	$ 161,403
Costs and expenses:						
Cost of revenue (exclusive of depreciation and amortization shown separately below)		7,384	18,589	25,857	18,021	29,982
Sales and marketing		5,037	16,986	26,847	17,577	38,340
Product development		11,578	29,366	39,444	27,307	44,151
General and administrative		6,812	12,976	19,480	12,831	23,431
Depreciation and amortization		2,107	6,365	11,854	8,399	12,986
Total costs and expenses		32,918	84,282	123,482	84,135	148,890
(Loss) income from operations		(432)	(5,509)	(3,355)	(3,341)	12,513
Other income (expense), net		773	1,277	230	359	(269)
Income (loss) before income taxes		341	(4,232)	(3,125)	(2,982)	12,244
Provision for income taxes		13	290	848	399	2,176
Net income (loss)		328	(4,522)	(3,973)	(3,381)	10,068
Undistributed earnings allocated to preferred stockholders		(328)	—	—	—	(8,215)
Net income (loss) attributable to common stockholders		$ —	$ (4,522)	$ (3,973)	$ (3,381)	$ 1,853
Net income (loss) per share attributable to common stockholders:						
Basic		$ 0.00	$ (0.11)	$ (0.10)	$ (0.08)	$ 0.04
Diluted		$ 0.00	$ (0.11)	$ (0.10)	$ (0.08)	$ 0.04
Weighted-average shares used to compute net income (loss) per share attributable to common stockholders:						
Basic		38,092	42,389	41,184	41,032	42,239
Diluted		38,961	42,389	41,184	41,032	45,486
Pro forma net income (loss) per share attributable to common stockholders[1] (unaudited):						
Basic				$ (0.05)		$ 0.11
Diluted				$ (0.05)		$ 0.11
Pro forma weighted-average shares used to compute pro forma net income (loss) per share attributable to common stockholders[1] (unaudited):						
Basic				86,822		87,884
Diluted				86,822		91,131
Other Financial and Operational Data:						
Adjusted EBITDA[2]		$ 3,480	$ 5,461	$ 14,651	$ 9,364	$ 31,619
Number of registered members (at period end)		16,712	32,307	55,111	48,004	80,553

IPO Conditions - Balance Sheet

	December 31,		September 30, 2010		Pro forma September 30, 2010 (Note 2)
	2008	2009		(Unaudited)	
ASSETS					
CURRENT ASSETS:					
Cash and cash equivalents	$ 80,495	$ 89,979	$ 89,647		$ 89,647
Accounts receivable (net of allowance for doubtful accounts of $960, $1,100 and $1,855 at December 31, 2008 and 2009, and September 30, 2010, respectively)	14,987	24,324	35,797		35,797
Prepaid expenses and other current assets	2,718	5,160	9,690		9,690
Restricted cash	218	—	—		
Income tax receivable	62	2,230	2,230		
Deferred income taxes	731	1,695	2,249		2,249
Total current assets	99,211	121,158	139,613		139,613
Property and equipment, net	21,724	25,730	48,934		48,934
Intangible assets, net	506	297	5,947		5,947
Other assets	621	1,374	2,501		2,501
TOTAL ASSETS	$ 122,062	$ 148,559	$ 196,995		$ 196,995
LIABILITIES, REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY					
CURRENT LIABILITIES:					
Accounts payable	$ 2,510	$ 4,919	$ 4,795		$ 4,795
Accrued liabilities	10,224	18,352	25,669		25,669
Deferred revenue	14,858	25,450	45,061		45,061
Income tax payable	133	552	1,593		1,593
Total current liabilities	27,725	49,273	77,118		77,118
LONG TERM LIABILITIES	395	528	2,226		2,226
DEFERRED TAX LIABILITIES	731	1,695	2,249		2,249
Total liabilities	28,851	51,496	81,593		81,593
COMMITMENTS AND CONTINGENCIES (Note 10)					
REDEEMABLE CONVERTIBLE PREFERRED STOCK:					
Redeemable convertible preferred stock, Series C, $0.0001 par value—4,357,644 shares authorized; 4,357,644 shares issued and outstanding; liquidation preference of $12,811	12,700	12,700	12,700		—
Redeemable convertible preferred stock, Series D, $0.0001 par value—6,800,349 shares authorized; 6,599,987 shares issued and outstanding; liquidation preference of $75,702	75,281	75,281	75,281		—
Total redeemable convertible preferred stock	87,981	87,981	87,981		
STOCKHOLDERS' EQUITY:					
Convertible preferred stock, Series A, $0.0001 par value—17,238,579 shares authorized; 17,168,214, 17,168,214, and 17,238,579 shares issued and outstanding at December 31, 2008, 2009 and September 30, 2010, respectively; liquidation preference of $5,494, $5,494, $5,516 at December 31, 2008, 2009 and September 30, 2010, respectively	5,451	5,451	5,884		—
Warrants issued to purchase convertible preferred stock, Series A	15	—	—		—
Convertible preferred stock, Series B, $0.0001 par value—17,450,991 shares authorized; 17,450,991 shares issued and outstanding; liquidation preference of $9,947	9,962	9,962	9,962		—
Common stock, $0.0001 par value—120,000,000 shares authorized; 41,913,101, 41,745,728, and 42,841,084 shares issued and outstanding at December 31, 2008 and 2009, and September 30, 2010, respectively; 88,488,285 shares issued and outstanding pro forma	3	4	4		9
Additional paid-in capital	5,778	13,725	21,563		125,385
Accumulated other comprehensive loss	(23)	(3)	(3)		(3)
Accumulated deficit	(15,956)	(20,057)	(9,989)		(9,989)
Total stockholders' equity	5,230	9,082	27,421		115,402
TOTAL LIABILITIES, REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY	$ 122,062	$ 148,559	$ 196,995		$ 196,995

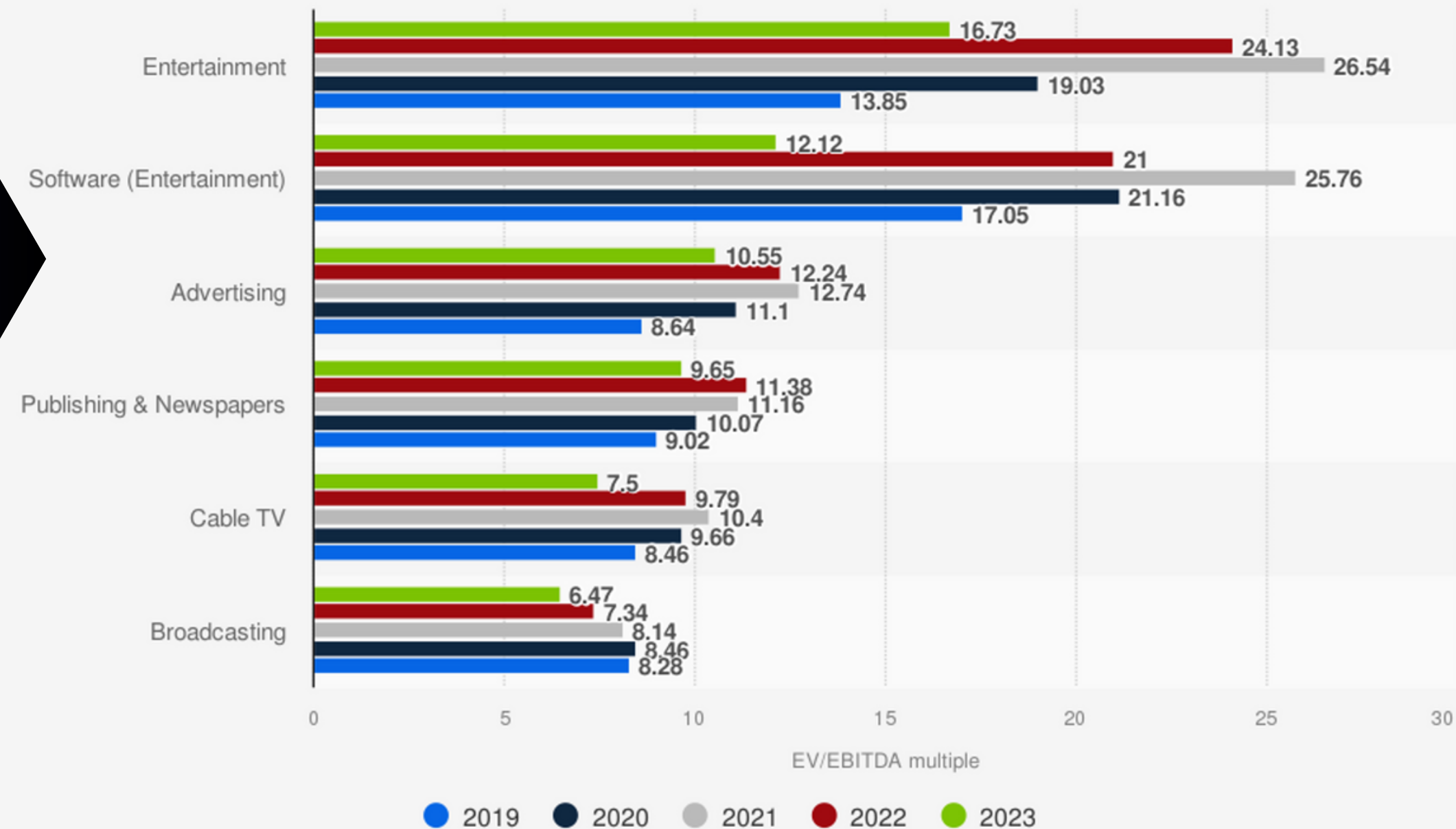|	2008	2009	2010	CAGR
Total revenue	78773	120127	161403	43. 14%
Gross profit	-4232	-3125	12244	272. 61%
EBITDA	5461	14651	31619	140. 62%

IPO Analysis

By being conservative we can expect an EV/EBITDA ratio for Linkedin at it's IPO of around 20.

In this scenario:
- EBITDA (2010): $31 619 000
- EV (2010): 31 619 000 * 20 = $632 380 000
- No Net Debt ! Total Liabilities (2010): $81 593 000
- Market Capitalisation (2010) : $550 787 000

- Price / Share (2010) :
  550 787 000 / 7 840 000
  $\Rightarrow$ $70.25 / Share > $45 / Share

Seems like a VERY GOOD BUY

Average EV/EBITDA multiples in the media & advertising sector worldwide from 2019 to 2023, by industry

Industry	2019	2020	2021	2022	2023
Entertainment	13.85	19.03	26.54	24.13	16.73
Software (Entertainment)	17.05	21.16	25.76	21	12.12
Advertising	8.64	11.1	12.74	12.24	10.55
Publishing & Newspapers	9.02	10.07	11.16	11.38	9.65
Cable TV	8.46	9.66	10.4	9.79	7.5
Broadcasting	8.28	8.46	8.14	7.34	6.47

EV/EBITDA multiple

● 2019 ● 2020 ● 2021 ● 2022 ● 2023

Source
Leonard N. Stern School of Business
© Statista 2023

Additional Information:
Worldwide; 2019 to 2023

LinkedIn Post IPO Analysis

US$ '000	2011	2012	2013	2014	2015	CAGR	
P&L							
Net Revenue	**522,189**	**972,309**	**1,528,545**	**2,218,767**	**2,990,911**	55%	
Gross Profit	440,741	846,788	1,325,637	1,924,970	2,572,053	55%	⬆
GP Margin	*84%*	*87%*	*87%*	*87%*	*86%*		
Adjusted EBITDA	98,713	223,030	376,243	595,214	779,804	68%	⬆
EBITDA Margin	*19%*	*23%*	*25%*	*27%*	*26%*		
EBIT	25,845	56,862	47,812	36,135	(150,942)		⬇
EBIT Margin	*5%*	*6%*	*3%*	*2%*	*-5%*		
Net Income	11,912	21,610	26,769	(15,320)	(164,761)		⬇
Net Income Margin	*2%*	*2%*	*2%*	*-1%*	*-6%*		
							⬆
Number of registered members	**144,974**	**201,912**	**276,842**	**346,731**	**413,671**	30%	⬆
Average Revenue per customer	3.6	4.8	5.5	6.4	7.2	19%	⬆
Consolidated Balance Sheet							
Cash & Cash Equivalents	339,048	270,408	803,089	460,887	546,237	13%	
Marketable Securities	238,456	479,141	1,526,212	2,982,422	2,573,145	81%	
Property & Equipment	114,850	186,677	361,741	740,909	1,047,005	74%	
Working Capital	499,268	603,418	2,113,479	3,239,315	2,747,005	53%	
Toal Assets	873,697	1,382,330	3,352,793	5,427,257	7,011,199	68%	
Total Stockholders equity	624,979	908,424	2,629,394	3,325,392	4,468,643	64%	
Return on Assets (ROA)	*1%*	*2%*	*1%*	*0%*	*-2%*		⬇
Return on Equity (ROE)	*2%*	*2%*	*1%*	*0%*	*-4%*		⬇
Working Capital Turnover Ratio	*0.96*	*0.62*	*1.38*	*1.46*	*0.92*		⬇

Revenue Vs Registered Members, '000 ⬆
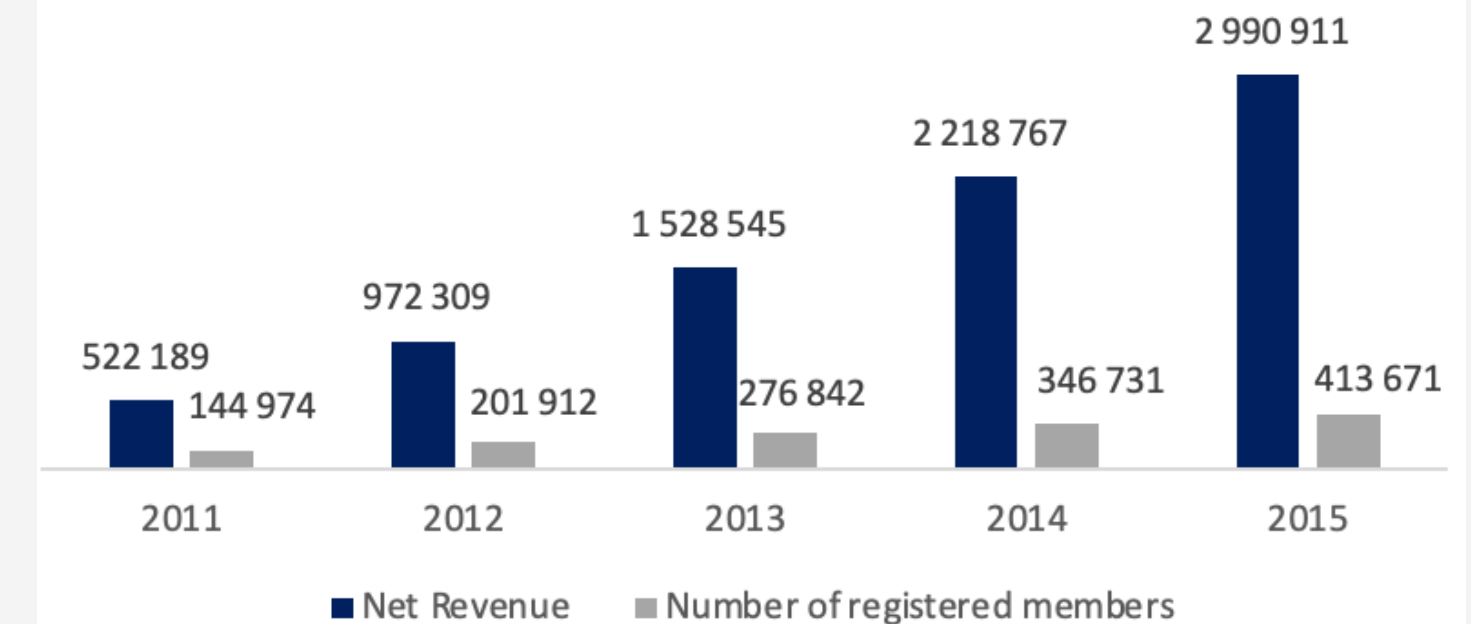

Revenue Vs Registered Members y-o-y growth ⬇
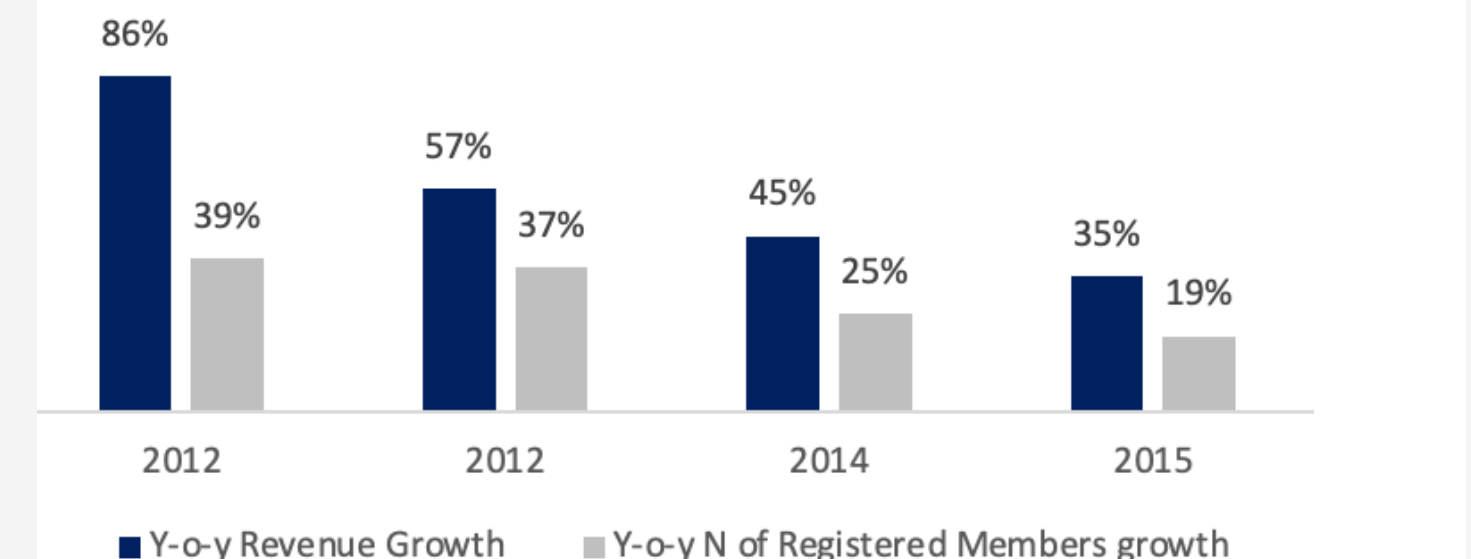
While LinkedIn's Revenue grows at CAGR 55% and number of registered members at CAGR 30% (2011-2015), its y-o-y revenue and registered members growth slowed down.
Average Working Capital Turnover Ratio is 1.07, which means that LinkedIn is not in a strong position to support its sales and growth.

LinkedIn Post IPO Analysis

1) Additional Paid in Capital, 'USD 000
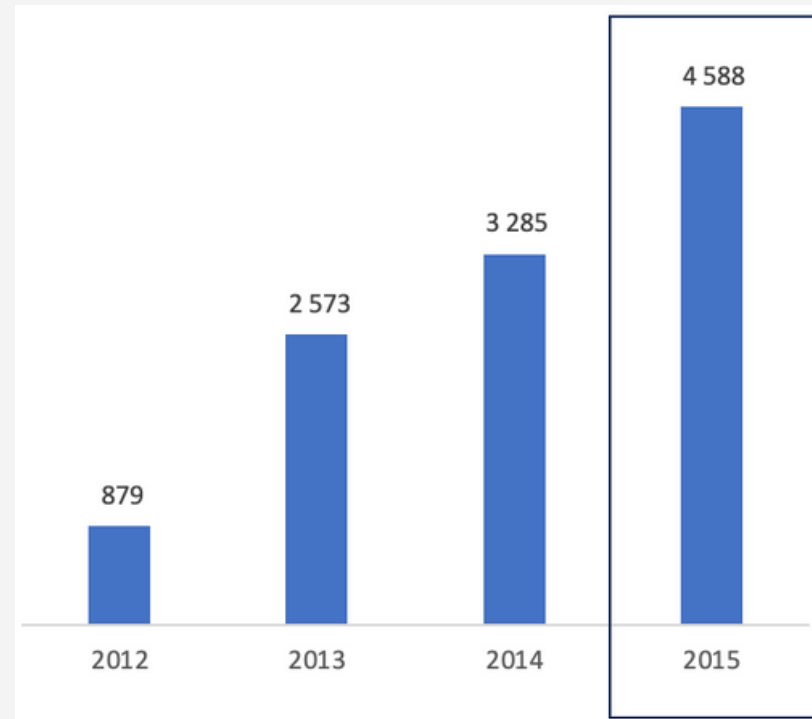
Paid-in capital is the total amount of cash that a company has received in exchange for its common or preferred stock issues.

It can be assumed that LinkedIn raised the capital through share issuance in order to acquire Lynda.com.

2) Lynda.com acquisition by LinkedIn

In April 2015 LinkedIn announced USD 1.5 billion acquisition of online education company Lynda.com.

LinkedIn believes that the acquisition of Lynda.com positions the company to be able to further expand on long-term content strategy, and to realize our vision of building the world's first economic graph.

Considering LinkedIn decreasing y-o-y revenue and registered customer growth, this acquisition was a strategic measure to continue delivering on the growth strategy.

3) Lynda.com acquisition outcome

In 2015, LinkedIn had an operating loss of $214.7 million driven by increases in headcount-related expenses of $636.2 million as LinkedIn hired additional employees to support the growth in our business. LinkedIn also had an increase of $183.5 million in depreciation and amortization related to intangible assets from our acquisition of Lynda.com, build out of our data centers, leasehold improvements as we lease additional facilities to accommodate our headcount growth, and capitalized website and internal-use software.

LinkedIn EBIT margin decreased from 5% in 2011 to -5% in 2015. Net Profit margin decreased from 2% in 2011 to -6% in 2015.
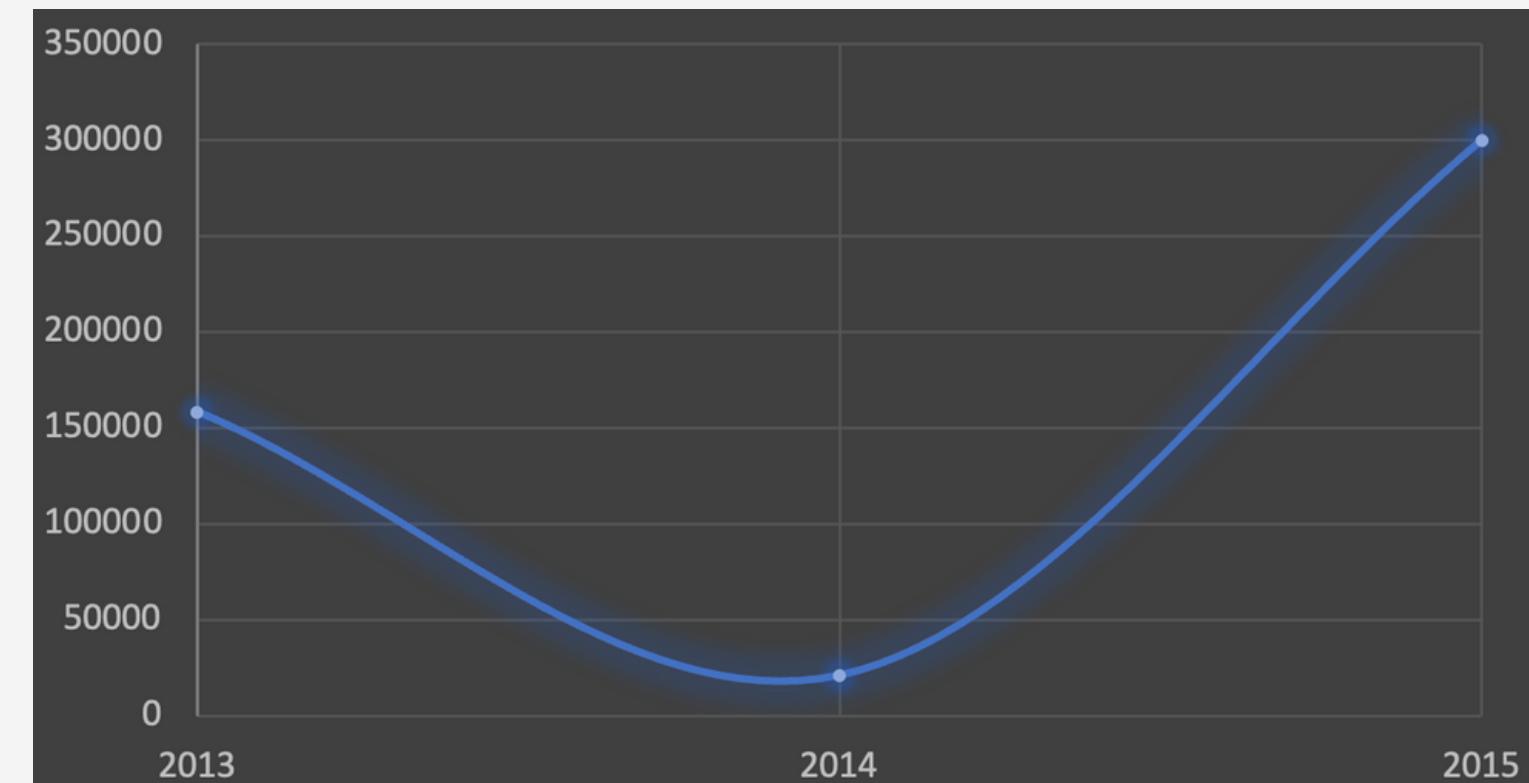
2002	2011	2015	2016
LinkedIn incorporation	LinkedIn IPO	LinkedIn acquired Lynda.com	Microsoft acquired LinkedIn
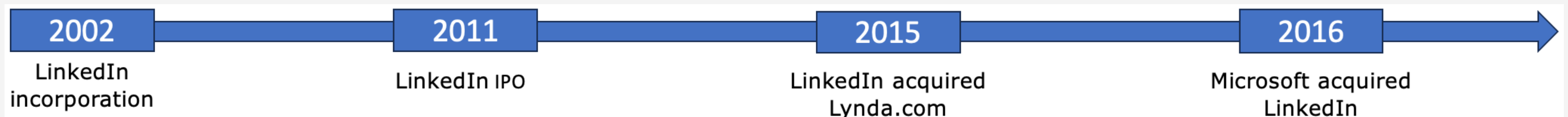
LinkedIn Post IPO Analysis

	Year Ended December 31,		
	2015	2014	2013
		(in thousands)	
Reconciliation of Free Cash Flow:			
Cash flows provided by operating activities	$ 806,975	$ 568,951	$ 436,473
Purchases of property and equipment	(507,246)	(547,633)	(278,019)
Free cash flow	$ 299,729	$ 21,318	$ 158,454

Overall Free Cash Flow is **UP** for 2013-2015 having considerable increase from 2014 to 2015

(21 318 - 158 454) / 158 454 = **- 87** % ⇒ Fell 87% in 2014

(299 729 - 21 318) / 21 318 = **1 306** % ⇒ Grew 1 306% in 2015

CAGR = (299 729 / 159 454) ^ (½) -1 = **0.37** ⇔ **37%**

Economic Balance Sheet

III - Fixed Assets	I - Shareholders Equity
Tangible:	**Equity :**
1047.01 + 1507.09 =	
2554	**4873.82**
Intangible:	
373.09	
IV- Working Capital requirement	II - Net Financial Debt
Current Assets - Current Liabilities:	Long Term + Short Term - Cash: 1126.53 + (162.18 + 0) - 546.24 =
3935.09 - 1188.08 =	
2746.92	**742.47**
CAPITAL EMPLOYED **5674.11**	**INVESTED CAPITAL** **5616.29**

Difference of 57.82 (around 1%) ⇒ can be explained by approximation errors

LinkedIn's share price after IPO

LinkedIn

LinkedIn's Share Price Since 2011

Microsoft to acquire LinkedIn for $196 per share

2011
IPO of LinkedIn at $45 per share

2016
MSFT acquires LNKD at $196 per share

CAGR
= (196/45) ^ (⅕) - 1 = 0.3422
<=> **34.22%**

Conclusion 1

Although LinkedIn might have
some difficulties when
expanding...
...we still believe that investing
in their IPO was a
VERY GOOD OPPORTUNITY

LinkedIn

Acquisition documents

In a traditional merger, where the target is public, we rely on two documents:

1. **The definitive agreement**: The press release announcing the deal is usually distributed to media outlets and is on both companies' websites. When a public company is acquired, it will immediately file to the SEC an 8-K that contains the press release. In addition, it will typically file the full merger agreement
2. **The merger proxy**: Because LinkedIn must get shareholder approval for this transaction, it must file a proxy statement with the SEC. When the vote concerns a merger, the proxy is called a **merger proxy,** If the proceeds include stock, the proxy is called a **merger prospectus**. The proxy will go on to disclose a lot of details around deal negotiations, company projections, treatment of dilutive securities and other details that are more thorough and more clearly laid out than those in the legal jargon-heavy merger agreement.

Both the merger agreement and proxy lay out in more detail the terms described in the press release.

The Microsoft-LinkedIn acquisition agreement details

LinkedIn

Conditions that would trigger the break-up fee

A breakup fee refers to a payment a seller owes a buyer should a deal fall through due to reasons explicitly specified in the merger agreement.

For example, when Microsoft acquired LinkedIn in June 13, 2016, Microsoft negotiated a $725 million breakup fee should any of the following happen:

1) LinkedIn Board of Directors changes its mind
2) More than 50% of company's shareholders don't approve the deal
3) LinkedIn goes with a competing bidder (called an "interloper")

There's good reason for buyers to insist on a breakup fees: The target board is legally obligated to try to get the best possible value for their shareholders. That means that if a better offer comes along after a deal is announced (but not yet completed), the board might be inclined, due to its fiduciary obligation to target shareholders, to reverse its recommendation and support the new higher bid. The breakup fee seeks to neutralise this and protect the buyer for the time, resources and cost already poured into the process. This is particularly acute in public M&A deals where the merger announcement and terms are made public, enabling competing bidders to emerge. That's why breakup fees are common in public deals, but not common in middle market deals.

LinkedIn

- **No-shop provisions** Recall how the press release disclosed that a breakup fee would take effect if LinkedIn ultimately consummates a deal with another buyer. The merger agreement has a section called "No Solicitation," commonly known as a no-shop, that prohibits LinkedIn from seeking other bids. Microsoft, like most acquirers, was weary of other suitors (particularly of Salesforce) and sought to protect itself.

- **Material adverse change (mac)** Another protection for the buyer is material adverse change (MAC), which gives the buyer recourse should the seller's business go completely off the rails prior to the deal closing. Microsoft included a MAC (as do virtually all buyers) in the merger agreement. The MAC gives the buyer the right to terminate the agreement if the target experiences a material adverse change to the business.

- **Exchange ratios? Not here** In the Microsoft-LinkedIn deal, Microsoft used its cash to acquire LinkedIn stock. We know this because the press release, merger agreement and proxy all describe how Microsoft is buying LinkedIn shares. The proxy lays out clearly that at closing, LinkedIn shareholders will receive $196 for each of their shares. However, there is another way Microsoft could have acquired LinkedIn: It could have acquired all LinkedIn's assets and assumed all liabilities. Furthermore Microsoft paid for LinkedIn in cash, butsometimes companies will use their own stock as currency. When a buyer pays for a target with its own stock, there's another consideration: What if the acquirer share price drops between the announcement and closing date? To address this, deals are usually structured with a **fixed exchange ratio** with the ratio fixed until the closing date. Alternatively, deals can be structured with a **floating exchange ratio**.

Microsoft Acquisition of LinkedIn

LinkedIn

EBITDA (2015) : $779 804 000
EV (2015) : 779 804 000 * 20 = $15 596 080 000
Net Debt (2015) = $743 000 000
Market Capitalisation (2015) : $14 853 080 000
Price / Share (2015) : $14 853 080 000 / 136 000 000

$\Rightarrow$ $110 / Share

< $131.08/ Share (LNKD share price)
< $196 / Share (MSFT price at acquisition)

Period Ending:	2015 31/12	2014 31/12	2013 31/12	2012 31/12
Total Revenue ⌄	2990.91	2218.77	1528.55	972.31
Revenue	2990.91	2218.77	1528.55	972.31
Other Revenue, Total	-	-	-	-
Cost of Revenue, Total	418.86	293.8	202.91	125.52
Gross Profit	2572.05	1924.97	1325.64	846.79
Total Operating Expenses ⌄	3141.85	2182.63	1480.73	915.45
Selling/General/Admin. Expenses, Total	1526.86	1115.7	747.67	452.9
Research & Development	775.66	536.18	395.64	257.18
Depreciation / Amortization	420.47	236.95	134.52	79.85
Interest Expense (Income) - Net Operating	-	-	-	-
Unusual Expense (Income)	-	-	-	-
Other Operating Expenses, Total	-	-	-	-
Operating Income	-150.94	36.13	47.81	56.86
Interest Income (Expense), Net Non-Operating	-55.26	-4.99	1.4	0.41
Gain (Loss) on Sale of Assets	-	-	-	-
Other, Net	-8.53	0.06	0.02	-0.16
Net Income Before Taxes	-214.73	31.2	49.23	57.11
Provision for Income Taxes	-49.97	46.52	22.46	35.5
Net Income After Taxes	-164.76	-15.32	26.77	21.61
Minority Interest	-1.38	-0.43	-	-
Equity In Affiliates	-	-	-	-
U.S GAAP Adjustment	-	-	-	-
Net Income Before Extraordinary Items	-166.14	-15.75	26.77	21.61
Total Extraordinary Items	-	-	-	-
Net Income	-166.14	-15.75	26.77	21.61
Total Adjustments to Net Income	-	-	-	-
Income Available to Common Excluding Extraordinary Items	-166.14	-15.75	26.77	21.61
Dilution Adjustment	-	-	5.04	7.78
Diluted Net Income	-166.14	-15.75	31.81	29.39
Diluted Weighted Average Shares	129.02	122.8	141.33	153.45
Diluted EPS Excluding Extraordinary Items	-1.29	-0.13	0.23	0.19
DPS - Common Stock Primary Issue	-	-	-	-
Diluted Normalized EPS	-1.29	-0.13	0.23	0.19

	2015	2014	2013 (in thousands)	2012
Reconciliation of Adjusted EBITDA:				
Net income (loss)	$ (164,761)	$ (15,320)	$ 26,769	$ 21,610
Provision (benefit) for income taxes	(49,969)	46,525	22,459	35,504
Other (income) expense, net	63,788	4,930	(1,416)	(252)
Depreciation and amortization	420,472	236,946	134,516	79,849
Stock-based compensation	510,274	319,133	193,915	86,319
Adjusted EBITDA	$ 779,804	$ 592,214	$ 376,243	$ 223,030

Microsoft Acquisition of LinkedIn

We believe that the LinkedIn acquisition was:
VERY EXPENSIVE / OVERVALUED

Microsoft is paying $196 per share in an all-cash deal that represents a 50% premium on LinkedIn's share price. The price Microsoft is offering is a major validation for the company's future growth prospects, after LinkedIn's shares tanked by more than 40% in February.

Source:
https://www.forbes.com/sites/parmyolson/2016/06/13/microsoft-buys-linkedin-26 -2-billion-biggest-acquisition-to-date/

Microsoft acquires LinkedIn		
	Share Price	**Premium**
Offer price	196	49.53%
Unaffected price	131.08	-

Reasons for buy it at premium

LinkedIn

Extend its market into the social field

Strategy
transformation

Strengthening Azure and cloud
services

Conclusion 2

Although the LinkedIn acquisition price can be considered as **overvalued**, their acquisition has allowed Microsoft to expand its offerings, enhance productivity tools, and tap into the professional networking space, ultimately positioning the company for **future growth and success**.

Speaking of future growth ...

To go

LinkedIn

further

```python
import yfinance as yf
import pandas as pd
import numpy as np
from sklearn.linear_model import LinearRegression
from sklearn.model_selection import train_test_split
from sklearn.metrics import mean_squared_error, r2_score
import matplotlib.pyplot as plt


# Step 1: Collect historical stock price data for Microsoft
msft = yf.Ticker("MSFT")                                                    # Ticker symbol for Microsoft
data = msft.history(period="1y")                                            # Retrieve 1-year historical data

# Step 2: Data preprocessing
data['Date'] = pd.to_datetime(data.index)                                   # Convert index to datetime object
data['ElapsedDays'] = (data['Date'] - data['Date'].min()).dt.days           # Calculate elapsed days from starting date
X = np.array(data['ElapsedDays']).reshape(-1, 1)
y = np.array(data['Close'])

# Step 3: Split the data into training and testing sets
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=42)

# Step 4: Train the linear regression model
model = LinearRegression()
model.fit(X_train, y_train)

# Step 5: Make predictions
y_pred = model.predict(X_test)

# Step 6: Evaluate the model
#mse = mean_squared_error(y_test, y_pred)
#r2 = r2_score(y_test, y_pred)
#print("Mean Squared Error:", mse)
#print("R-squared Score:", r2)

# Step 7: Visualize the predicted stock prices
fig, ax = plt.subplots(1, 1, figsize = (12, 6))
ax.scatter(X_test, y_test, color='blue', label='Actual')
ax.plot(X_test, y_pred, color='red', label='Predicted')
ax.set_xlabel('Elapsed Days')
ax.set_ylabel('Stock Price')
ax.set_title('Stock Price Prediction - Microsoft')
ax.legend()
```
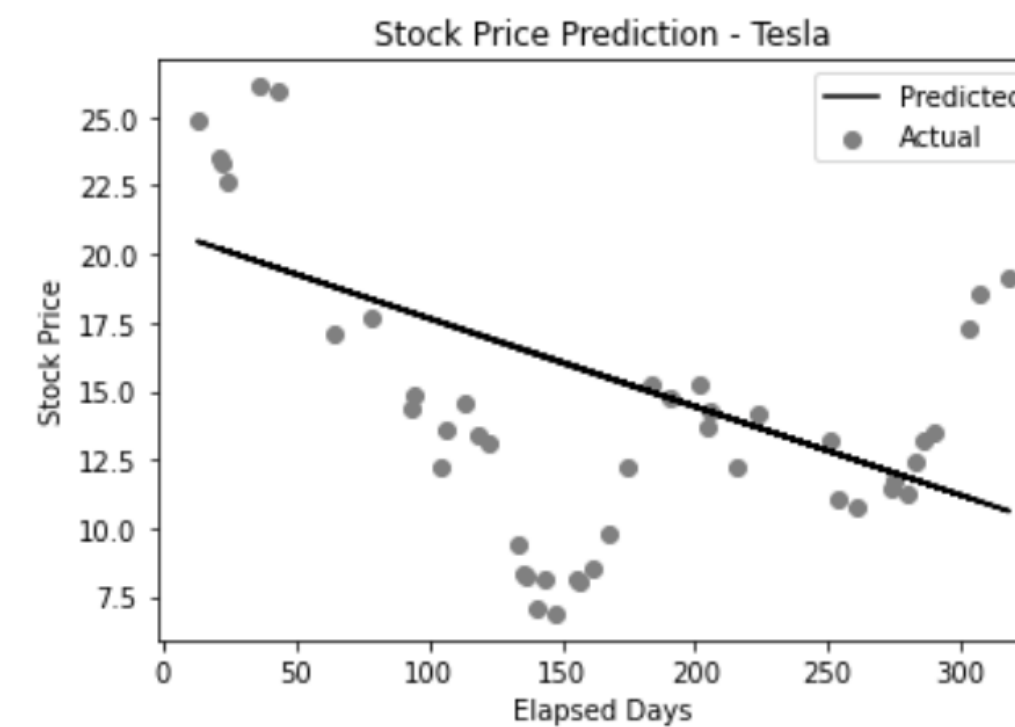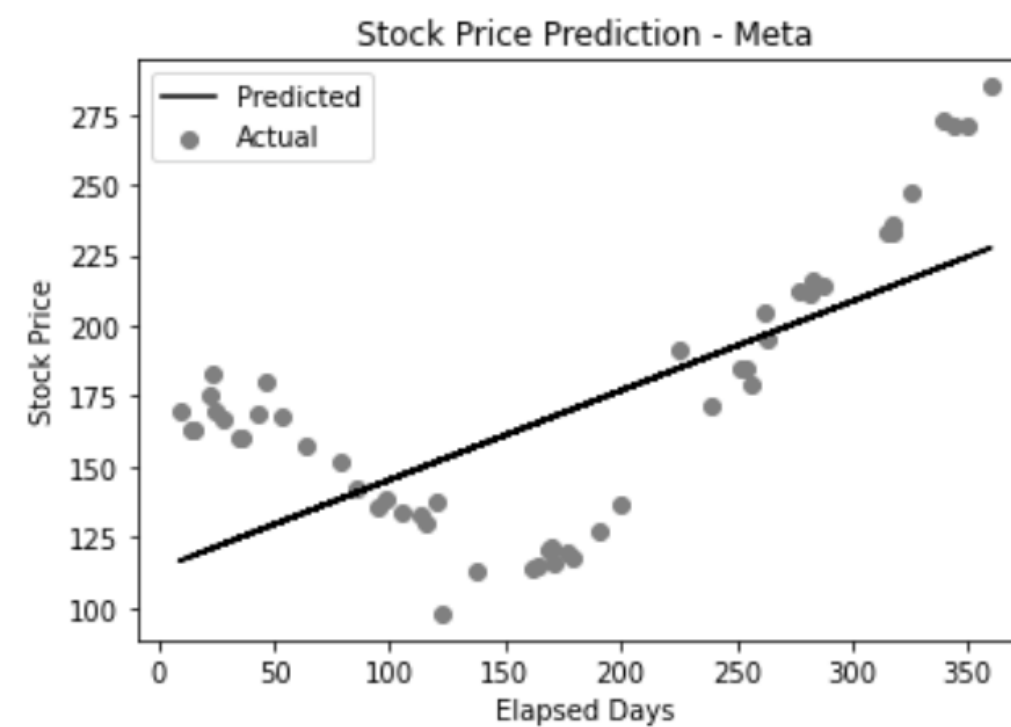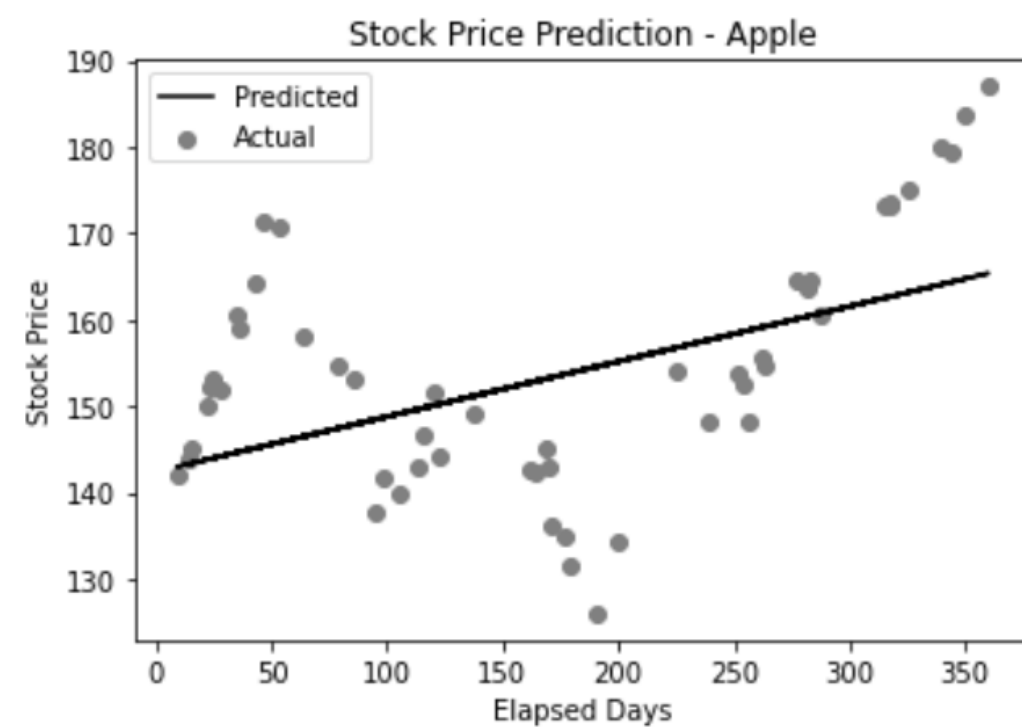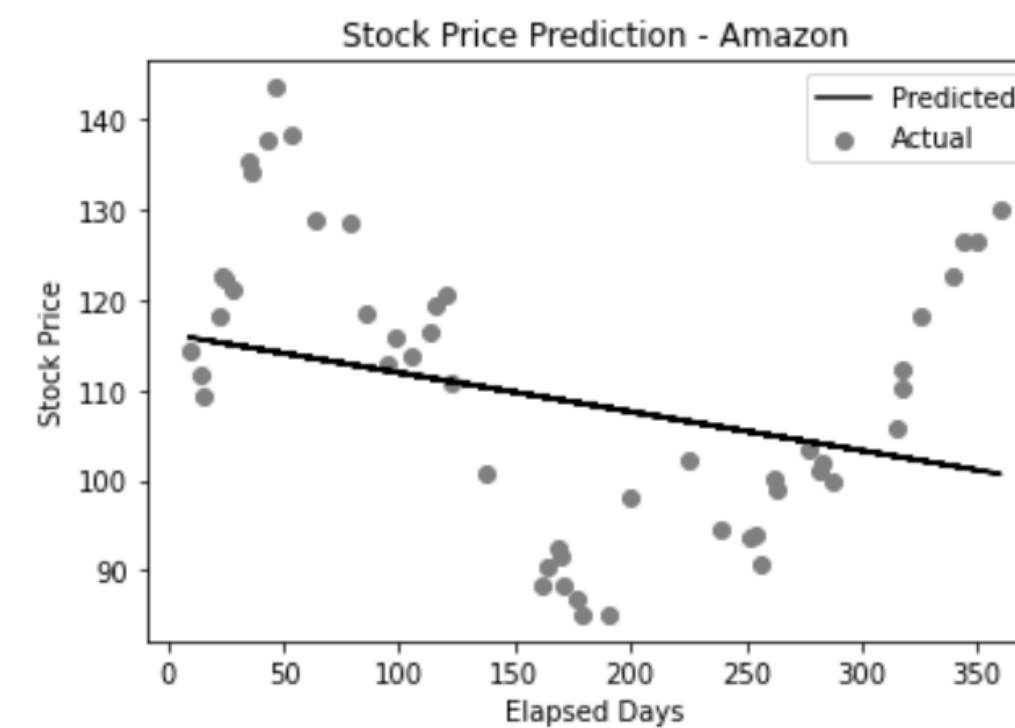
Microsoft stock's 'forecast'
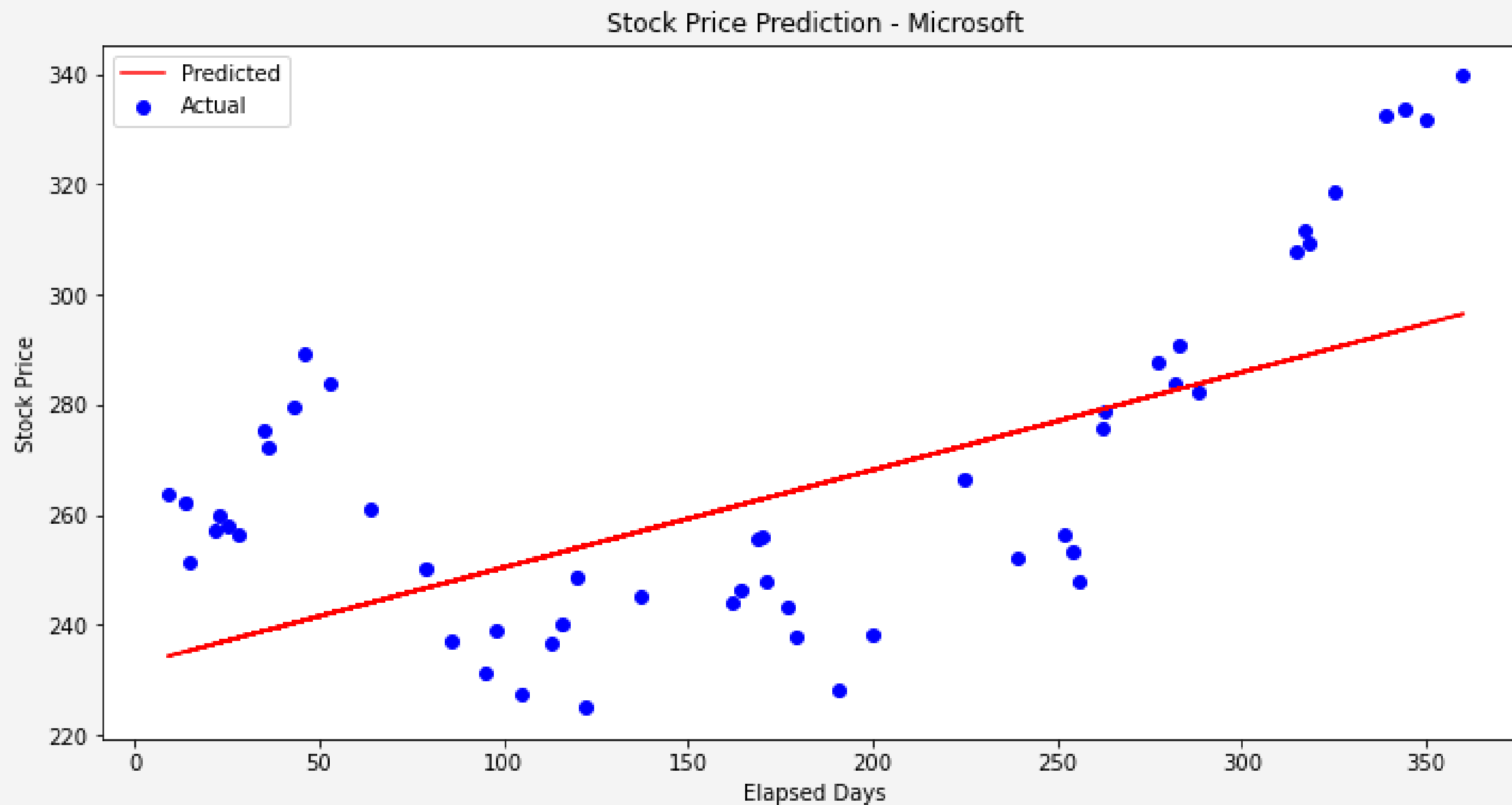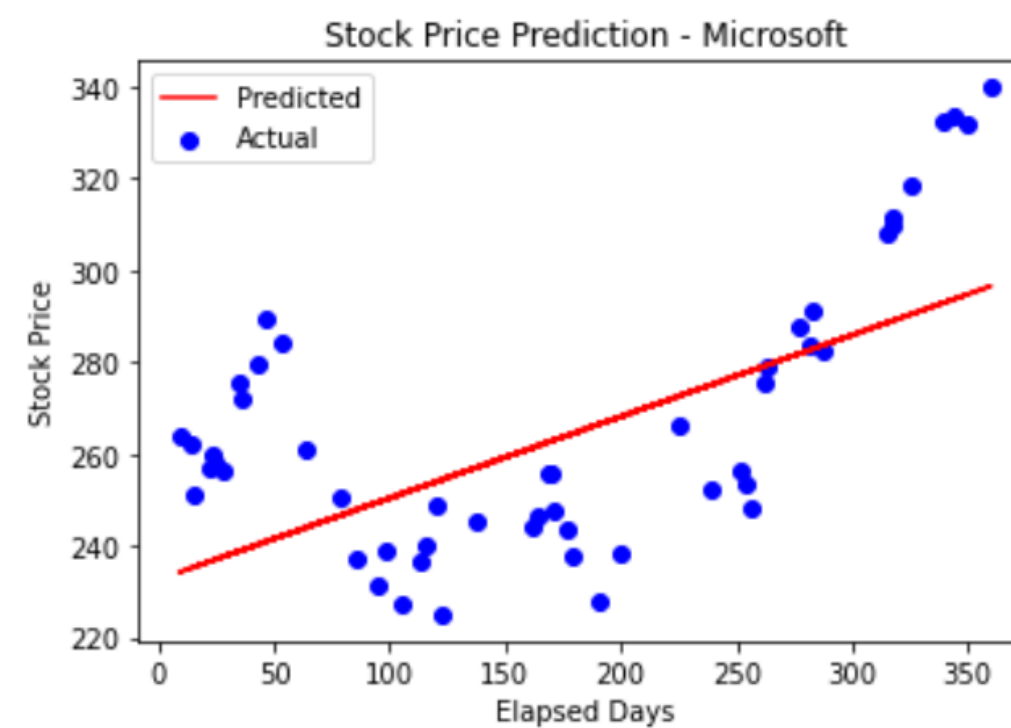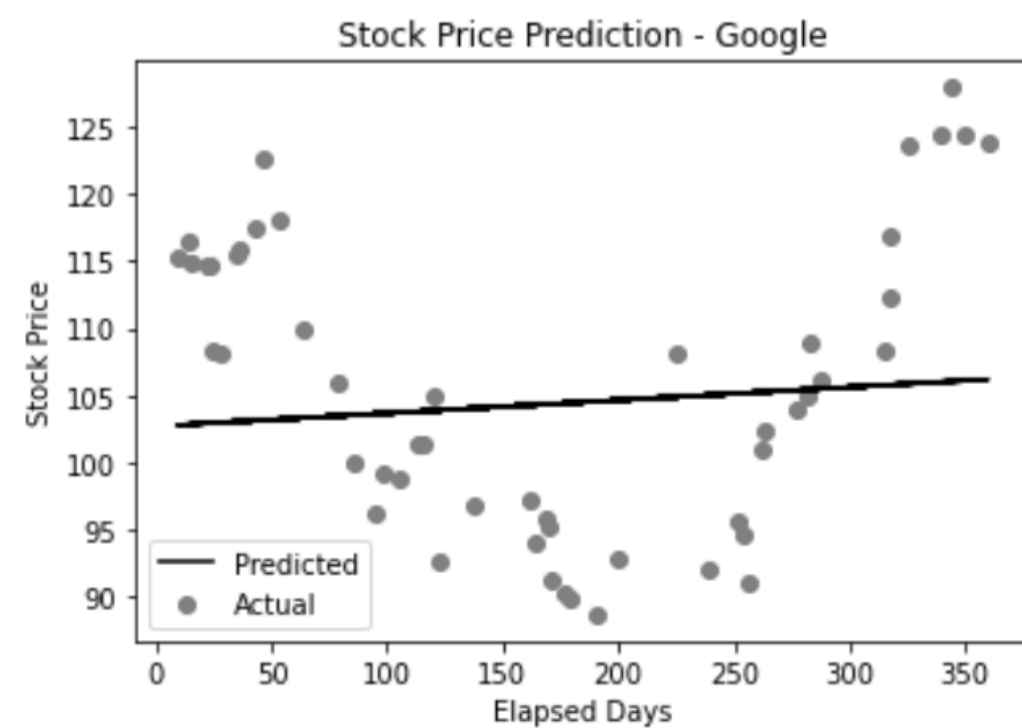
Thank you for your attention!