

VALUATION AND ANALYSIS OF E-BUSINESS: WITH SPECIAL REFERENCE TO AMAZON AND EBAY

Ujjwal Raj*, Abhinav Pandey**

Abstract For anyone involved in E-business and connected to the field of corporate finance, understanding the mechanism of an online business and its valuation is an indispensable requisite. This is not only because of the importance of valuation in acquisitions and mergers but also because the process of valuing a business and its units helps identify sources of economic value creation and destruction within the company.

Similarly, this value creation is affected by many a factors which are non-financial in nature and do not get incorporated while valuation. The firm, further goes through many a common mistake too and these are the result of relying upon the traditional practices and the methods.

Hence, need is to find out such factors and problematic contents that distorts the valuation and misinterpretation of the business and its financial position. The vigilance and expertise along with experience are the characteristics required to be with the financial analyst so as to avoid such blunders in financial analysis.

Keywords: E-Commerce, Valuation, Discounted Cash Flow (DCF) Analysis, Multiples Method, Market Valuation, Comparable Transactions Method

INTRODUCTION

Electronic Commerce (E-Commerce) can be defined loosely as doing business electronically. E-Commerce includes electronic trading of physical good and of intangibles such as information. This encompasses all the trading steps, such as online marketing, ordering, payment and support for delivery. E-Commerce is also a convenient channel to provide services, such as after sales support or online legal advice, etc. Furthermore, E-Commerce also includes electronic support for collaboration between companies, such as collaborative design.

An explosive development in E-Commerce is seen during past 20 years. Increased Internet accessibility has made E-Commerce much more accessible and easily usable at lower cost.

Thus, E-Commerce on the basis of the increased Internet accessibility is set to become a very important way of doing business. The emergency of E-Commerce re-constructs the traditional value chain and brings companies various innovative choices of business models.

Big or small, business valuation is important for proprietors, so that they can better use some of these valuation methods to speak the language of finance-types. There are a lot of factors that go into determining the valuation of a company. Certainly revenue is a big factor but it is not the only factor in the valuation of a company.

Consider a situation where half of the business ideas are good and other half are bad. If the shareholders or the investors cannot differentiate between the two, entrepreneurs with bad ideas will try to prove their bad ideas as the good ones and try to allure the investors to put-in money. Value is created when the business earns a return on the total investment made in excess to the cost of capital.

Now-a-days, where every aspect of economic activities is going on an electronic platform and the advent of rapid technological changes and innovations is moulding the ways of doing the business, i.e., from traditional “Brick and mortar” to “Brick and click” model of business and hundreds of websites being created daily, it has become a need of the time to value the business as mergers and takeovers are taking place. The big fishes are eating the small ones.

* Department of Management, Dayalbagh Educational Institute, Uttar Pradesh, India.

** Assistant Professor, Department of Management, Faculty of Social Sciences, Dayalbagh Educational Institute, Uttar Pradesh, India. Email: abhinavpandey.bits@gmail.com

Valuation of an online and offline business does not differ that much significantly but still there are few differences in their valuation. The cost structure, logistics, business strategies and market places etc. differ significantly for both types of businesses.

Of course, the utility of business valuation methods is not limited to only large corporations and investment bankers.

Start-ups and small businesses would benefit from knowing a bit about how business valuation works and perhaps could even consider a course in small business valuation. Alternatively, those in need of a slightly more advanced and thorough explanation and step-by-step walkthroughs will want to take a look at this financial models and valuation for beginners that need more corporate finance or investor-type knowledge.

REVIEW OF LITERATURE

Sr. No.	Title	Researcher(s)	Year	Summary
1.	Company valuation methods: The most common errors	Pablo Fernandez	February 2007	<p>In this paper, the researcher describes the four widely used company valuation methods: Balance sheet methods, income statement methods, mixed methods and cash flow discounting methods and finds that the cash flow discounting methods are conceptually correct.</p> <p>The errors found out are related to: <i>discount rate calculation, forecasting the cash flows, debt-equity ratio used in calculating WACC and Valuation, residual value calculation, taking cash-in-hand as the cash flows, mixing the value with price etc.</i></p>
2.	A study on the value and impact of B2B E-commerce: The case of web-based procurement	Chandrasekar Subramaniam and Michael J. Shaw Department of Business Administration, University of Illinois at Urbana-Campaign, Urbana, USA	August 2004	<p>This paper uses the case of Web-based B2B procurement system and focuses on proposing a framework to quantify and measure the value of B2B E-commerce system and identify the factors that determine this value.</p> <p>There are two type of factors identified: <i>Process type</i>: structured processes accounted for 55% of total volume of procurement and unstructured for 45%. The total cost-savings from using web for unplanned procurement is significantly higher than for planned procurement. <i>Process complexity</i>: by plotting cost-savings for the different types of unplanned transactions, it is found that moderately complex items, i.e., MRO, office equipment and software and services, have the potential to return higher benefits than simple or more complex items.</p>
3.	Valuing internet businesses	Chris Higson and Johri Briginshaw London Business School	2000	<p>In this article, the authors argue that the old rules still apply, i.e., the only way to test the reasonability of new economy stock prices is to model the company's ability to generate cash in the future.</p> <p>This analysis also allows the development of a view about the performance that would be needed to justify current valuations. The analysis suggests that many internet valuations are stretched. Investors are focused on growth prospects for the firms, but more concurrent and realistic analysis about future profitability has been neglected in what will be an increasingly competitive world. Further, authors say that the investors' assumptions that the new economy businesses will not require assets are unrealistic in many cases.</p> <p>Finally the article concludes that because some new economy stocks are overvalued, there is a risk of misdirection of productive resources.</p>

Sr. No.	Title	Researcher(s)	Year	Summary
4.	Valuing young, start-ups and growth companies: Estimation issues and valuation challenges.	Aswath Damodaran Stern School of Business, New York University	May 2009	<p>Young companies are difficult to value for a number of reasons. Some are start-up and idea businesses, with little or no revenues and operating losses.</p> <p>Even those young companies that are profitable have short histories and most young firms are dependent upon private capital, initially owner savings and venture capital and private equity later on.</p> <p>In this paper, the researcher examines how best to value young companies. He uses a combination of data on more mature companies in the business and the company's own characteristics to forecast revenues, earnings and cash flows.</p> <p>He also establishes processes for estimating discount rates for private capital and for adjusting the value today for the possibility of failure. In the process, the argue takes place is that the venture capital approach to valuation that is widely used now is flawed and should be replaced.</p>
5.	Resource-based analysis of E-commerce business value	Marta Aranyossy Department of Enterprise Finances E-Business Research Centre, Corvinus University of Budapest	September 2010	<p>The researcher focuses on exploring the existence and process of IT value creation on the Hungarian market.</p> <p>Further he focuses on E-Commerce investments and analyzes one outward facing aspect of corporate IT system. A correlation analysis between market share and capabilities comes out to be true in contrast with the profitability.</p>
6.	Operational drivers of business valuation in the E-commerce sector-focus on public companies that assume inventory risk	Adelin Trusculescu, Anca Draghici, and Caludiu-Tiberiu Albulescu Goetzpartners, Germany/Politehnica University of Timisoara, Romania	May 2015	<p>In this paper, the researchers talk about a shift in the valuation approach from revenue driven valuation to operational profitability driven.</p> <p>The article analyzes through regression analysis the current revenue and operating profitability based valuation levels of ten publicly listed inventory risk bearing companies in global E-Commerce sector against several key operating performance indicators.</p> <p>The research findings shows that the future expected revenue growth still represents the most important key operating performance indicator but valuations are increasingly driven by operating profitability and less by revenue of a company.</p> <p>Further suggestion was made that these findings are especially important to the numerous entrepreneurs in the E-Commerce sector that are looking to sell their companies and which could face the challenge of having to implement a major strategic shift before starting a sales process and implicitly selling the company at a high business valuation.</p>

RESEARCH METHODOLOGY

Need of the Study

Valuation is done by each and every business and so does by online businesses. The value of a business is not just affected by its financial performance rather multiple of factors affect

this valuation. Similarly, valuation process is not error free. An analyst does commit some mistakes that are the result of common wrong practices, understanding and ease of doing analysis. Thus, the need of extracting out these common factors and errors arises and hence, the study is carried out for this.

Objectives of the Study

- To measure the value of E-business.
- To explore the factors affecting the valuation of the business.
- To explore the common errors in valuation of E-businesses.

Research Design: The study will be analytical in nature.

Scope of the Study: The study will be carried out for online businesses operating in India.

Sample size: The sample size will be two E-business players, namely; Amazon and Flipkart.

Data Collection: The data will be collected from the company annual reports and government web sources and publications.

Analytical tools: The data collected will be analyzed with the help of the methods; (I) Discounted Cash Flow (DCF) Analysis (II) Multiples Method (III) Market Valuation (IV) Comparable Transactions Method.

Presentation tools: tables, bar graphs, charts etc.

Business Valuation

Businesses need to be valued for a number of reasons such as their purchase and sale, obtaining a listing, inheritance tax and capital gains tax computations. Generally, valuation difficulties are restricted to unlisted companies because listed companies have a quoted share price. However, even listed companies can present valuation challenges for example when one is trying to predict the effect of a takeover on the share price.

Whenever a company is bought, what the new owners have a right to, depends on the stake they hold. Majority holders have access to their share of earnings and, because they can opt for a winding up, their share of net assets of the company.

Minority holders have access to the dividends the majority decides to pay and a share of the net assets if the majority decides to wind up the company.

Therefore, because minority holders have little power and no control, a 20% share of a company should be less than 20% of its total value. Conversely, an 80% share should be worth more than 80% of the full value of the company. Majority holders should be prepared to pay a premium for control.

Common Business Valuation Methods

- Discounted Cash Flow (DCF) Analysis
- Multiples Method

- Market Valuation
- Comparable Transactions Method

The above methods are based on some understanding of accounting. Finance people and potential investors will generally look at the financial statements to evaluate a company including: The Balance Sheet, the Income Statement, the Statement of Cash Flows, and the Statement of Retained Earnings, so it certainly helps to know what they are.

Discounted Cash Flow (DCF)

This is the most thorough way to calculate the value of a company, a classic tool. This method has two general approaches:

- Weighted Average Cost of Capital (WACC)
- Adjusted Present Value (APV)

These work by calculating the Free Cash Flows (FCF) of a company as well as the net present value (NPV) of these Free Cash Flows.

WACC

Here is the formula to calculate the discount rate (r) of the Weighted Average Cost of Capital (WACC). It uses the target equity ratio $\frac{E}{(D+E)}$ and the target debt ratio $\frac{D}{(D+E)}$.

The formula for the discount rate (r) of the Weighted Average Cost of Capital (WACC) is:

$$r_{dWACC} = \frac{E}{(D+E)}(r_e^L) + \frac{D}{(D+E)}(1-t)(r_D)$$

Where:

- D = Market value of debt
- E = Market value of equity
- r_D = Discount rate for debt = Average interest rate on long-term debt
- r_e^L = Discount rate for leveraged equity (calculated using CAPM)

The formula for the Capital Asset Pricing Model (CAPM)

$$r_e^L + r_f + \beta_L(r_m - r_f)$$

Where:

- r_f = Risk-free rate of return for a theoretical investment without risk
- r_m = Expected market return
- $(r_m - r_f)$ = Excess market return
- β_L = Leveraged Beta (Beta is a measure of Volatility/Risk)

Note: The risk-free rate comes from the Treasury bond rate at the time where the projections are being considered

ADJUSTED PRESENT VALUE (APV)

The adjusted present value uses the Net Present Value (NPV), which calculates on the basis of being financed only by equity. After the NPV is determined, APV then factors in the benefits of financing by taking into account the present value (PV) of any financing benefits like tax shields such as those provided by deductible interests.

The NPV formula is:

$$\frac{FCF_1}{(1+r_d)^1} + \frac{FCF_2}{(1+r_d)^2} + \frac{FCF_3}{(1+r_d)^3} + \dots + \frac{FCF_n}{(1+r_d)^n}$$

Where:

- FCF = Free Cash Flows
- r_D = Discount rate for debt = Average interest rate on long-term debt

(Hiller, 2016) Once you know the FCF apply the CAPM calculated with the unleveraged beta.

$$r_e^U = r_f + B^U(r_m - r_f)$$

Where:

r_f = Risk-free rate of return for a theoretical investment without risk

r_m = Expected market return

$(r_m - r_f)$ = Excess market return

B^U = Unleveraged beta

Then adjust for debt and compare the differences with and without the debt shield.

As a Rule of Thumb for business valuation:

Debt Tax Shield = (Corporate Tax Rate) × (Weighted Average Interest Rate) × (Total Debt)

Debt Tax Shield = APV without DTS × (Tax rate × Long-term Debt Rate)

MULTIPLES METHOD

Price-to-Earnings Multiples

Also known as P/E ratios, Price-to-Earnings Multiples compare a company's market cap to its annual income. This is the most commonly used multiple. To ascertain the value

of the company, its current equity value is divided by its recent net income to ascertain the price-to-earnings multiple.

EBITDA Multiples

EBITDA stands for Earnings before Interest Taxes Depreciation and Amortization, and it's a fancy way to say un-taxed and un-adjusted profits. Once you have this amount calculated in a standard way, you can factor in the cost of outstanding debts to ascertain enterprise value and then also look at which multiples are used for other companies in the industry to determine equity value. As a multiples method, the total calculated enterprise value is divided EBITDA to determine the EBITDA multiple.

Earnings Multiples

Another method utilizes the earnings multiplier. This method is a good way to assign value to a stable and fairly predictable business that is about to make an IPO. It bases price value on multiples of the business's earnings potential and so prospective buyers have the ability to translate the purchase price into expected earnings and projected return on investment (ROI). It also has the distinct benefit of being a simpler basis to compare different businesses across industries and locations and also provides a more tangible and simpler basis by which to compare different businesses in different industries or locations. While relatively easy in practice, there are some challenges with this method. While earnings data is calculated from historical financials, the calculation needs the earnings to be precisely defined and calculated in the same way. Furthermore, you need to apply the right multiplier to earnings. Due to business risk, the multipliers can vary widely.

Comparable Transactions Method

Another type of valuation that relies to a certain extent on multiples is the comparable transactions methods. To use this method, you look at comparable transactions in that industry paralleled to a business with a similar model and then compare them by the relevant ratios and multiples such as Enterprise Value-to-EBITDA.

With the comparable transactions method, you are looking for a key factor that helps to determine the valuation. To do this you compare the financials of similar companies and try to find a multiple that closely predicts the valuation. Once you know that, you can use that multiple to value the company being considered.

Factors that Influence the Multiple

Evaluating a business acquisition is a complex task, and as a result there are many factors that influence the multiple of a business. While there is no definitive list of variables, there are certainly three key focus areas, which are the transferability, sustainability and scalability of revenue. Any operational or market factor that directly or indirectly impacts these core drivers will influence the multiple.

We take into account a number of factors on valuation scorecard to derive the value of a website or internet business.

Below are some of the major ones which specifically drive the valuation of an E-business and should be taken into account by the analysts and valuation experts.

Financials

- How old is the business?
- How has gross and net income been trending for the last 1–3 years? The last few months?
- Can a new firm/business replicate the cost structure? Can they make any savings?
- Can all of the revenue streams be transferred to a new owner/business?
- How stable is the earning power e.g., are CPMs in this niche on the decline/hard to replace?
- Is the owner an influence on the earnings power (i.e., owner-specific earning relationships)?

Traffic

- What percentage of traffic comes from search? (i.e., what percentage is potentially at risk from search engine algorithm changes)
- How secure are the search rankings? What is the mix of short and long tail?
- How has traffic been trending for the last year? The last few months?
- What is the industry trend?
- Where does the referral traffic come from? Is it sustainable?

Operations

- How much of the owner's time is required to run the business?
- What are the owner's responsibilities? Are there high technical requirements?
- What technical knowledge is required to run or manage the business?
- Are there employees/contractors in the business and how are they managed?

Niche

- How competitive is the niche?
- What are the barriers to entry?
- Is the niche growing?
- What are the recent trends and developments in the niche?
- What expansion options are available?

Customer Base

- Where does the business get customers from?
- How much do customers cost to acquire?
- If subscription, what is the customer lifetime value and churn rate?
- If one-time, how active is the customer base? Are they re-ordering?
- Is it possible to remarket to the existing customers? Is there a mailing list?

Other

- Are there physical assets or specific regional responsibilities with the business?
- Are there any licensing requirements in order to run the business?
- Does it infringe in any trademarks?
- Does the business offer any unique advantages? (e.g., trademark)

With a sense of the relevant valuation drivers, prospective buyers can be much clearer about what to look for when appraising a business and what to seek information on from the seller. This is where a good broker is vital for asking the right questions of the seller. They will weed out companies before they even come to market and help you along the way.

DATA AND CALCULATION

The valuation for an E-business could be done from any of the discussed method but the financial statement has an important role in selecting a method for valuation. The discounted cash flow method could be a good one but it is only useful when the analyst precisely determine the free cash flows and the weighted average cost of capital (WACC).

Similarly, the market valuation could be done for companies listed on the stock exchange and their shares are being traded in the stock market. But what about the valuation of a firm which is neither listed on the stock market nor does it make profits. The valuation will also be done for the firms and business owner or the acquiring firm would need to know the value of such firms.

Hence, the **Net Worth** will be the estimation of the value of the business firm.

Calculation of Net Worth

The formula for calculating the net worth is:-

Equity share capital + preference share capital + Reserves and surpluses

Net worth = + undistributed profits – (undistributed losses + fictitious assets)

OR

Net worth = Total current assets + total fixed assets – Outside liabilities

The fictitious assets are excluded from the calculation of net worth for a firm as these are not exactly the assets for the business rather big revenue expenditures which are written off in parts and balance is carried to the assets side.

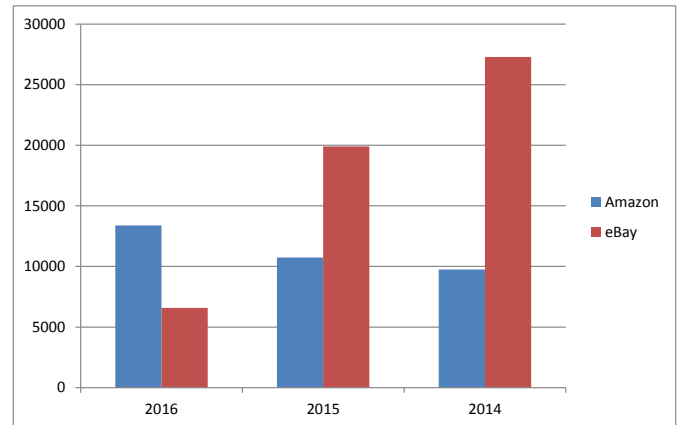
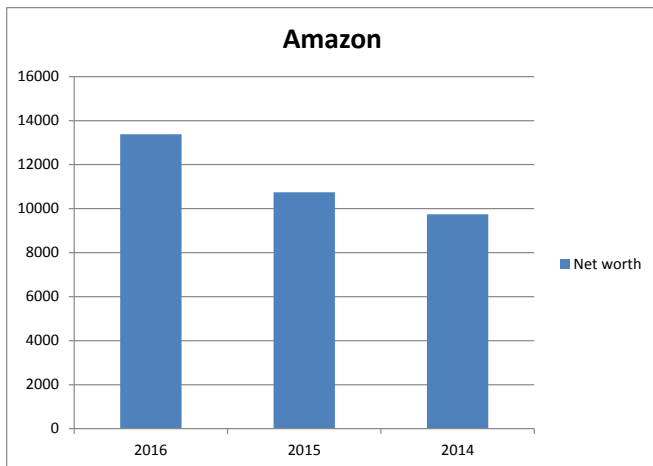
For Amazon Inc. (In million \$)

Particulars	2016	2015	2014
Cash and cash equivalents	15890	14557	8658
Marketable securities	3918	2859	3789
Inventories	10243	8299	7411
Accounts receivables	6423	5612	4767
Property and equipment	21838	16967	10949
Goodwill	3759	3319	2655
Other assets	3373	2892	1930
(A) Total assets	65444	54505	40159
Accounts payable	20397	16459	15133
Accrued expenses	10384	9807	6688
Unearned revenue	3118	1823	1159
Long-term debt	8235	8265	3191
Other long-term liabilities	9926	7410	4242
(B) Total outside liabilities	52060	43764	30413
Net worth (A-B)	13384	10741	9746
Percentage / ↑ ↓	24.60%	10.20%	-

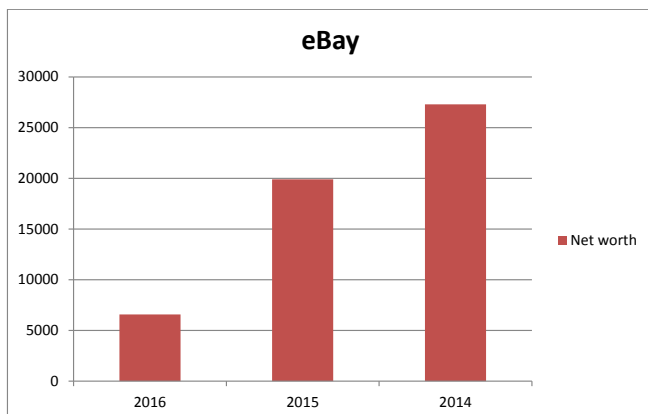
For EBay Inc. (In million \$)

Particulars	2016	2015	2014
Cash and cash equivalents	1832	4105	6328
Short term investment	4299	3730	3770
Accounts receivable	619	600	797
Other current assets	1154	1048	3600
Current assets of discontinued operations	0	17048	10545
Long-term investments	3391	5736	1491
Property and equipments	1554	1486	5777
Goodwill	4451	4671	2902
Intangible assets	90	133	9094
Other assets	395	201	564
Long-term assets of discontinued operations	0	6368	264
(A) Total assets	17785	45126	45132

Particulars	2016	2015	2014
Short term debt	0	850	6
Accounts payable	349	107	309
Accrued expenses	1736	3830	9260
Deferred revenue	106	108	2799
Income taxes payable	72	125	158
Current liabilities of discontinued operations	0	12511	107
Deferred and other tax liabilities	2092	522	841
Long-term debt	6779	6777	4117
Other liabilities	75	79	244
Long-term liabilities of discontinued operations	0	317	0
(B) Total outside liabilities	11209	25226	17841
Net Worth (A-B)	6576	19900	27291
Percentage / ↑ ↓	(66.95)%	(27.08)%	-



Net Worth comparison



Calculation of Price-Earnings Ratio

The price to earnings ratio indicates the expected price of a share based on its earnings. As a company's earnings per share begin to rise, so does their market value per share. A company with a high P/E ratio usually indicates positive future performance and investors are willing to pay for this company's shares.

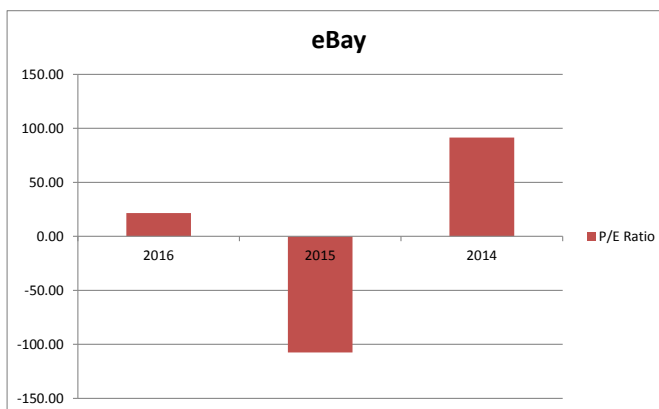
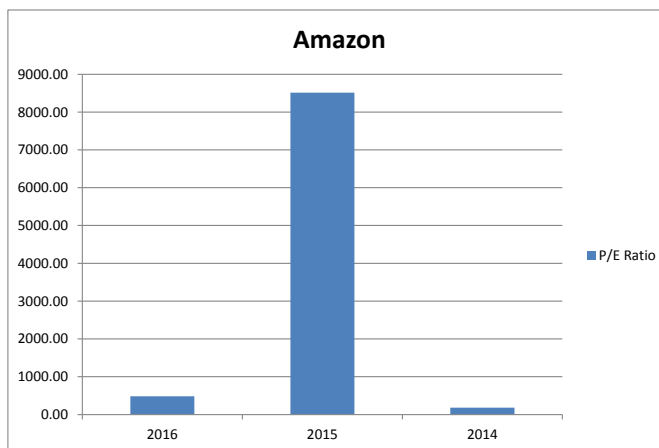
P/E ratio = Market price per share (MPS) / Earnings per share (EPS)

For Amazon Inc

	2016	2015	2014
Net profit (after interest and tax)	1725	46	2856
Equity shares outstanding	1208	1251	1295
EPS	1.43	0.04	2.21
MPS (as on 31st December)	687.75	312.98	398.79
P/E Ratio	481.62	8511.70	180.82

For eBay Inc

	2016	2015	2014
Net profit (after interest and tax)	596	-241	274
Equity shares outstanding	467	462	457
EPS	1.28	-0.52	0.60
MPS (as on 31st December)	27.48	56.12	54.87
P/E Ratio	21.53	-107.58	91.52

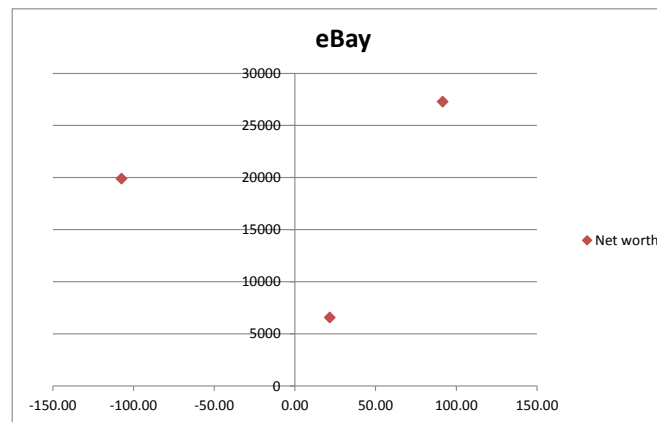
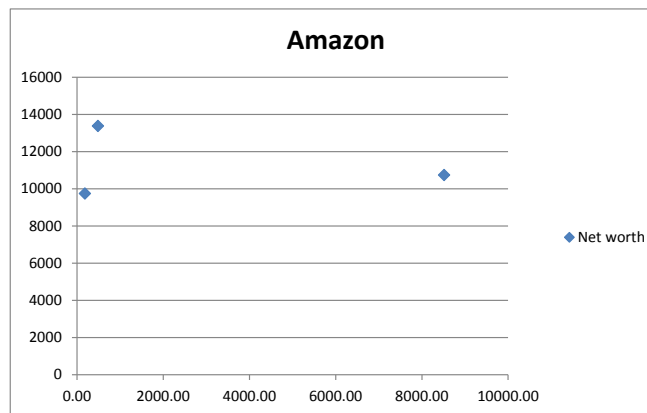


RELATION BETWEEN P/E RATIO AND NET WORTH

A correlation analysis is done between the P/E ratios and the net worth for the respective years. The correlation coefficient

examines the relationship between the two and this is shown by scatter diagram which shows P/E ratios on the y-axis and newt worth on the x-axis. And how the change in one variable does affect the other variable?

year	Amazon Inc			EBay Inc		
	P/E ratio (x)	Net Worth (y)	Coefficient of correlation (r)	P/E ratio (x)	Net Worth (y)	Coefficient of correlation (r)
2014	21.53	6576	r = 0.188797	481.62	13384	r = -0.2221
2015	-107.58	19900		8511.7	10741	
2016	91.52	27291		180.82	9746	



FINDINGS, ANALYSIS AND CONCLUSION

Key Findings of the Paper

Valuation is critical factor for each and every organization which wants its business to grow and develop continuously. In order to remain competitive in the market, a firm needs

to measure its value from time to time so that it can see where do its businesses stand in comparison to that of the competition.

Avoidance of risk and uncertainty is the focus of every firm and for that it needs to the factors that play a vital role in determining its value and success in the market. A number of factors; financial, operational, market, etc., impact the business value and some of them are firm specific and some are industry specific which applies to all in the same manner.

As an E-business, this risk increases even more because of the nature of the transactions involved. People still prefer physical markets over these online platforms and for attracting them these firms need to undergo heavy losses while providing the same offerings at lower or discounted prices. And even the breakeven is achieved after a long period of time. Hence these type of firms need a heavy amount of funds and this fund would only come if the business worth some value and there is a return surety on the capital being invested.

The key findings of the paper which have come out from the valuation and financial analysis done for the selected E-businesses are pointed as follows:

- The net worth value of Amazon has increased over the past periods and there is a value creation for the firm and as well as the shareholders. Which means business activities are going good and operations are expanding.
- But the same is not the case with eBay, as we can see that its net worth value has gone down drastically over the past three years and funds have been consumed without fetching any returns to the business. This gives an alarming signal to the shareholders and investors as well.
- The business value of Amazon has risen by 10.21% in 2015 and by 24.61% in 2016 which is 37.32% overall growth since 2014.
- Whereas the reverse is the case with eBay as its value dropped by 27.08% in 2015 and by 66.95% in 2016 which is 75.90% overall drop since 2014 and it's an alarming signal for the firm as it is rapidly losing its value.
- The valuation through price to earnings ratio shows that Amazon has not been able to maintain its earnings per share as it went quite down to 0.04 in 2015 which led P/E ratio to up by a high margin and then EPS went up by a good margin next year.
- The price to earnings ratio for eBay has been on a roller coaster ride as company had to face losses and its EPS went negative to -107.58 but it recovered pretty well next year and its EPS went up to 1.28 from -0.58 in the year 2016.
- When we put together the P/E ratio values and Net worth of the business by a correlation analysis, we can see that for Amazon both have been in the same direction, i.e., there is a positive correlation between P/E and Net worth as the correlation coefficient $r = 0.188$ that shows a weak to moderate correlation.
- The correlation analysis for eBay between P/E ratio and Net worth shows a negative correlation as the

coefficient value $r = -0.222$ that means there is a low to moderate negative correlation between P/E and Net worth for eBay.

As this study takes a note on the different factors which affect the valuation of the E-business, the following are the key factors explored in the paper which impact the valuation and must be taken in consideration so as to find out the true assessment of the business:

- First of all the life line of the business has a great impact on its valuation, i.e., how old is the business? This gives the past trend and financial behavior of the business.
- How gross and net income has been trending for the last 1–3 years and the last few months also impact the value of a business. A stable flow of earnings makes a business more valuable.
- The effectiveness of the cost structure, savings tend and how efficiently the revenue streams are being transferred to the business operations.
- The stability of the earning power and owner influence on the earnings power (i.e., owner-specific earning relationships).
- When we talk about factors related to that of traffic on the website and search engines, we see that what percentage of traffic comes from search, i.e., what percentage is potentially at risk from search engine algorithm changes?
- How secure are the search rankings? What is the mix of short and long tail?
- How has traffic been trending for the last year? The last few months?
- Where does the referral traffic come from? Is it sustainable?
- As we move towards different dimension of factors we also look for operational factors like; how much of the owner's time is required to run the business?
- What are the owner's responsibilities? Are there high technical requirements?
- What technical knowledge is required to run or manage the business?
- Are there employees/contractors in the business and how are they managed?

Some of the factors apart from the numeric figures also have a role in value creation for a business and these factors are:

- Where does the business get customers from?
- How much do customers cost to acquire?
- If subscription, what is the customer lifetime value and churn rate?

- If one-time, how active is the customer base? Are they re-ordering?
- Is it possible to remarket to the existing customers? Is there a mailing list?
- Are there physical assets or specific regional responsibilities with the business?
- Are there any licensing requirements in order to run the business?
- Does it infringe in any trademarks?
- Does the business offer any unique advantages? (e.g., trademark)
- Considering the return on assets as the return on debt and equity.
- Some of the errors are related with the interpretation of valuation like; confusing values with price.
- Confusing goodwill with the brand value and intellectual capital.
- Lastly and most common error is including only finance department in valuation of the firm, especially in case of an online firm.

The following are some of the common errors that an analyst comes across in valuation of an online business. These errors are not firm specific rather they are generic in nature and could be committed by any analyst in valuation:

- Wrong risk-free rate used for valuation. E.g. using historical average of risk-free rates, using short term government rate or wrong calculation of rates.
- Using a wrong beta value by taking average of historical beta values, using beta value of the acquiring company or the holding company.
- Using required market risk premium as equal to historic equity premium and assuming the required market risk premium as expected risk premium.
- Another type of errors is related to calculation of WACC. Like using debt to equity ratios for calculating the cost of capital which is actually different from the debt-equity ratio resulting from the valuation.
- Taking discount rate lower than the risk-free rates.
- Taking statutory tax rate instead of effective tax rate for a levered company.
- Another big error is calculation of WACC on the book values of debt and equity.
- Furthermore, errors are committed in forecast of cash flows too and these are such as; not including changes in working capital while determining cash flows.
- Taking the net income as cash flow and net income plus depreciation as the cash flow.
- Considering an asset valuation as the cash flows.
- Use of arithmetic averages instead of geometric averages to evaluate the growth.
- Using earnings multiples from an extra ordinary transaction.
- Not including cash flows resulting from a future investment.
- Not taking in the value of non-operating assets in cash flow calculation.

CONCLUSION

This paper identifies that how online companies are valued and what methods one can adopt in valuation of an online firm. The paper focuses upon the factors affecting the use of formal evaluation methods and how an E-business can be evaluated for different financial situations.

The size of the company has larger indirect effects than the direct ones. As a consequence, in the multivariate settings it is less important than in the bi-variate analysis.

If valuing an E-business through net worth, as done in the paper, the correlation of value with the price-earnings ratio is low on the scale. For Amazon, as we see, it is on positive side whereas for eBay it is on the negative side. Both the firms are high on P/E multiples but not so strong on the net worth value of the business.

Due to low this correlation, we assume that the value of a firm is more related with its market value rather than the earnings or price of the shares alone. An E-business needs to forecast cash flows and WACC to appropriately define the value of the firm.

The attitudes towards E-business implementation and evaluation thus play the key important role on the actual usage of evaluation procedures. There are numerous factors that impact this valuation procedure of the company and an analyst need to take into account all or most of these factors in order to arrive at a reliable valuation of the firm.

Thus, we can see that it is not just the financials which impact an online business rather multiple of other factors related to the ICT and internet impact the valuation and financials to be calculated.

When evaluating E-business the traditional assessments of investment cannot be used, because permanent change and a variety of qualitative and indirect benefits prevent the applications of such financial models. On the other hand, however, the actual evaluation methods may be truly inadequate and their results may actually not be worth of the efforts.

And there are many common mistakes being committed by firms in valuation and most common type of errors are related with forecast of free cash flows and the computation cost of capital. Therefore, firms need to take it carefully in valuation and selection of an appropriate method of valuation is also must.

From a more substantial point of view, the research is thus needed to evaluate the effectiveness of E-business evaluation methods. How useful is the application of a certain evaluation approaches? Are these approaches generally not used because they are ineffective? Or, they are useful, but they are not used, because of the ignorance of the potential users? Or, do the players in E-business implementation systematically avoid evaluation? Do the analysts take up the right approach? Do they consider non-financial factors equally in valuation? And do firms take up measure to avoid common errors in valuation?

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