Financial Statements Analysis and Liquidity Estimation at Wiredelta Web Development Pvt. Ltd.

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Comments by the Faculty

Financial Statements Analysis forms the basic building block towards carrying out valuation exercise for every corporate enterprize – private and public limited. In recent times, corporation valuation has earned a heightened interest among diverse set of professionals including portfolio managers, corporate finance mangers, chief executive officers, board of directors, and other stakeholders. While the objectives of ascertaining the corporate value of an enterprise differ; there is almost a ubiquity of opinion towards appreciation of the role of valuation rendered towards maximizing the overall interest of the corporation and shareholders in particular.

The complexities arising out of developing a valuation model for a private enterprise is far greater as compared to a public enterprize. Besides the financial statements (that are not easily available for a private enterprize), non-availability of critical data pertaining to estimation of weighted average cost of capital (WACC) poses a key constraint in determining the enterprize value (EV) and eventually the intrinsic value (IV) of an equity share of an enterprise. Notwithstanding the fact that the financial literature is inundated with theoretical models purporting to assign a plausible value to a private enterprize; researchers and practitioners alike have to ultimately confront with a seeming trade-off between estimating a value vis-à-vis estimation errors that are likely to render to model inaccurate.

For instance, while determining the beta value for a private enterprise, in the absence of stock-market data, it is a common practice to estimate the beta value using the "bottom-up" approach. Under this approach, the beta is estimated by computing an unlevered-beta value determined by averaging the beta values of all the "comparable firms" and subsequently levering the same with a corresponding debt-equity ratio. This approach, while undoubtedly presents as a superior alternative as against assigning an arbitrary beta value; researchers and practitioners nevertheless need to be mindful of the potential estimation errors creeping into the final valuation output.

To summarize, it is essential that a prudent valuation model is derived out of fundamental variables to lend meaningful defence of the estimated corporate value in the eyes of discerning investors. The trap towards building a complex model, which at best becomes an equivalent of a "black-box", must be avoided at all times. A black-box spitting out a valuation number for all the given inputs is after-all equivalent of GIGA (garbage-in-garbage-out). In this paper, the author has presented a valuation model for a private enterprise by employing a pragmatic approach, which is not just meaningful in terms of the rationale offered, but also mindful of the potential estimation errors arising out from developing a veracious model as applied to a private enterprize.

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Industry Overview

Mobile App Industry

The mobile app economy was worth $53 billion in 2012, and the forecast for 2016 is that it will grow to $143 billion. The figures vary slightly from researcher to researcher but the fact is that mobile is really big. Revenue is generated through in-app purchases, in-app ads, and big data accumulation. The most promising sections are social networks, utility, advertizing, and productivity. The fastest growing markets are APAC and Latin America. The market for app development services, including application creation, management, distribution and extension services, will grow in value to 100 billion in 2015. In only a year and a half after the launch of the Apple App Store the application developer market overtook the app download market in revenue size.

Web Development Industry

Since the commercialization of the web, web development has been a growing industry. The growth of this industry is being pushed especially by businesses wishing to sell products and services to online customers.

An ever growing set of tools and technologies have helped developers build more dynamic and interactive websites. Instead of running executable code on a local computer, users can interact with online applications to create new content. This has created new methods in communication and allowed for many opportunities to decentralize information and media distribution. Users can interact with applications from many locations, instead of being tied to a specific workstation for their application environment.

Examples of dramatic transformation in communication and commerce led by web development include e-commerce. Online auction-sites such as eBay have changed the way consumers find and purchase goods and services. Online retailers such as Amazon.com and Buy.com (among many others) have transformed the shopping and bargain-hunting experience for many consumers. Another good example of transformative communication led by web development is the blog. Web applications such as WordPress and Movable Type have created easily-implemented blog-environments for individual web sites. Websites are no longer simply tools for work or for commerce, but serve more broadly for communication and social networking. Websites such as Facebook and Twitter provide users with a platform to communicate and organizations with a more personal and interactive way to engage the public. (Web development, n.d.)

Company Overview

WD is a next-generation web-agency providing affordable development services to Internet entrepreneurs. Two young entrepreneurs, Mark Dencker and Thibaut Delarbre, realized that the existing web agencies across Europe, the United States of America, and the United Kingdom

were quoting unreasonably high prices. The business opportunity was obvious, and WD was born in Barcelona in December, 2011.

Later, the two entrepreneurs discovered good opportunities in India that helped reduce the high margins quoted by most companies, and set up Production Centres here, in Mysore and Coimbatore. WD tapped the Indian Internet market in just 7 months after its birth (July, 2012). Simultaneously, they also set up WD offices in Denmark and Paris.

Organizational Structure

Business

For business development, it is normally Business Developers, the HoBU, and Project managers that work in tandem with each other.

Production

Under production centres, there are Core Project Managers reporting to the HoBU. And a Project Manager has three Team Leads reporting to him: the Design Team Lead, the CSS Team Lead, and the PHP Team Lead. Each of these team leads have both an Internal and Freelance Team Member working under them. That is, the Design Team Lead has a freelancer and internal designer under him, the CSS Team Lead has a freelance and integrator under him, and so on.

Products

Web development, Facebook Pages and Applications, Consultation- SEO, SEM, Data Analytics, Operation- Domain and Hosting, Security and Support.

Project Management Tools at Wiredelta

Wiredelta (WD) is incorporated in France, with offices in Paris (France), Copenhagen (Denmark), Mysore (India), and Coimbatore (India). As the offices are spread across the globe, coordinating the efforts is a challenge. To ensure smooth coordination WD utilises the following tools,

- Google Docs
- ASANA
- Google Spreadsheets
- Slack Messenger

Projects Undertaken

1. Estimation of cash balance in hand from April-2015 until December-2015.

2. Creating Income statements for the years 2012-2015 basing upon cash flow transactions data.

3. Reviewing bank statements and cash flow statements for the years 2012-2015, across all the accounts they operate in, to ensure they match in terms of date, amount and transaction details. This data would be used for auditing purposes.

4. Initiation of new columns in the cash flow statements which would be used for creation of Balance Sheet and Income Statements.

5. Creation of wikis for documentation of all the projects undertaken.

Project 1

Project Methodology

Objective of the Project

- To estimate free cash available to the firm from April until December, based upon recurring costs, non-recurring costs, Upcoming Revenues and Costs from cash flow statements (recorded on accrual basis) and from the probabilities of conversion of leads generated into projects by the two partners.

Alternative Ways of Tackling the Objectives Listed

- Free cash flow to the firm can be estimated using the historical data by estimating a growth rate.

- Free cash flow to the firm can be estimated using probabilities of leads given by the partners, basing upon the historical conversion rate of leads.

- Discounted cash flow approach (DCF).

Problem Solving Approach Selected

- Estimating free cash flows using probabilities of leads given by the partners, basing upon the historical conversion rate of leads.

Rationale and Motivation for Selecting this Approach

- As Wiredelta is a start-up with young history and high growth rate, it is not reliable to use the historical data to estimate a growth rate and project into future.

- Also, the type of projects they have been handling are diverse and changing very rapidly.

- DCF cannot be used for the same reason that estimating discount rate is a challenge as we do not have appropriate competitor data.

Description of the Approach

The data of leads generated by the partners is given. Analysts have assigned probabilities so as the concerned lead would be converted into a project with a probability of 30% within one month, the other with a probability of 40% and so on. The data is given for next three months. Depending upon that, using an algorithm by tracking past conversion of leads, cash flow in the firm has been estimated. Expected Revenues and costs data is given for the next two months. Cash flows are estimated basing upon the "upcoming" data for the next two months and are estimated depending upon the leads data for later months.

Step by Step Description of the Approach

1. Firstly the payment receivable policy of the company is studied and is as follows:

   After the agreement of the project, before the development of wireframe starts, they charge 5% of the estimated price. After the letter of agreement is signed and before the design starts, they charge 30% of the estimated price right before the production begins. After the design is approved, before the front and back end development starts, 40% of the estimated price is charged. The rest 25% is charged after the launch of the project.

The time taken for the stages above stated on an average is as follows:

Wireframe- 2 weeks

Design-2 weeks

Development (Front end) - 3 weeks

Development (Back end) - 8 weeks

Final testing and launch- 2 weeks

2. The leads are classified into "Active" and "Became Project". Leads whose status is "Active", mean that the client is still in touch but not have been converted into project yet. The next set of leads reflect projects that have been converted but have not been given the wireframe yet, which means they have received only 5% of the agreed price. It can also be noted that the probabilities are given as in probability of the lead getting converted into a project within one or three or six months in case of active leads. When it comes to the category of "Became Project" probability of submission of the wireframe and starting the design and development processes. The last category "no-go" gives the probability of a project being scrapped off.

From the historic lead conversion data, few assumptions are made for estimation of conversion of leads into projects and cash balances. The assumptions are as follows:

Active Leads

- Those leads which have probability of "no-go" less than or equal to 60% is considered.

- The category (within one, three and six months) for which there is a highest probability is considered for conversion of lead.

Became Project

For the leads which have already become project and have received 5% of the agreed price is considered as per the estimate given, as to time taken for different stages to be completed and respective payments to be received at each stage of completion.

Steps of Execution

- Analysed the past leads data and checked the rate of conversion for different kinds of projects and for different clients.

- Looked at how exchange rates would create differences in cash flows.

- Calculated recurring costs.

- Analysed non-recurring costs.

- Have known the receivable policy at different stages of the project.

- Depending upon the analysis, made assumptions for estimation as stated earlier.

- Created a sheet named [calc] Liquidity to estimate cash balance from the upcoming sheet present in the cash flow statement for the next two months and estimating cash balances for the consecutive months from [calc] leads sheet and from mc costs sheets which are estimated. The sheet is made dynamic so as to project the balance from upcoming sheet for the following 2 months and projecting balance from estimated revenue and cost sheets for the consecutive months.

- The sum of the balances for each account is reflected in a row which also includes conversion of different currencies like Denmark DKK, Indian Rupee, US Dollar, Great Britain Pound into a standard currency Euro.

- The conversion rates are updated on a sheet named "Financial", which takes an average of real time prices of last 6 months.

Project 2

Creation of Income Statements

Introduction: Wiredelta operates in three currencies namely Denmark DKK, Indian Rupee, USD, GBP and Euro. They have classified into three accounts for the purpose of recording expenses and revenues in the cash flow statements. Income statement is made to reflect costs and revenues made across all the above stated accounts and give an end balance for Wiredelta as a whole by converting net income into a base currency Euro.

Process Involved

- Import cash flow statements for the concerned year of different accounts (India, Denmark and Online).

- Create sheets which reflect Costs, Wages, Transfers and Revenues for a concerned year.

- Create an Overview sheet which includes reflections of costs, Wages, Transfers and Revenues of all the accounts across different months and also show all of them spilt up by accounts. This sheet also shows Total of each of them at the end of the year. The sheet gives key ratios as Profit margin, Cost/ Sales, Wages/ Sales.

- Income statement also has a sheet named [Overview] Partners which would reflect the capital brought in by each of the partners, partner global tertiary benefits and revenues generated by each of the partners business units.

Recommendations

- **Accrual System of Accounting**: WD does not follow accrual system of accounting. It has only cash flow statements. It is advisable to follow accrual system of accounting which would help in real time tracking of future costs and revenues, thereby would help in planning for investments.

   Advantages of accrual based accounting
   Accrual basis accounting is more popular than cash basis accounting because it produces more accurate, more faithful financial statements that constitute better representations of actual circumstances than its main competitor. Since accrual basis accounting records revenues and expenses together in the same time periods based on their causal relationships, it produces more accurate gauges of entities' performance in any time period. By contrast, the use of cash basis can lead to distortions due to the collection of cash and cash equivalents not aligning with the actual timing of sales. (Accrual Basis Accounting, n.d.)

- **Process of Book Keeping and Accounting through Accounting Software**: As the current process of recording transactions and generating invoices is very time consuming process, and as there is no back up for the data which would become serious issue in case of loss of data, it is advisable to have an accounting software which would solve all the above issues.

- **Standardizing the Process for Estimation of Conversion of Leads**: As of now, there is no standard process for estimation of conversion of leads into projects. If the process is standardized, it would help in accurate estimation of sales and thereby cash inflow for the future months. As of now, different estimates are given by different people by following different kinds of assumptions.

- **Updating Exchange Rates on a Real Time Basis**: As there has been lot of fluctuations in the exchange rates due to macro-economic conditions, it is advisable to update the exchange rate data on a real time basis.

Learnings and Conclusion

Learnings

- **NPV**: The net present value (NPV) or net present worth (NPW) is defined as the sum of the present values (PVs) of incoming and outgoing cash flows over a period of time. Incoming and outgoing cash flows can also be described as benefit and cost cash flows, respectively. Different kinds of projects have been planned over next two months. Investment anticipated in the project is given, cash inflows have been estimated. NPV of these projects is calculated using an expected rate of return (derived from the investments made in similar kinds of projects) and feasibility is checked.

- **Ratio Analysis**: key financial ratios to be analysed would differ for a company with a long history and for a company with a very young history.

    Ratios like:
- ➢ **Revenue Run Rate**- The Revenue Run Rate is the annualized revenue of a company if you were to extrapolate the current revenue over a year. Wiredelta has revenue run rate of 50000 Euros on an annualized basis, which has grown on an average of 17% over last three years.

- ➢ **Burn Ratio**- The rate at which a start-up company expends capital to finance overhead costs prior to the generation of positive cash flow.

- ➢ **Operational Efficiency**- Operational efficiency can be defined as the ratio between the input to run a business operation and the output gained from the business. The input is capital infused and output is revenues generated from operations. It has grown at a rate of 10% on an average.

- **Valuation**: It is quite challenging to value a start-up as it has a young history and growth rate being very volatile. The challenge starts with computing beta as the company is not listed. Also getting data about competitors would be difficult if the company operates in a very narrow segment like, Wiredelta is only into web and mobile app development.

- ➢ **Relative Valuation**- Relative valuation also called valuation using multiples is a generic term that refers to the notion of comparing the price of an asset to the market value of similar assets. Relative valuation is preferred as there are quite a number of comparable firms to arrive at a multiple and hence price for Wiredelta. Both trading and transaction multiples are taken into account.

- **Cash Flow Analysis**: Most of the start-ups fail because of "no cash on hand". For most of the established companies cash from operations, cash from investing and cash from investing would matter for analysing the performance of the company, whereas for a start-up cash flow from operations drive the business. Minimizing costs, managing receivables, improving revenues etc., are few of the important goals in making effective use of cash.

Conclusion

The perspective of financial analysis would differ for an established firm and a start-up. One major difference is importance level of cash in hand. Any start-up would survive on cash for day to day business and investments, whereas an established firm would look for cash in hand for paying out dividends and for reinvestment. Liquidity estimation would help Wiredelta in planning for investments for growth. Income statements would give the glimpse of financial position of the company across different accounts and over the years. Ratios like costs to revenue, wages to revenue can be analyzed to improve upon cost management and track changes.

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Appendix

Figure 1 - Liquidity Estimation, Source: WD Financial Statements

Figure 2 - Income Statement, Source: WD Financial Statements