



VentureBean Consulting

Valuation

Examples, Exercises & More

Startup Conference: BCAS & KSCAA

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Agenda: 'To Trigger Thinking'

Valuation: Questions

Valuation: Methods

Valuation: Focus Startup

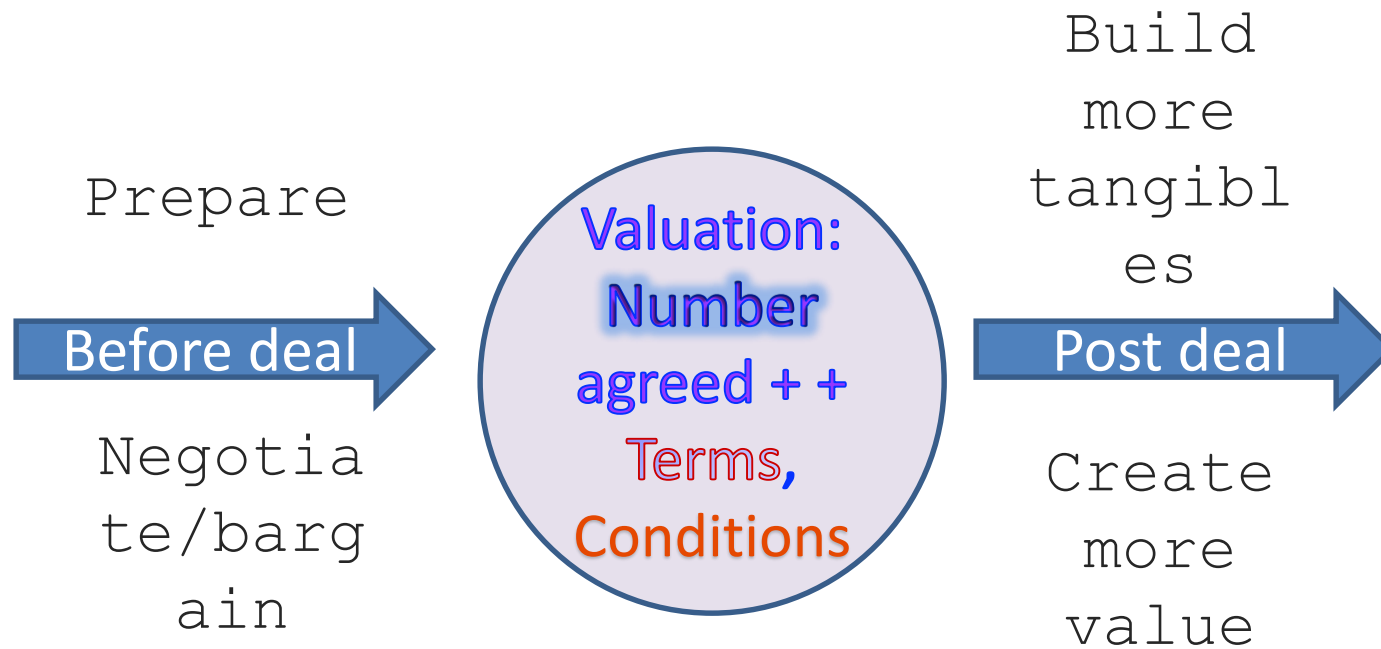
Valuation: Process

Valuation: Summary

Questions.. questions..

- My company is profitable with rapid growth
 - Why is it not valued by a VC?
 - Why does a VC prefer to invest in a company that is losing money and not making profits?
- Why does value **differ** from *investor* to investor?
 - An angel investor, a financial investor and a strategic investor value my business differently.
 - Two angel investors are valuing my business differently.
- Should I select the investor who is giving my venture a **higher** valuation?

Is valuation a Number?



Math is only One of the Elements

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Valuation methods

These can be broadly classified into:

- Cost based
- Income based
- Market based

Cost based methods

There are different ways of arriving at cost:

- Book value
- Replacement value
- Liquidation value

NOTE

These methods could become relevant when one is considering the accounting, legal and tax impacts of valuation, for eg.

–in deals related to M&As, JVs and partnerships etc..

–in cross-border transactions, depending on countries involved



Income Based methods

- Earnings capitalisation method or profit earning capacity value method
- Discounted cash flow method (DCF)

INCOME: Earnings capitalisation method

- Also called Profit earnings capacity value (PECV)
- Value determined by capitalising earnings at a rate considered suitable
- Assumed that the underlying value driver of the company is its future earnings potential
- Suitable for fairly established business having predictable revenue and cost models
- For example
 - Profittee Limited is earning post tax profit of Rs. 5
 - It is capitalized at 10%.
 - Value of Profittee Limited is equal to Rs. $(5/10\%)$ crores, ie Rs. 50 crores.

INCOME: Discounted cash flow

$$Value = \sum_{t=1}^{t=n} \frac{CF_t}{(1+r)^t}$$

- CF = cash flow
- t = the year and
- r = discount rate

i.e. the cash flow for each year from year 1 to year n (which is the time period under consideration) is discounted to arrive at the present value of future cash flows from year 1 to n

Market based method

- Assumption is that other firms in industry are comparable to firm being valued
- Standard parameters used like multiples of revenue, EBIDTA, PAT, book value,
- Other indicative parameters such as revenue, revenue per user, net margin per user etc.
- At different times, different multiples are popular, including those such as GMV (gross merchandise value) for e-commerce businesses
- Adjustments made for variances from standard firms or deals in the recent past, these can be negative or positive; i.e. premiums and discounts are assigned

Exercise in Valuation - I

ILLUSTRATIVE VALUATION EXERCISE					
REVENUE FORECAST			All revenues in USD		
Business Units	Y1	Y2	Y3	Y4	Y5
Unit 1	12,00,000	24,00,000	48,00,000	72,00,000	1,08,00,000
Unit 2	12,00,000	24,00,000	48,00,000	57,60,000	69,12,000
Unit 3	8,00,000	16,00,000	32,00,000	38,40,000	46,08,000
Unit 4	8,00,000	16,00,000	32,00,000	38,40,000	46,08,000
Total	40,00,000	80,00,000	1,60,00,000	2,06,40,000	2,69,28,000
Profit margin, year 3 & year 5 respectively		20%	32,00,000	25%	67,32,000
VC Investment	USD	20,00,000			
VALUATION USING DIFFERENT METHODS					
1	<u>Average Revenue Multiple</u>		8	<u>One Year Forward - average from selected sample companies</u>	
	Discounts for				
	Liquidity	35%	2.8		
	Size	35%	2.8		
	Company	10%	0.8	Note:	
	Total Discount	80%	6.4	While making assumptions for future multiples and expected PAT etc, you must have some basis for your assumptions.	
	Revenue Multiple		1.6	Keep these justifications available with you in case of need in negotiations. While you may not necessarily discuss this, you must have this information and justification.	
	Valuation - Multiple ONE YEAR FORWARD	USD	64,00,000	for eg. why is the multiple 8 and not 15 etc.	
	VC Expected Stake	31%			
2	Exit Table Method	3 year time	5 year time		
	Expected Valuation	2,00,00,000	4,00,00,000		
	Discount Rate applied	50%	50%		
	Present value of expected valuation	59,25,926	52,67,490		
	% ownership expected by VC Investor	34%	38%		

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While making assumptions for future multiples and expected PAT etc, have a basis for assumptions, as this may be required for negotiations. While you may not necessarily discuss this, you must have this information and justification. for eg. why is the multiple 8 and not 15 etc.

Exercise in Valuation - I

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Exercise in Valuation - II

How would you value Meadows Co. based on the market/industry information provided?

<u>Some parameters used to value</u>	Plantation Co.	Garden Co.	Park Co.
Enterprise value/sales	1.4	1.1	1.1
Enterprise value/EBITDA	17.0	15.0	19.0
Enterprise value/free cash flows	20	26	26
Meadows Co.			
Sales	Rs. 200 crores		
EBIDTA	Rs. 14 crores		
Free cash flow	Rs. 10 crores		

Exercise in Valuation – II: Possible Solution

<i>Some parameters used to value</i>	Plantation Co.	Garden Co.	Park Co.	Average
Enterprise value/sales	1.4	1.1	1.1	1.2
Enterprise value/EBITDA	17.0	15.0	19.0	17.0
Enterprise value/free cash flows	20.0	26.0	26.0	24.0
Application to Meadows Co.		Average	Value	
Sales	Rs. 200 crores	1.2	Rs. 240 crores	
EBIDTA	Rs. 14 crores	17.0	Rs. 238 crores	
Free cash flow	Rs. 10 crores	24.0	Rs. 240 crores	

Exercise in Valuation - III

How would you value PenPencil Co. based on the market/industry information provided?

<i>Some parameters used to value</i>	Papers Co	Docs Co.	Prints Co.
Enterprise value/sales	2.6	1.9	0.9
Enterprise value/EBITDA	10.0	21.0	4.0
Enterprise value/free cash flows	21.0	30.0	24.0
Application to PenPencil Co.			
Sales	Rs. 300 crores		
EBIDTA	Rs. 15 crores		
Free cash flow	Rs. 7.5 crores		

Exercise in Valuation – III: Possible Solution

<i>Some parameters used to value</i>	Papers Co	Docs Co.	Prints Co.	Average
Enterprise value/sales	2.6	1.9	0.9	1.8
Enterprise value/EBITDA	10.0	21.0	4.0	11.7
Enterprise value/free cash flows	21.0	30.0	24.0	25.0
Application to PenPencil Co.		Average	Value	
Sales	Rs. 300 crores	1.8	Rs. 540 crores	
EBIDTA	Rs. 15 crores	11.7	Rs. 175.5 crores	
Free cash flow	Rs. 7.5 crores	25.0	Rs. 187.5 crores	

As there is a wide value range, the application of the relative multiples does not look appropriate in this case. What are your thoughts on this?

FOR MORE EXAMPLES

Exercises, Notes and explanations at:

[Valuation Basics: Examples and Practical Tips and notes](#)

[The Science and Art of Startup Valuation](#)

[5 Points on Valuation and Negotiations... OR ...
how You can get a better price](#)

[Venture-a-Question: On Start-up Valuation](#)

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Valuation : Startup

At very early stage valuation is often a function of:

- Amount of **cash burn** (with different scenarios of bootstrap and adequate funding)
- **Stake** promoter is **willing to give up**

PLUS factors such as

- **Value add expected** from potential investor
- **Expected** funds to be raised in **future rounds**, connecting this to future dilution expected to be made

**It would help if you can
articulate And
list this**



Valuation: Startup to Exit.. Think thru

ILLUSTRATIVE CASE: FINANCIAL INVESTMENT ROUNDS AND EXIT

		Year of investment	Founder 1 %	Founder 2 %	First Round Angel %	Second Round Angel %	VC %	Acquiror %	TOTAL %	AMOUNT BROUGHT IN BY INVESTOR	TOTAL COMPANY VALUE
Stage 1	Start/Co. Formation	Y 0	50	50					100%	Rs. 10 lakh	
Stage 2	Angel/seed 1	Y 1	48	48	4				100%	Rs. 10 lakhs	Rs.2.5 crores
Stage 3	Angel/seed 2	Y 2	38.4	38.4	3.2	20			100%	Rs. 1 crore	Rs.5 crores
Stage 4	VC	Y 3	28.8	28.8	2.4	15	25		100%	Rs. 5 crores	Rs.20 crores
Stage 5	Exit: Sale to company	Y 6	0	0	0	0	0	100	100%	Rs.60 crores	Rs.60 crores
Amount to investor/owner: Rs. Crore			17.28	17.28	1.44	9	15				
Return as a multiple of investment			345.6	345.6	14.4	9	3				

Notes:

1) Returns to investors

Angel/seed 1 14.4X in 5 years

Angel/seed 2 9X in 4 years

VC 3X in 3 years

2) Other aspects which are relevant

ESOP impact

Tax/legal impact

Valuation methods

Prepared for illustration only: Anjana Vivek: beanie@venturebean.com



Value depends on Type of investor

- HNIs, informal and formal angel groups
- Seed Funds
- Venture Capital
- Private Equity
- Banks exploring innovative ways to fund SMEs
- Strategic Investors
- Corporate Funds; (Family) Business Groups, Indian & Global
 - Directly and/or through a special division or subsidiary
 - For employees alone or open to public
 - As intellectual and/or financial capital with other facilities
- Government supported funds
- Impact Investors
- Incubators
- Accelerators
- Co-Creators
- Crowd funding
- Online funding platforms

**Which
One
Could be
the
...
Right
Fit
for
the
Venture?**



Valuation : Startup

Some angel investors/ Incubators/ Accelerators, set a pre-decided equity percentage, illustrative example:

- Range between 7.5%-10% of company equity, for Rs.25 lakhs investment
- 25%-30% of the company, for the first amount of investment, which could vary between 50 lakhs to 2 crores
- 75% discount to valuation at next round by investor

NOTE: Regulatory aspects and Tax MUST be factored In by entrepreneur before accepting any terms.

Valuation : Startup Examples

Names/data changed to maintain confidentiality..

Mentoring:

- 1. Edtech Co. 1 year old – Terms: month one meeting (half day), Focus on growth strategy and advisory services for leadership team: 2% equity
- 2. Food tech idea stage – Terms: month 2 meetings (2 hour), mentoring on growth strategy, funding strategy and help in fund raising: 5% equity *plus* 1 % success fee of funds raised
- *Statutory and tax issues to be addressed while equity is given*

Incubation by Tech company:

- 3. Idea stage: (i) Rs.50 lakhs was committed for 1st year, to be drawn on need basis (ii) Admin/accounting etc. support to be provided (iii) basic sustenance monthly fee of Rs.25,000 per month agreed to for each of 2 founders: 48% equity with Tech Company and balance equally by two founders

Valuation: Startup Examples

4. Investment in media/entertainment company in 2014!

(numbers changed to maintain confidentiality)

- HewS closed \$10 million valuation from InvestorA
- Reading press reports, Investor 2 wanted to participate and asked the promoters to suggest a valuation
- HewS Team and InvestorA decided at random: 20% increase in 1 week, leading to valuation of \$12 million;
- On flight as InvestorA travelled to meet Investor2, he decided he would not just be a messenger, he would value add, so he decided to up valuation to \$18 m
- During negotiations, Investor2 gave final offer of \$15 m
- Thus in about 10 days the company valuation went up by 50%, from \$10 m to \$15 m
- Founders ended up with more money than they had planned for and had to think of ways to spend this!

Valuation: Startup Examples

Names/data changed to maintain confidentiality..

Service business: Value add measures:

- 5. Two year co. – Rebranded, reclassified domain, pre-funding; on advise that revenue multiple would go up from 3 to 5.
- 6. Three year co. – Changed business model to increasing outsourcing of some service delivery aspects. Cost of inputs increased, gross margins reduced, however operational efficiency increased, net profit margins increased and valuation multiples; i.e. revenue and PBT multiples increased.

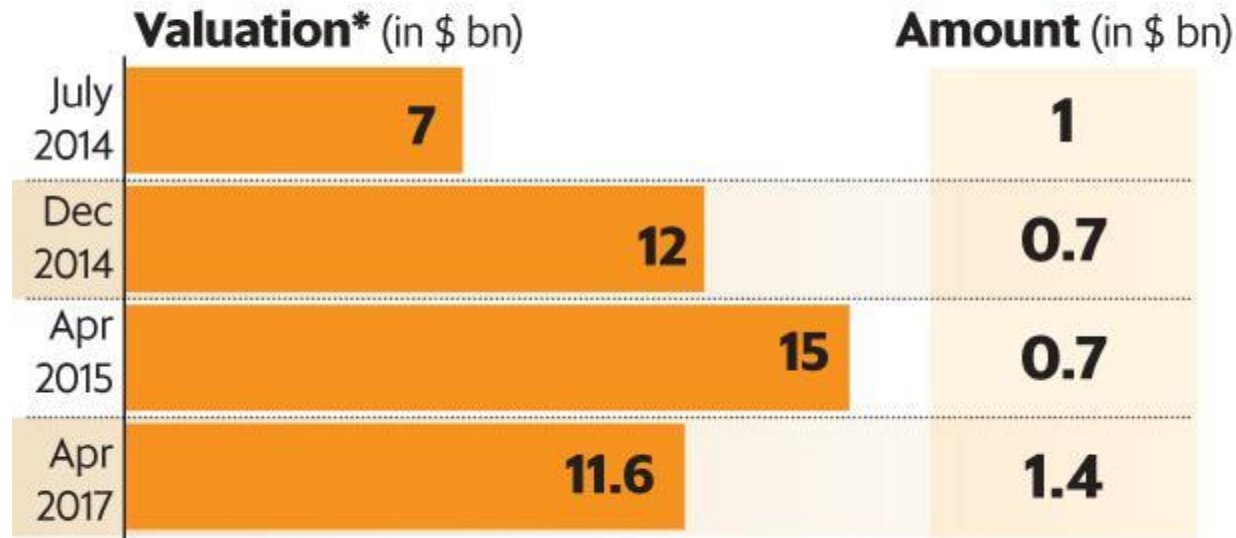
Investor negotiation:

- 7. Early stage idea: Jim had high technical knowledge, limited financial knowledge. Investor Z convinced Jim that he could partner and grow the company to high value in 3 years and negotiated for half the business. Jim got into this without understanding how shares could get further diluted in later rounds of funding. At the end, Jim was left with less than 10% of the company he started, however valuation was high.

Valuation: Dynamic/Volatile

FLIPKART'S FORTUNES

Flipkart's last four completed fundraising rounds.



*Data refers to post-money valuations

Source: Mint research

Reference: Article published in Livemint November 30th, 2017:

SoftBank offers to buy Flipkart shares at up to \$10 billion valuation

<http://www.livemint.com/Companies/QBVZHpX5f43yBKML4HdIFN/Soft-Bank-offers-to-buy-Flipkart-shares-at-up-to-10-billion.html>



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Valuation

Based on

- Tangibles and Intangibles
- Data and Assumptions
- Subjectivity and Objectivity

Valuation

- At idea and early stage there is limited data, more subjectivity; higher weightage given to
 - **Team**
 - Potential market
 - Competitive scenario
- At next phase, more weightage is given to
 - Customer traction
 - Pipeline
 - Past record of conversion from pipeline etc.
 - Immediate past performance
 - Business and financial model

Valuation

- Many methods are there, including but not limited to
 - Multiples of revenue, EBIDTA, user base, etc
 - Multiples of industry specific value drivers, e.g. GMV (Gross Merchandise Value), revenue per user, net margin per user
 - Cash flow based, discounted
 - Exit valuation expected
- Financial forecasts are the starting point and required from a regulatory perspective. They are also a key point in the due diligence review, prior to investment
- Uncertainties are factored in by way of scenario and sensitivity analysis, probabilities and expectations
- Other statutory, accounting and tax implications are to be factored in while arriving at valuation and deal cash flows

Valuation

Driven by:

- **Markets:** Flavor of season, competitive scenario, industry trends
- **Team:** At helm plus advisors/mentors/board
- **Cash burn:** Or cash needed, look at scenarios of minimum bootstrap and best case
- **% sharing:** Equity promoter is willing to let go

Valuation

Driven by:

- Unbundling of deal issues, such as
 - Board Membership
 - Decision making powers
 - Payment/salary to founders
 - Assistance in administrative matters (eg. Incubation)
 - Contribution to execution and participation in key activities such as sales, partner tie-ups
 - Liquidation preference
 - Exit clauses
- **Negotiation and taking control of the situation**

Valuation

- Deals can sometimes be structured to accommodate valuation perceptions
 - For eg. linking to future performance
 - This could become an area of **concern** when there is a possibility of a “**down round**” when new investors come into the picture
- Understand what could be the
 - **Deal maker** issues and
 - **Deal breaker** issues

Process of valuation

- Use more than one model
- Identify **current** market models relevant to venture
- Have a rationale for the models used
- Plan long term not short haul
- Look at alternate scenarios
- Discount for risks, assign probabilities
- Arrive at range
- **Identify** deal issues (breaker/maker) for negotiation
- **Practice** before negotiating

**A valuation range is preferable
to a single number**



Valuation: Impacted by Quality ..

- **FOCUS on Quality not just on Quantity ...**
- Illustrative parameter: **Revenue Quality**
 - Sales **Quantity**
 - **Quality** of revenue - in terms of product/service/vertical/location etc.
 - Customer segments addressed
 - Average revenue per employee
 - Number of customers, number of high value customers
 - New customers added
 - Customers lost
 - Pipeline customers
- **Customer acquisition strategy**

Strategic Planning – Creating value

- Preparing for alliances and partnerships across the life cycle, this includes
 - Partner identification
 - Due diligence review
 - Forecasts and valuation (with and without deal)
 - Negotiation, acceptable and non-acceptable terms (deal breaker and deal maker issues)
 - Other deal terms and conditions
 - Deal closure
 - Post deal integration
 - Exit plan if required for eg. for VC

Strategic Planning – Creating value

- **Alliances, M&A and partnerships:**

- advisors/mentors
- operations
- investment
- Deals
- etc.

should lead to value creation not value depletion

- Understand **financial** and **non-financial** aspects and impact on growth and sustainability
- Is this adding to your brand perception in the market or depleting from this

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In Summary

- Build a Financial Model that is consistent, capture elements of business model; address deal rationale
- Look at different valuation models; arrive at a value range
- Prepare for negotiation, identify deal issues, possible negotiation strategies
- **Caution**: Look out for concern issues, hidden agendas; evaluate on value-based parameters including but not limited to fund source, governance, ethics and reputation
- Keep an eye on the law and statutory regulations; these also impact valuation and deal negotiation
- Plan for advisors/CAs/lawyers, due diligence costs and other deal related costs which will add to the price paid or reduce the price received for any transaction
- Plan for long term impact of decisions on valuation

Thank you

Reference: VentureBean K.Hub (Knowledge Hub)

For teaching notes, articles and more on finance, valuation, business models, leadership and more..

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