

## SEED CAPITAL FINANCING VALUATION OF DATA ANALYST STARTUP: S-MART CASE

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*Abstract. A Start-up in seed stage only has prototype and lack of financial record because it has not generate any revenue yet. S-MART as a start-up founded in 2018 that tries to help warung managing the stocks, shorten the distribution channels and organizing the financial record and stocks ordered through digital platform for warung, so that they will have a competitive advantage. However they are still in the seed stage and need to find a suitable source of financing to support their business. This study aims to help S-MART estimate the enterprise value in order to be a bargaining power in the attempt to look for capital and the suitable source of financing for them. This study uses two valuation methods which are Berkus and Scorecard methods. The data collected was from the interview with the CEO of S-MART, SMART's investors intended, and find the similar start-up financing deals as comparable data. The results show Berkus method generates USD1,526,500 and Scorecard method shows USD 1,333,240. For a seed stage start-up like S-MART, Berkus and Scorecard are more preferable due to the absence of financial records that makes it difficult to determine the right input factors such as growth rates, cost of capital, and other fundamental financial assumptions for estimating future financial projections.*

*Keyword: Start-up Valuation; Seed Stage; Berkus Method; Scorecard Method*

### INTRODUCTION

There are two different view in term of startup, first, startup as part of business creation phase and second, startup as a kind of business (Raichaudhuri, 2010). As a kind of business, what make them different among other ventures is the growth: their ability to grow big and rapidly (Graham, 2012). According to Overall's model, S-MART is positioned in the end of the first phase which is customer discovery and started to move on the customer validation phase (Overall & Wise, 2015). Startup is similar with other projects or companies that need investments or funding to run their day-to-day business and operational stuff before they get revenue. The characteristic of startup is unique and make them hard to be valued using conventional approach. There are several purposes of valuating startup such as exit strategy for either merger & acquisition or initial public offering (IPO), to develop stock option and to make financing plan for the future of the business.

S-MART is a new startup from Bandung that has main purpose to integrate all existing retail sales data. The user of this platform will be SMEs (Small Medium Enterprise), especially *warung*. The SMEs (Small Medium Enterprise) in Indonesia give big contributions to the Indonesia's GDP (Gross Domestic Product) and the retail market in Indonesia is very prospective (Simbolon, 2016). They have problem related with long distribution channel (Tambunan, 2011) and lack of stock managing. S-MART will focus to help the SMEs in handling those problems, so that SMEs will have a competitive advantage. S-MART is still in the early stage of their life time with only prototype in hand has not generated any revenue yet and there is not any financial record that can be used to make conventional corporate valuation method.

The objective of this research is to estimate the enterprise value of S-MART and find the suitable source of financing to get S-MART capital needs. The result of this research can be used as consideration for S-MART to get funding. This research will use the Berkus and Scorecard method to estimate the value of the company by conducting deep interview with the CEO and SMART's investors intended because author considers the fact that there are no available financial records that can be projected, the data is limited based on the what S-MART has achieved started from when it is founded until the interview with CEO is conducted and the outcome of this research might not be applied to all kind of business venture because each venture has its own assumptions and methodologies.

### LITERATURE REVIEW

Start-up needs to pass the start-up life cycle that has been developed through the combination of the innovation life cycle model, customer development framework, and start-up funding stages (Overall & Wise, 2015). Startup can be classified into several categories based on financing cycle which are seed round, series A round, series B round, and final round. The earliest startup stage is the seed round and it is when the founders' concept and prototype are still in term of prototype. The capital financing in

this round will be used by the start-up as its operational cost mainly for finishing their product's prototype or Alpha version (Uzzaman, 2015).

There are two main sources of financing that startups can be got which are from lenders in the form of debt or from investors in the form of equity. According to Hofstrand (2013), debt financing is funds that creditors lend to startup with the agreement of repaying the borrowed money plus interest at a specific agreed time in the future. Benefits that the lenders get is the interest on the amount lent to the borrower. The conventional way to get funding is from financial institution such as banks. Others way are from Friends, Family and Fools (FFF) or Peer-to-peer loans (Edwards, 2010). The equity financing can be obtained by exchanging a percentage of ownership shares and it does not need a repayment in the future but the investors are let to involve in the business strategy decision making (Hofstrand, 2013). One of the investors that gives a seed capital to startups is Angel investors (Edwards, 2010) that can be in the form of formal organization or as a single individual. Another organization that can also provide equity financing is Venture Capital. Venture funds are big and professional institution that is consisted of former entrepreneurs, finance and industry experts (Edward, 2010).

Valuation is the process by which risks and returns are linked to specify the value of an asset (Gitman & Zutter, 2015). There are several methods to assess digital start-ups such as Berkus Method, Scorecard Method, Risk Factor Summation Method, Comparable Transaction Method, Book Value Method, Liquidation Value Method, Discounted Cash Flow Method, First Chicago Method, and Venture Capital Method (Damodaran, 2002). Assessing the company at the beginning of its life cycle is difficult, in part because there is no history of operations and partly because most young companies do not make it past the initial stages of success (Damodaran, 2009). Therefore, this research only focused on using Berkus Method and Scorecard Method because the advantage of those methods is those methods do not need any historical data but still based on the current condition of the company.

The Berkus valuation method is suitable for early stage ventures. Berkus method is started with an initial pre-money valuation and does not involve financials and relies solely on the assumption that after five years the business would make it exceed USD 20 million. The concept is to add up to half million dollars for every degree of criteria reached by the startup, which are sound idea, prototype, quality management team, strategic relationships, and product rollout or sales (Berkus, 2016).

According to Payne B. (2011), the scorecard method assists valuation of pre-money and pre-income compared to average valuations and then adjustment of the value based on certain metrics. The seven factors of scorecard method are strength of the management team, size of the opportunity, product/technology, competitive environment, marketing/sales channels/partnerships, need for additional investment and other. Each factor has weights and would be added with respect to the comparable and so on.

## METHODOLOGY

This stage of research begins with identifying the problem. The interview was conducted with the chief executive officer (CEO) of S-MART. Based on problem identification, the researcher did a literature review on the seed capital financing valuation of start-up. The focus of this literature review was Berkus and Scorecard method as the method for valuating a start-up.

The data is collected from interviewing the CEO, using the comparable data which is similar start-up financing deals obtained from Angel.co database and conducting AHP (Analytic Hierarchy process) (Saaty, 2008) to determine the weighted value of each sub-factor in Berkus Method based on interview with SMART's investors intended. After that, the researcher analyse the data using Berkus method and Scorecard method. The Berkus method is done by assessing 5 main factors and, in this study, five criteria are divided into 10 subcategories by the authors and each subcategory was weighed (%) based on AHP results. The 5 main factors are consisted of sound idea, prototype, quality management team, strategic relationships, and product rollout or sales.

The second step is Scorecard method. The average previous funding deals obtained from previous transaction data by the Angel.co are used as comparable data or benchmark in this method. Then, the benchmark value will be weighted based on the assessed multiple factors and criteria based on the outcome of the interview. There are seven factors and each of them has subfactors and each of subfactors has a criterion or situation. The seven factors are strength of the management team, size of the opportunity, product/technology, competitive environment, marketing/sales channels/partnerships, need for additional investment, and other. After evaluating all of factors, the sum of them will be S-MART's enterprise value. After analysing and getting the result, the next step is generating the conclusion on that basis. The researcher will provide the enterprise value of SMART and give recommendations regarding the appropriate source of financing according to the characteristics and valuation that has been conducted in this research.

## FINDINGS AND ARGUMENT

The findings of this research are statistical descriptions of data related to enterprise value of S-MART by Berkus and Scorecard method. The results of data processing showed the enterprise value of SMART, which are based on the Berkus method, is USD1,526,500. The result of the Berkus valuation method can be seen in appendix on last page.

Based on the results of Berkus valuation method, from the first category, the benefits of S-MART product have already confirmed by numerous clients, proposed a sound idea and made it validated by the market but there is not any current patent implemented. So, it is given \$442,500 and \$0 for this stage. On the second category, it is concluded that the technology succeeded in the pilot plan and product design to solve all the technical problems handled. This stage is given \$218,250 and \$31,750. The result of third category is showed that the S-MART team is completed, competent and also each member has enough pertinent experiences. Based on that, it is given \$334,500 and \$40,500. Next, the fourth category explained that they have already developed the distribution issue plan but there is currently no collaborative partner, and it is given \$0 and \$14,500. Last, based on fifth category, S-MART currently has not generated any income yet but it has already had a mature and organized sales plan. The company also has predicted the size of the market potential which is more than \$20 million. Therefore, it is given \$0 and \$445,000.

The second method is Scorecard and based on it, the enterprise value is USD 1,333,240. The result of Scorecard method can be seen in table 2.

**Table 2.1 Scorecard Method calculation Result**

Main Factors	Weighted ranking Range (%value to Pre-Revenue Company)	Average Data Analyst Start-up			S-MART (BASED ON NORM)			
		Max Value Weighted %	Weighted Value (USD)	Norm	% of Norm	Weighted %	Factor	Valuation (USD)
1. Strength of the Management team	0%-30%	30%	362,786	100%	125%	37.50%	0.375	453,483
2. Size of the Opportunity	0%-25%	25%	302,322	100%	100%	25.00%	0.25	302,322
3. Product/Technology	0%-15%	15%	181,393	100%	95%	14.25%	0.1425	172,324
4. Competitive Environment	0%-10%	10%	120,929	100%	125%	12.50%	0.125	151,161
5. Marketing/Sales Channels/Partnerships	0%-10%	10%	120,929	100%	110%	11.00%	0.11	133,022
6. Need for Additional Investment	0%-5%	5%	60,464	100%	90%	4.50%	0.045	54,418
7. Other (Market Validation, Strong Brand)	0%-5%	5%	60,464	100%	110%	5.50%	0.055	66,511
SUM		100%				110%	1.1025	1,333,240

		Benchmark (USD)	S-MART (USD)
Pre-Money Valuation	Average Comparable data as benchmark	1,209,288	1,333,240

Based on the results of Scorecard valuation method, first, the strength of entrepreneur and team, was assigned 125% with the explanation, there is experience in the business sector but only experience in sales or technology, the founder is coachable, and the team is identified and on the sidelines. Second, the size of opportunity was assigned 100% with the description that the size of target market (total sales) SI will be >\$100 million and the potential for revenue of target company in five years <\$20 million. Third, the product/technology was assigned 95% because of several explanations which are the product is well defined and prototype looks interesting, the product is also included as a pain killer, and it is easily copied and not yet has intellectual property. Forth, the competitive advantage was assigned 125% with the explanation, the strength of competitors in this marketplace is fractured, many

small players, and the strength of competitive products are weak. Next, the marketing /sales /partnership was assigned 110% with the reason which is the sales channels, sales and marketing partners is already identified, so the key partners are in place. The need for additional investment was assigned 90% because they need venture capital in the future. Last, the other factor was assigned 110% because S-MART has others factors as their consideration to be sustainable company.

## CONCLUSIONS

In this research, only two methods that is used and implemented on S-MART because there is not any available financial data that can be projected, limited data regarding similar company as benchmark, and the lack of tangible assets that the start-up has. S-MART's valuation results using Scorecard method showing a smaller value with the result of USD 1,333,240 compare to the result using Berkus method with the result of USD1,526,500. The difference between those results of two different valuation methods are because the Scorecard assessed more parameters compare to Berkus and the Scorecard used another company as benchmark obtained from Angel.co database. The benchmark company is from the same industry. Regarding picking which tools ought to be use, it is smarter to comprehend what necessities does every one of the device needs, what does these instruments are intended for, and what stage does the start-up in. The start-up assessment can be linked with these description.

Any sort of valuation strategies actualized to discover the estimation of beginning time venture should manage the vulnerability of their future budgetary presentation. In spite of the fact that the results of Berkus and Scorecard technique may not be right if the market discernment towards new companies isn't right, these strategies are better than other methods such as which DCF and VC methods. A beginning period adventure explicitly in seed stage like S-MART has not built up any financial record accordingly making the correct suspicions for anticipating its future money related projections is troublesome.

S-MART needs of capital can be supported either by equity or debt. But, taking a gander at the normal for innovation start-up like S-MART, they need a lot of capital for building up their items before it very well may be sold to the market and produce a few incomes. Thusly the appropriate financing hotspots for S-MART is by searching for angel investors or venture capital who generally have enthusiasm for financing dangerous beginning period adventures who needs a lot of capital for their improvement. S-MART has already generated solid idea and validated it. The team are suggested to work full team and focus on growing the business and the most important thing is they have to execute their plan soon with a clear strategy and planning.

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Category	Subcategory	Weighted Value (%)	Scoring					Result
			\$500,000	\$375,000	\$250,000	\$125,000	\$0	
Sound Idea	Product Benefits	88.5%	Product benefits confirmed by numerous clients	Product benefits confirmed by first client	Product benefits clearly identifiable	Product benefits not clearly identifiable	Product benefits has not been identifiable	\$442,500
	Protection of Patent	11.5%	Extensive portfolio of granted patents	Basic patent granted	Basic patent close to being granted	First patent application	No patent application	\$0
Prototype	Technology Maturity	87.3%	Technology successful in technical application	Technology successful in demo plant	Technology successful in pilot plan	Technology successful on a laboratory scale	Technology still in experimental phase	\$218,250
	Product Status	12.7%	Finished product	Beta version	Design complete all technical issues addressed	Prototype is still in development	Need more research and development	\$31,750
Management Team Quality	Competences of The Management Team	89.2%	Management team is complete and very competent	Management team is complete and competent	Management team is complete	Management team with some flaws	Management team with major flaws	\$334,500
	Team Experiences	10.8%	Significant relevant experience	Relevant experience	Limited experience, but appropriate knowledge	Limited experience and inappropriate knowledge	No evidence of required experience	\$40,500
Strategic Relationship	Network Size (new business opportunity, access to resources, legitimacy and 1 extra)	88.4%	Availability of partner who can provide 3 sub criteria and more	Availability of partner who can provide 3 of 3 sub criteria	Availability of partner who can provide 2 of 3 sub criteria	Availability of partner who can provide 1 of 3 sub criteria	Unavailability of partner	0
	Market Route	11.6%	Realistic marketing plan/distribution partner	Options identified - agreements in place with all or some partners	Options identified - no agreements in place	Develop the distribution issues plan	Limited thought given to distribution issues	\$14,500
Sales	Size of Market Potential	88.9%	Very large market potential (> \$20 million)	Large market potential (\$20-15 million)	Medium market potential (\$15 - 10 million)	Small market potential (\$10-5 million)	Very small market potential (<\$5 million)	\$444,500
	Sales Plan	11.1%	Very likely to be feasible (100% of sales plan is achieved)	Likely to be feasible (75% of sales plan is achieved)	Justifiable (50% of sales plan is achieved)	Difficult to justify (25% of sales plan is achieved)	Unjustifiable (0% of sales plan is achieved)	\$0
							Valuation Result	\$1,526,500