

Analysis of Henbuk Startup Value Using a Scorecard Assessment Method

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Abstract. This study aims to determine the valuation value of Henbuk's startup by conducting qualitative and quantitative analyses. Henbuk is a startup engaged in e-commerce. The Henbuk startup is currently in the initial funding stage, and the founders are opening opportunities for investors, which can later support operational and development activities. In obtaining funding from investors, the Henbuk startup requires an initial assessment of the company's value. The score assessment consists of several indicators, e.g., quality of the founder and team, opportunity size, product and technology, competition, marketing, sales and partnerships, and the need for additional investment. The results of the value assessment are obtained by using the Scorecard Assessment Method. The results of this study may help to determine the real value of other start-ups for the investors in the future.

Keywords: startup, stage valuation, seed funding, scorecard valuation method.

Introduction

A startup is formed to find a suitable business model to produce products or services following the target market (Jaya, Ferdiana and Fauziyati, 2017). A startup is said to be a newly developing company with the primary goal of finding products and needs (Hardiansyah and Tricahyono, 2019). Companies are usually in the process of developing and researching to find the right market. Many interpret a startup as an investment system from a business that will move the company automatically. Moving or running a business as a startup is usually divided into several phases, starting from the planning phase, the expansion phase, the initial growth phase and the final growth phase (Kamal and Firmansyah, 2021). One example of a startup built to produce products or services according to its target market is Henbuk.

Henbuk is a startup company engaged in e-commerce, namely the e-book marketplace. Henbuk is like Gramedia.com, selling books. Henbuk was established in June 2021, and Henbuk was launched in December 2021. The current Henbuk office is at Jalan Merdeka 4 No 17 Denpasar. The motivation to develop the Henbuk startup was when there was a desire to read books, but books were challenging to access, and the price of books was relatively high. Hence, a Henbuk startup was founded to make more people great with books that are easily accessible and inexpensive.

Related to Henbuk's objectives, Henbuk classifies its target market, namely public schools and campuses. However, for now, Henbuk is more focused on collaborating with schools. Based on Henbuk's development, obstacles are faced, such as the transformation of conventional publishers to digital publishers and the distance between authors who still need to be convinced of the book industry. However, these obstacles have been overcome, and it already has 36 publishers and 469 authors. As for the users themselves, there are already 28,997 users. Besides these obstacles, Henbuk is not a single startup, other startups are also working in the same field, and these other startups can be said to be Henbuk's competitors. The competitors of Henbuk are Amazon Kindle, Ibook, Apple and Gramedia.com. With a competitor, namely Amazon Kindle, Henbuk has the advantages or strengths of Henbuk, within three minutes, Henbuk can already sell a new competitor release. Henbuk gives 90% royalties to writers while others only 48%; Henbuk provides digital marketing like novelty, and in Henbuk, royalties are shared automatically and transparently.

Henbuk once received a grant from Amazon of 6,500 USD and personal funds of IDR 2,000,000,000. So, Henbuk is already in the initial funding stage. However, Henbuk wants to provide an opportunity for investors to invest their capital in strengthening its market growth and expanding its market share. Therefore, the startup valuation value from Henbuk is needed to be used as reference material by investors when investing in Henbuk. The assessment method that suits Henbuk's startup is the scorecard assessment method in qualitative and quantitative analyses. The reason for using the scorecard valuation method compared to other methods in Henbuk's startup assessment is that it makes easier for startups to calculate their value using a range of proportions by comparing similar companies at the same stage of development with non-financial indicators (Komang Sri Artani *et al.*, 2019). The scorecard valuation method is also suitable for assessing newly developed startups like Henbuk. Aspects of the assessment using the startup assessment method include management strength with value, technology and products, sales platforms and others.

1. Theoretical Background

1.1. Startup

A startup is an organization with an appropriate business model to generate rapid growth (Hardiansyah and Tricahyono, 2019). A startup is a temporary organization built to find a new business model, which can later be published (Dellyana *et al.*, 2021). Startups grow from scratch to become very high-value companies. As a new business, startups face conditions of very high uncertainty (Putu Agustini, Swastika and Estiyanti, 2019). The uncertainty is the startup's success rate, whether it succeeds or fails.

1.2. Startup Valuation

Startup valuation is the economic value of the business that is owned. The facts in estimating the value becomes a challenging task (Silva *et al.*, 2021). The startup valuation value can be used as a guide or reference in measuring how much potential a business has. One of the benefits of startup valuations is to attract investors to invest (Putu Agustini, Swastika and Estiyanti, 2019).

1.3. Determinants of Startup Valuation

In order to conduct startup valuations, there are various controlling factors. These determinants are used as general indicators that can be used as a reference in determining the valuation value of a startup. The following are several determinants of startup valuation (Sudarningsih, Estiyanti and Satwika, 2019), namely:

- a. Traction
- b. Team reputation
- c. Revenue streams
- d. Distribution reach
- e. Sector conditions

1.4. Scorecard Valuation Method

The scorecard assessment method compares a startup based on the average pre-money valuation of other startups in the same sector (Payne, 2011). Table 1 and Table 2 explain about Bill Payne scorecard worksheet and table of score. This method will make it easier for the startup to calculate using the playback range. The scorecard scoring method provides a list of criteria, and the assessment is based on input from management (Susinto, Afgani and Damayanti, 2022). Thus, startups can provide more value to essential assets. The following is a list of the criteria assessed:

- a. Team management strength : 0% - 30%
- b. Chance percentage: 0% - 25%
- c. Product or applied technology : 0% - 25%
- d. Competitive ecosystem : 0% - 10%
- e. Marketing platform : 0% - 10%
- f. Additional investment requirements : 0% -5%
- g. Other factors: 0% - 10%

Weighting	Impact On The Valuation	Factors and Issues
0% - 30%		
Strength on the entrepreneur and the management team	+	Experience
	++	Many years of business experience
	+++	Experience n this business sector
	++	Experince as a CEO
	+	Experince as a COO, CFO, CTO
	-	Experince as a product manager
	---	Experince in sales or technology
	---	No business experience
	0	Willing to step aside, if necessary, for an experienced CEO
	+++	Unwilling
+++	Neutral	
+++	Willing	
+++	Is the founder coachable?	
+++	Yes	

	--- - 0 + +++	No How complete is the management team? Entrepreneur only One competent player in place Team identified and on the sidelines Competent team in place
Weighting	Impact On The Valuation	Factors and Issues
0% - 25% Size of the opportunity	-- + ++	Size of the target market (total sales) <\$50 million \$100 million >\$100 million Potential for revenues of target company in five years <\$20 million \$20 to \$50 million >\$100 million (will require significant additional funding)
0% - 15% Strength of the product and intellectual property	--- 0 ++ +++ --- ++ +++	Is the product defined and developed? Not well defined, still looking a prototypes Well defined, prototype looks interesting Good feedback from potential customer Orders or early sales from customer Is the product compelling to customers? This product is a vitamin pill This product is a pain killer This product is a pain killer with no side effects
	0 ++ +++	Can this product be duplicated by the other? Easily copied, no intellectual property Duplication difficult Product unique and protected by trade secrets Solid patent protections
0% - 10% Marketing/ Sales/ Partners	--- ++ +++ -- ++	Sales channels, sales and marketing partner Haven't even discussed sales channels Key beta testers identified and contacted Channels secure, customers placed trial order No partners identified Key partners in place
0% - 10%	-- - ++ -- +++	Strength of competitors in this marketplace Dominated by a single large player Dominated by several players Fractured, many small players Strength of competitive products Competitive product are excellent Competitive product are weak
0% - 5% Need for additional	+++	Need for additional rounds of funding None
rounds of funding	-- 0	Another angel around Need venture capital
0% - 5%		Other's factor

Other	++ --	Positive other factors Negative other factors
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Table 1. Bill Payne Scorecard Valuation Worksheet

No	Impact	Score
1	+++	7
2	++	6
3	+	5
4	0	4
5	-	3
6	--	2
7	---	1

Table 2. Table of Score based on Authors' Compilation

2. Research Method

The type of data used in this study is qualitative on organizational structure, products, competitors and team management. In addition, this study also uses quantitative data obtained from the results of qualitative data analysis.

a. Qualitative Data Analysis

Data that cannot be counted or measured with numbers can provide additional information in the form of descriptions or descriptions. Qualitative research is denoted by the primary empirical material collected in the research process, described orally or narrated (Devetak, Glazar and Vogrinc, 2010). Research using qualitative data is aimed at obtaining a complete picture of the views of the people being studied in the form of interviews with the founder of the Henbuk startup, Mr Hendika Permana.

b. Quantitative Data Analysis

Data in the form of numbers or quantities with units of measurement can be calculated mathematically. Quantitative research focuses on collecting measurable measures of variables and conclusions from a sample population. This quantitative research adopts structured procedures and formal instruments in data collection (Almeida, Queirós and Faria, 2017). So, this study will use quantitative data from the startup Henbuk in the form of worksheets using the scorecard assessment method. Quantitative data analysis from startup Henbuk uses the scorecard assessment method. The steps that must be carried out in the scorecard assessment method are:

- Understand all variables: the founder and team's quality, the business opportunity's size, product or technology, business competition, marketing and additional investment.
- Provides values related to previously understood variables.
- Keep multiplying by ranking factor.

- Then, add up the multiplier results and multiply by the average of the initial assessment.

3. Results And Discussion

3.1. The results obtained from qualitative research, namely:

a. Team management

Human resources from the Henbuk startup have pretty good and competent human resources, such as Mr I Putu Hendika Permana, S.Kom., M.M. is the CEO and founder and the person in charge of the startup Henbuk. His last education was at Triatma Mulya University with a master's degree in management, and he graduated in 2012. Mr Hendika entered the business world in 2009, building an internet cafe by taking a side job on web projects and applications. In 2012, Mr Hendika decided to work for BRI Bank, one of state-owned enterprises in Jakarta as a Account Manager. In 2013, he started running a business in the technology sector until now. Because if there is no experience, then the foundation of a business will not stand firm. Your experience does not rule out the possibility of participating in existing training because this training can add insight regarding new material. In addition to experience, Mr. Hendika also often attends relevant trainings to improve his knowledge and skills.

Furthermore, there is Ni Putu Dita Ariyanti, who graduated from a Vocational School majoring in accounting in 2019 and currently serves as implementation staff at Henbuk with a specialization in application implementation. Next is Putu Andi Yuda Prayoga, who serves as CMO at Henbuk, specializing in sales and marketing. His last education was undergraduate, graduating in 2009. Gede Wahyu Prasetya serves as head of investor relations & strategic partnership at Henbuk, specializing in international relations. His last education was a bachelor's degree which he graduated from in 2017.

b. Size of Opportunity

Henbuk was founded in 2021 and until now has 36 publishers, 469 authors and 28,997 users. This number continues to increase over time until now. Meanwhile, regarding the highest income earned by startup Henbuk while running its business, it was IDR 667,362,696.00, which was obtained in January 2022. The source of Henbuk's income comes from book sales and e-libraries.

c. Strength of the Product

Currently, Henbuk has 3,726 books for sale and has 15 marketers, 469 authors, 36 publishers, and 28997 readers. The advantage of this Henbuk product is that Henbuk provides a royalty of 90%, while competitors only get 48%. Competitive Environment

Startup Henbuk, domiciled in Denpasar, has an excellent opportunity to market its products and services, judging from the main target customers for Henbuk being schools and campuses. It is supported by conditions where most of the campuses are located in the Denpasar area, and several schools are also in the Denpasar area. The number of schools in Bali is around 3,457, of which the Denpasar region alone has 412 schools with 29 tertiary institutions out of 45 tertiary institutions in Bali.

Apart from Denpasar, there are collaborations in South Sumatra, Bogor, Purbalingga and Surabaya. In addition, 520 schools and campuses will be targeted for collaboration in Indonesia. The plan has been prepared to add 10 or 15 schools and campuses every year to collaborate. While running his business, Henbuk has also completed several projects originating from donations from the Ministry of Education and Culture in developing Henbuk products.

d. Marketing, Sales, Partners & Competitor

Marketing implemented by Henbuk is B2B and B2C. The first step that Henbuk must pass is B2B, which then continues with B2C. According to the founder, the application of B2B is infrequent in marketing using social media. Because products are successfully marketed through social media, social media is number one on the marketing list. However, to do branding, Henbuk still uses social media. The social media users are Instagram, TikTok, YouTube and Facebook. Besides that, Henbuk also has partners to carry out its sales, namely the regional office in South Sumatra, Agent Gorontalo, Digital Marketers, the Education Office, Mobilizing Teachers and DIKTI. Startup Henbuk in running its business has competing companies or what are often called competitors, namely Bukukita.com and Mizanstore.

e. Funding and Valuation

Henbuk's startup is currently in the seed funding phase, where startups already have mature products, customers and business models. It has not discouraged startup founders from developing their businesses by providing opportunities for investors to invest in their businesses.

3.2. Quantitative assessment results are obtained from the scorecard valuation method:

The scorecard method is done by calculating Henbuk's startup valuation using Bill Payne's scorecard valuation worksheet. This method is done by multiplying the maximum weight in each indicator with an estimated scale of 1-7 based on the score of indicators (table 3). The calculation is on the first indicator, namely strength of the entrepreneur and management team experience, which gets a score from each indicator, namely $(5 + 1 + 7 + 7) : 4 = 5$ which is then multiplied by 30% to get 1.5 points. The second indicator is size of the opportunity by obtaining a score from each indicator, namely $(6 + 3) : 2 = 4.5$ which is then multiplied by 25% to get a point of 1.13. The third indicator is strength of the product and intellectual property by obtaining a score from each indicator, namely $(7+7+1) : 3 = 5$ is done with 15% so as to get a point of 0.75. The fourth indicator is the competitive environment by obtaining a score from each indicator, namely $(3 + 2) : 2 = 2.5$ then multiplied by 10% to get a point of 0.25. The fifth indicator is marketing, sales, partners get a score of $6 : 1 = 6$ multiplied by 10% get points as much as 0.6. The last indicator is others with the score obtained on each indicator, namely $(4 + 6) : 2 = 5$ which is then multiplied by 10% to get 0.5 points. The points from each indicator are then summed up which will be used to find the valuation of a startup.

No	Parameters/Indicators	Impact	Score	Total score / total indicators	Weighting	Factor
1	Strength of the Entrepreneur and Management Team					
	Experience					
	Many years of business experience	+	5	$(5+1+7+7):4 = 5$	5 x 30%	1,5
	Experience in this business sector	++				
	Experience as a CEO	+++				
	Experience as a COO, CFO, CTO	++				
	Experience as a product manager	+				
	Experience in sales or technology	-				
	No business experience	---				
	Willing to step aside, if necessary, for an experienced CEO					
	Unwilling	---	1			
	Neutral	-				
	Willing	+++				
	Is the founder coachable?					
	Yes	+++	7			
	No	---				
	How complete is the management team?					
	Entrepreneur only	-				
	One competent player in place	0				
	Team identified and on the sideline	+				
	Competent team in place	+++	7			
2	Size Of The Opportunity					
	Size of the target market (total sales)					
	<\$50 million	--		$(6+3):2 = 4.5$	4.5 x 25%	1,13
	\$100 million	+				
	>\$100 million	++	6			

	Potential for revenues of target company in five years					
	<\$20 million	--				
	\$20 to \$50 million	++				
	>\$100 million (will require significant additional funding)	-	3			
3	Streng Of The Product and Intelctual Property					
	Is the product defined and developed?					
	Not well defined, still looking a prototypes	---		$(7+7+1) : 3 = 5$	5 x 15%	0,75
	Well defined, prototype looks interesting	-				
	Good feedback from potential customer	++				
	Orders or early sales from customer	+++	7			
	Is the product compelling to customers?					
	The product is vitamin pill	---				
	The product is a pain killer	++				
	The product is a pain killer with no side effects	+++	7			
	Can this product be duplicated by the other?					
	Easily copied, no intellectual property	---	1			
	Duplication difficult	-				
	Product unique and protected by trade secrets	++				
	Solid patent protections	+++				
4	Competitive Envirotnment					
	Strength of tcompetitors in this marketplace					
	Dominated by a single large player	---		$(3+2) : 2 = 2.5$	2.5 x 10%	0.25
	Dominated by several players	-	3			
	Fractured, many small players	++				
	Strength of competitive products					

	Competitive product are excellent	--	2			
	Competitive product are weak	+++				
5	Marketing, Sales and Partner					
	Sales channels, sales and marketing partner					
	Haven't even discussed sales channels	--		6	6 x 10%	0.6
	Key beta testers identified and contacted	++				
	Channels secure, customers placed trial order	+++	7			
	No partners identified	---				
	Key partners in place	++				
6	Other					
	Need for additional rounds of funding					
	None	+++		(4+6) : 2 = 5	5 x 10%	0.5
	Another angel round	0	4			
	Need venture capital	--				
	Positive other factors	++	6			
	Negative other factors	--				
Extension SUM						4,73

Table 3. Bill Payne's Worksheet Calculations based on Authors' Compilation

The next step is to determine the average pre-money value of competitors. The following is the average pre-money value obtained through several sources, namely:

Startup Named	Pre-Money	Scorecard Results
Mizanstore	Rp 500.000.000	Rp 440.500.000
Bukukita.com	Rp 500.000.000	Rp 442.500.000
Average		Rp 441.500.000

Table 4. Pre-money Competitor Calculation based on Authors' Compilation

After getting the SUM extension and average pre-money, the next step is to calculate the startup valuation value using the following formula:

“Valuation = Average pre-money valuation of companies x Extension SUM of Valuation Worksheet”

Finally, Henbuk's startup value is:

Valuation = Rp 441.500.000 x 4,73 = Rp 2.088.295.000

The result of the valuation value obtained is the economic value of the Henbuk startup for first year of the Henbuk startup business. The Henbuk startup assessment is carried out based on the factor

indicators that have been analyzed. After the valuation, Henbuk's startup will carry out a future strategic plan, such as allowing investors to invest their capital in expanding to a broader market.

Conclusion

1. A qualitative factor provides an adequate assessment of the Henbuk startup, namely:
 - Management team
The Henbuk startup team is quite complete and can work with the team and is still willing to take part in existing training to broaden their horizons.
 - Product/service and technology
The Henbuk platform aligns with the needs of a company and users and improves branding for users.
 - Marketing/Sales/Partnership
Startup Henbuk already has many users, from students to university students to teachers. Startup Henbuk is active in sharing content to get closer to readers or users on Instagram, Facebook and TikTok. Henbuk also has several partnerships or networks.
 - Competitive Environment
Henbuk's competitors are Mizanstore and Bukukita.com. However, Henbuk is superior in publishing, where users can publish their works quickly.
 - Funding
Startup Henbuk has previously received funding from Amazon and is currently opening offers for other interested investors.
2. Quantitative factors are calculations made through Bill Payne's worksheet to calculate Henbuk's startup valuation value. Based on these calculations, the startup valuation value is Rp 2.088.295.000.

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