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Business Valuation for Company Decision Making Case Study of: PT HIJ

Kevin Nathanael Susinto[1], Kurnia Fajar Afgani[2], Sylviana Maya Damayanti[3]
[1,2,3]School of Business and Management, Bandung Institute of Technology

ABSTRACT: The spread of COVID-19 and technological advancement has opened many doors for start-up company around the world, especially in Indonesia. Due to the nature of the virus where it may spread through physical contact, people have been avoiding going out, aligned with government policy that restrict citizen movement such a lockdown. The consumer behaviour began to shift as shown by number of people cooking at home, and number of delivery service are increasing. Seeing opportunity to serve in this market, PT HIJ is then founded to provide timely full set of fresh high-quality ingredients ready to cook delivered to the door of the customer. After one year of operation, the management experienced shortage of fund to grow the business and believed that it is right to source for new funding from the investors. As the management team have no experience in performing valuation, they would like to receive an insight about the valuation of their business. The study will cover the business model of PT HIJ, start-up ecosystem, analysis of the business environment and evaluation of valuation method. Based on the study, PT HIJ has a solid business model to grow its business. The trend of digitalization, government support and rising health awareness will benefit the company as one of the new start-ups itself. Also include in this study is valuation process performed using discounted cash flow method, venture capital method and scorecard method. It can be concluded from the three techniques, the valuation resulting in an enterprise value ranging up to IDR 470 million, with the median of valuation at IDR 262 million.

KEYWORDS: Financing, Investment, Startup, Strategy, Valuation

I. INTRODUCTION

As the largest economy in Southeast Asia, Indonesia has recorded impressive economic growth and is home to a massive population that is excited to innovation. With the advent of some of Indonesia's largest tech giants going public, the island country is gathering significant importance and influence as a hub for start-ups and talents. Despite the devastating effects of the COVID-19 pandemic both on microeconomic and macroeconomic scales, enterprises in the digital sector are booming more than ever by the rise of consumer demand. E-commerce, taxi-hailing businesses, online hotel reservation platforms, and parcel & food delivery services are indeed flourishing amidst an environment typified by the closure of brick-and-mortar businesses and movement restrictions.

COVID-19's silver lining has created a strong tailwind for Indonesia's digital economy with the pandemic accelerated digital adoption and brought about innovations faster than before, combined with better infrastructure and a growing middleclass. Technology has been democratized to the masses, becoming an integral part of life to millions of Indonesians. The large number of start-ups offer lot of benefits to the ecosystem and stakeholder, however, not all start-ups have same success story like the big name such as Gojek, Tokopedia, and Traveloka to name a few.

According to CB insights and Harvard Business Review, "nine out of ten start-ups fail and two-thirds of them does not even deliver positive return to investors". Furthermore, Statistic Brain Research Institute's report shows that half of the startup failed in the third and fourth year of operation. According to CB Insight, the top reasons start-up failed are due to ran out of money (37%), no investor interest (31%), no business plan (25%), lost focus (23%), and not right team (22%).

II. BUSINESS ANALYSIS

II.A Conceptual Framework

According to Kivunja (2019), "a conceptual framework is the total, logical orientation and associations of anything and everything that forms the underlying thinking, structures, plans and practices and implementation of the entire research project". The conceptual framework of this paper is done by identifying current business issue and situation, analysis of external and internal factors, take into account literature study, performing business valuation, and finally to the summary and recommendation.

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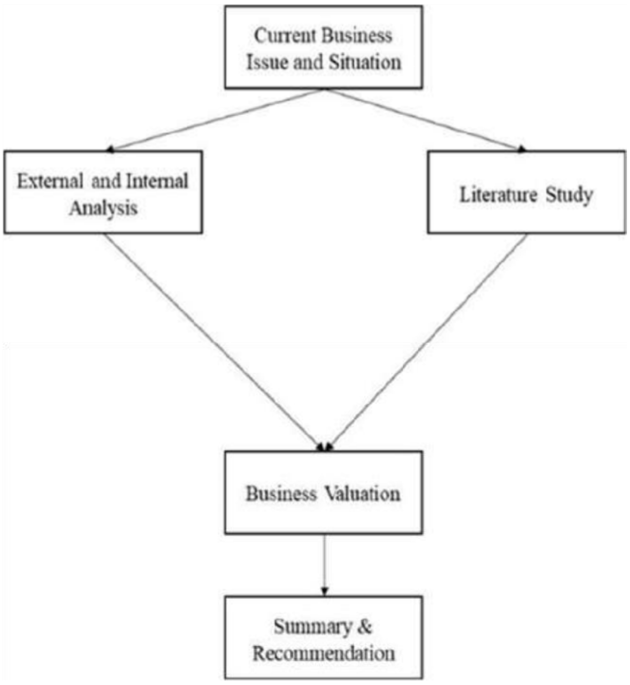

Figure.1 Conceptual Framework

II.B External and Internal Analysis

The external analysis is conducted by using PESTEL analysis and Porter's Five Forces. According to Walsh, (2015), "PESTEL analysis is assessed as a prerequisite/mandatory method that allows identifying factors relevant to the business environment and provides data and information that allow organizations within the analyzed environment to predict the situation in order to adapt to new situation and develop competitiveness". On the other side, The Porter's Five Forces take into account the analysis of bargaining power of buyer, the bargaining power of seller, the threat of substitute, the threat of potential entrant and the threat of the existing competition.

The internal analysis is conducted by using Business Model Canvas, SWOT analysis and SWOT Matrix. According to Magretta (2012), "A business model is a visualization describing how an enterprise operates, who is the customer, what does they value, and how it can generate revenue". Moreover, Osterwalder and Pigneur (2010) created the Business Model Canvas, which "incorporates various elements to be defined when considering the firm's business, value propositions, channels, customer segments, customer relationships, revenue streams, key resources, key partners, key activities and cost structures". The next internal analysis is SWOT analysis whereas according to Valentin (2001), the "SWOT analysis is the conventional approach of searching for insights into ways of realizing the desired alignment". Afterwards, Weihrich (1982) suggest a SWOT matrix that consist of four combinations: maxi-max(strength/opportunities),maxi-min(strength/threats),minimax(weakness/opportunities), and mini-min (weakness/threats).

II.C Literature Study

Valuation

According to Gitman & Zutter (2015), valuation is the process that link risk and return to determine the worth of an asset. However, the process can be complex sometimes in unsettled macroeconomics condition since the key inputs in every valuation process are the risk-free rate, risk free premium, and overall economic growth. The factors can be volatile in some case and in turn make it more difficult for the valuation process. Furthermore, even though the inputs into valuation are the same for all businesses, the challenges that arise face in making the estimates can vary significantly across firms and also across the business life cycle (Damodaran, 2019).

Terminal Value

Terminal value defined as the value of an asset, business, or project beyond the forecasted period when future cash flows can be estimated. The two most common methods for calculating terminal value are perpetual growth (Gordon Growth Model) and exit multiple. Damodaran (2009) assume that every firm makes it to stable growth and goes on. However, the real world delivers surprises along the way that may impede these paths. In fact, most companies do not make it to the steady state that we aspire to and instead get acquired, are restructured, or go bankrupt well before the terminal year.

Financing

Family and friends are the most common financing type for early start up as the founder will try to reach out and validate their business to the closest circle. This type of financing is mostly based o trust and relationship where majority of friends and family are often willing to supply funds at negative returns (Lee & Persson, 2012). Next there is Angel investor, according to Scott (2003), Angel investors to be wealthy investors who provides capital for new business ventures. Among start-ups, they are thought of as a bridge between loans from family and friends and venture capital, though angels are themselves often personally connected to the business. The other way to get the source of funding is through traditional bank, however it may require collateral or high credit profile to get the funding. According to the theory of bank loan demand (Cole & Sokolyk, 2018) only the highest-quality start-ups are likely to obtain bank business debt financing (Berger & Udell, 1998). The next alternative is through Venture Capital where Sapienza (1992) and Lerner (1995) explained that VC firms make the selection of portfolio companies, monitor, mentor and provide value-added services to them and ultimately exit from the company they invested. VC investors are often considered as the preferred intermediary in the financing of young and risky high-tech startups, which would otherwise experience difficulties in attracting traditional sources of financing (Gompers and Lerner, 2001).

Exit Strategy

According to Cumming (2008), there are exit strategies for the entrepreneurs which is Initial Public Offering (IPO), Acquisition, Buyback, and Write-off. Financial harvest strategies such as an IPO or acquisition by another company resulting in substantial value accrued to the entrepreneur. However, while IPO is attractive, the findings from Cumming (2008) as well as the start-up ecosystem in the world show that only few numbers of company succeed to go IPO. Hence, the exit strategy has higher probability of getting acquired while lower probability of IPOs and write-off.

II.D Analysis

Based on the analyses, PT HIJ has a solid business model to grow its business. The trend of digitalization, government support and rising health awareness will benefit the company as one of the new startups itself. As the company already have a viable product and been running for one year, it is very possible to attract the investor sooner or later. However, there are still challenge to be faced in terms of valuation, for young and start-up firms like PT HIJ, the absence of historical data and the dependence on growth assets make estimating future cash flows and risk particularly difficult. Hence,

the next step for this research project is to evaluate valuation technique that might be applicable to the company and create the implementation plan after the valuation completed.

III. METHODOLOGY

A startup valuation is a process in which the worth of the company is quantified during the initial funding or the seed funding where an investor gives funds for equity in the business. To analyses the method available, this project will divide it into 2 parts which is:

Pre-Revenue Valuation Methods	Post-revenue Valuation Methods
Venture Capital Method	Comparables Method
Scorecard Method	First Chicago Method
Risk Factor Summation Method	Discounted Cash Flow Method
Berkus Method	-

According to PwC, when determining which valuation method to be used, practitioners often use combination of the methods based on the several characteristics, as follow:

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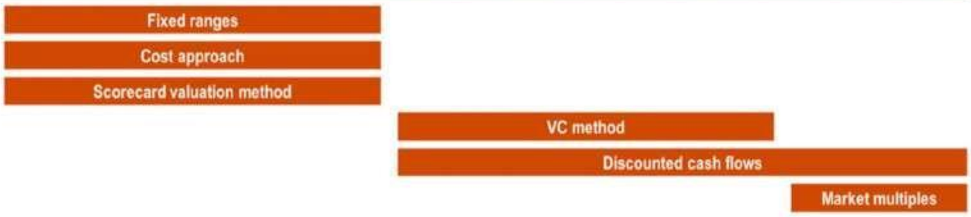
Characteristics	1 Idea / Seed	2 Seed / Start-up	3 Early growth	4 Expansion	5 Sustainable growth
Cash flows	NA	Only negative	Negative (but increasing)	Positive (growing at a decreasing rate)	Stable
Proof of concept	×	×	✓	✓	✓
Historical data	×	×	Limited	✓	✓
Forecast data	×	Limited	Limited	✓	✓

Valuation methods



For early-stage companies, the valuation methods would differ from those applied to more mature companies. As provided in the table above, for valuation of companies in Idea to Seed and Seed to Start-up stages, the fixed ranges approach, the cost approach, and the scorecard valuation method might be used. When using the fixed ranges approach, incubators propose a 'take or leave' investment, which is based on the fixed ranges of capital offered in exchange for a share of equity. The cost approach sets the idea that an investor is willing to cover the costs that have already been incurred to get the target entity to its current stage. Finally, in order to assess the value of the target company using the scorecard valuation method, the potential investors have a list of criteria based on which the target entity and its peers are evaluated.

Valuation of companies in Early Growth and Expansion stages might be based on the venture capital (VC) and discounted cash flows (DCF) methods. Using the VC method, the value of the target entity is estimated as the value after a several years operating in the future or often called exit value. That value is then discounted to the present value using a discount rate. The DCF method is used for companies where cash flows can be reasonably estimated. The DCF approach is a valuation method used to estimate the value of the target entity based on its expected future free cash flows. Those cash flows are then discounted to the present value using an appropriate discount rate, being the weighted average cost of capital (WACC).

Finally, the companies that have reached the Sustainable Growth stage could be evaluated using the DCF or market multiples methods. When using the market multiples approach, the potential investors could consider either the current market price of publicly traded peer companies or the previous comparable transactions with disclosed multiples. In start-up valuation, the most often used multiples are enterprise value-to-revenue (EV/R), enterprise value-to-EBITDA (EV/EBITDA), enterprise value-to-EBIT (EV/EBIT), and enterprise value-to-free cash flows (EV/FCF).

After analyzing the alternative methods available, PT HIJ is in the phase of start-up to early growth stage, and hence most suitable to be using VC method, Scorecard method and Discounted cash flow method because they already operate in the market, have visible product, generating revenue but have limited historical as well as forecast data.

III.A Discounted Cash Flow Valuation Process

Using the DCF method can result in PT X to have either positive or negative cashflow, depend on the variables that were used as assumptions.

Revenue

According to research conducted by Grand View Research (2020), the compound annual growth rate or CAGR of delivery meal kit service will be 17,4% from 2022 to 2030. According to Market Watch (2022), the compound annual growth rate will be at 22,6% from 2021 to 2026. According to brand essence research (2022), prepared meals industry is expected to growth at 17,15% from 2020 to 2027. Hence, taken the research data performed and for this paper purpose, the customer base will growth at the rate of 20% at the base scenario, 15% at the worst scenario, and 25% at the best scenario.

Required Rate of Return

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As suggested by Plummer (1989), Scherlis & Sahlman (1988), Sahlman, Stevenson & Bhide (1988), Manigart & Witmeur (2009), and Damodaran (2009) a range of discount rate may be used when estimating the discount rate below:

Stage	Seed / Idea	Seed / Start-up	Early growth	Expansion
Plummer[1]	50%–70%	40%–60%	35%–50%	25%–35%
Scherlis & Sahlman[2]	50%–70%	40%–60%	30%–50%	20%–35%
Sahlman, Stevenson, & Bhide[3]	50%–100%	40%–60%	30%–40%	20%–30%
VC guide in BE[4]	50%–100%	50%–60%	40%–50%	30%–40%
Damodaran[5]	50%–70%	40%–60%	35%–50%	25%–35%
Selected discount rate	**50%–85%**	**40%–60%**	**35%–50%**	**25%–35%**
Main characteristics	• First idea • Understanding marketability • Building an MVP	• Go-to-market • Define business model • Testing MVP • First revenues • Continuous feedback on MVP • First hires	• Product revenue starts to increase • Aiming towards break-even point • Pivot business model where needed • Competition increases • Team structure becomes more complex	• Marketing efforts increase • Cash flows become positive and more stable • Recurring / growing revenues and +/- break even • Expansion to new products or markets

According to detailed research by The National Bureau of Economic Research has stated that a 25 percent return on a venture capital investment is the average. According to detailed research by Cambridge associate, the top quartile of VC funds has average annual return ranging from 15% to 27% for 10 years holding period. In Indonesia, VCs have their own judgement when determining the required rate of return. For instance, Alpha JWC reported that they have invested in more than 30 companies and the rate of return is around 37%. According to Mr. Gusti from ABC Capital, the minimum required rate of return that they will consider will vary depending on the stage, such us 20% to 25% for expansion stage, 30% to 40% for early stage, and 50% for idea stage. Thus, as the number are comparable, 35% will be used as a discount rate for this valuation project.

Timeline

According to Ajinkya et al. (2005) and Hutton et al. (2012), “document that timelines is an important determinant of forecasting accuracy”. The assumption will be categorized into 3 scenario which is base case that show the business will run with stable growth, best case which the company have more optimistic view compared to the base scenarios and worst case which which company predict a slower growth compared to the base scenarios in the future. The forecast year less than 5 years would be too short to be useful, and over 10 years is too difficult to predict for most companies. Hence, considering the market that PT HIJ operates in, the forecast timeline for the valuation is 10 years.

DCF Valuation Result

Table below is the summary of the valuation of PT HIJ considering the probability of the case occurrence:

Scenario	Probability	Valuation (in IDR)
Best Case	25%	119,685,342
Base Case	50%	60,494,830
Worst Case	25%	(30,643,005)
Weighted Valuation		52,507,999

III.B Venture Capital Method Valuation Process

The model suggests that the first step is to determine the terminal value. Terminal value can be a benchmark to a similar company and the other way is using multiple such as revenue multiplier. The information for market multiple especially in Indonesia market is very limited to none. Next, Discount terminal to present value using investor target required rate of return to get post financing valuation.

However, there is some information about the deals valuation for delivery meal kit industry in the US. For instance, Blue Apron closed a deal of funding round in 2015, backed by Bessemer Venture Partners, Fidelity, and First Round Capital, valued the firm at about $2 billion (2-3 times forward sales). Moreover, based on the subscription-based retail transaction as a proxy, venture capitalist believes that the acquisition can be value as high as 5 times revenue. Hence, for this project purposes, 3 times forward revenue will be used as a multiple valuation. The enterprise value/EBITDA and price/earnings transaction multiples are largely irrelevant, given

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the lack of profitability for most meal-kit delivery services. Hence, Table below is the summary of the valuation of PT HIJ considering the probability of the case occurrence:

Scenario	Probability	Valuation (in IDR)
Best Case	25%	359,054,843
Base Case	50%	314,751,966
Worst Case	25%	60,920,380
Weighted Valuation		262,369,789

III.C Scorecard Method Valuation Process

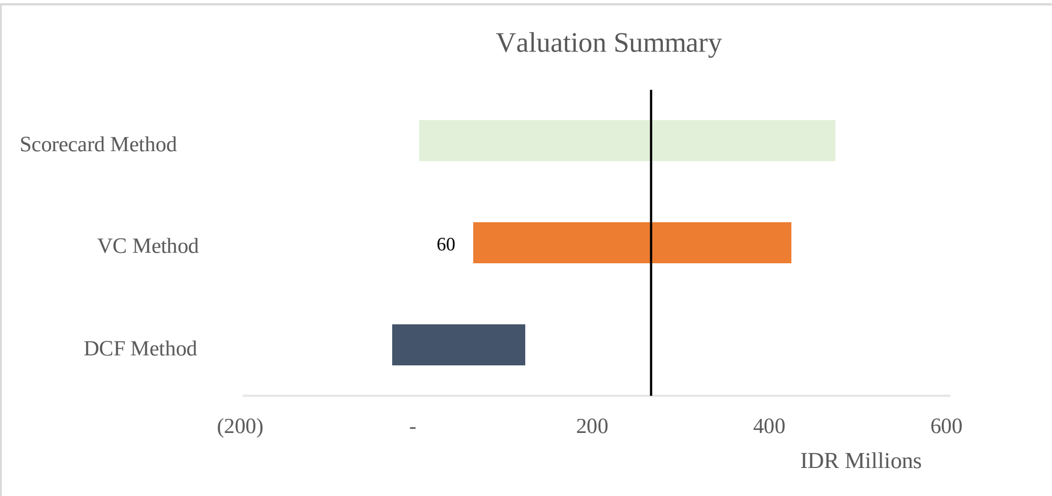
Under the scorecard valuation method, the list of criteria is provided and the valuation is based on the input from the management of the company, and venture capitalist considering the current condition and future opportunity of PT HIJ with the assumption of IDR 500 million pre-money valuation as demanded by the company's management team as the industry benchmark is not available. As follows:

Main Factors	Range of Weighted value (%)	Max Weighted Value (%)	Weighted Value	% of Norm	Weighted % of Norm	Valuation (in IDR)
1. Strength of the management team	0%-30%	30%	150,000,000	85%	26%	127,500,000
2. Size of the opportunity	0%-25%	25%	125,000,000	110%	28%	137,500,000
3. Product/Technology	0%-15%	15%	75,000,000	80%	12%	60,000,000
4. Competitive Environment	0%-10%	10%	50,000,000	90%	9%	45,000,000
5. Marketing/Sales/Channels	0%-10%	10%	50,000,000	110%	11%	55,000,000
6. Need of Additional Investment	0%-5%	5%	25,000,000	100%	5%	25,000,000
7. Other (ie. Market Validation, Brand Awareness)	0%-5%	5%	25,000,000	80%	4%	20,000,000
Total						470,000,000

III.D Valuation Summary

Based on the above valuation, the summary can be derived as follow:

In IDR		Discounted Cash flow method	VC Method	Scorecard Method
Scenario	Probability	Valuation (in IDR)	Valuation (in IDR)	Valuation (in IDR)
Best Case	25%	119,685,342	359,054,843	[redacted]
Base Case	50%	60,494,830	314,751,966	[redacted]
Worst Case	25%	(30,643,005)	60,920,380	[redacted]
Weighted Valuation		52,507,999	262,369,789	470,000,000



*Corresponding Author: Kevin Nathanael Susinto

IV. SUMMARY AND RECOMMENDATION

At the beginning of this paper, it can be seen that number of startups has been growing rapidly, also accelerated by the COVID-19. We have also identified the reason of failing startup, business environment of the company and also valuation method. However, every company have different lifecycle and each of them have their own terms, risk, financing method, and valuation method.

Based on the company outlook, and business outlook, the company still have potential to succeed in the market and getting the funding. The valuation analysis performed will benefit the company as well as the founder. For instance, it provides an accurate industry benchmark and can make it easier to obtain funding from lenders and financial organizations. Regular business valuations ensure you can plan strategically and grow at the right time. They also highlight areas that need attention before your business can achieve the desired growth. Other than that, when opportunities for investment, private equity injection or strategic partnerships arise, decisions need to be made quickly. A business owner who understands the true value of their business can take full advantage of these opportunities. A business valuation report covers your business's history, legal structure, financial information and a range of other factors. Thus, it provides a snapshot of the business performance in the current industry climate.

Based on the valuation performed, PT HIJ valuation resulting in an enterprise value ranging up to IDR 470 million, with the median of valuation at IDR 262 million. As the founder or the management team already have a number in their mind, better understanding on how to evaluate their business, what consideration need to be taken as discussed in this project. The founder of the company can try to search for a funding by proposing business deck to the investor such as venture capital.

REFERENCES

1. Angin Capital (2021). Indonesia Entrepreneur Ecosytem Mapping 2021: Report by ANGIN and Blue Impacts. Available from https://www.angin.id/2021/09/09/indonesia-entrepreneurs-ecosystem-mapping-2021. Accessed 2 January 2022
2. Berger. A & Udell. G (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. Journal of Banking & Finance, 1998, vol. 22, issue 6-8, 613-673
3. Cumming, D., (2008). Contracts and exits in venture capital finance. Rev. Finance. Stud. 21 (5), 1948–1982
4. Cole, Rebel & Sokolyk, Tatyana. (2014). Debt Financing, Survival, and Growth of Start-Up Firms.
5. Damodaran. A (2009). The Dark Side of Valuation 2nd Edition: Valuing Young, Distressed and Complex Business. New Jersey, United States: Pearson Educational Inc. Accessed 9 January 2022
6. Gitman, J & Zutter, C (2015). Principal of Managerial Finance 13th edition. accessed 8 January 2022
7. Gompers, P.A. and Lerner, J. (2001). The Venture Capital Revolution, Journal of Economic Perspectives Vol. 15(2), pg. 145–168. Accessed 8 January 2022
8. Kivunja, C. (2018). Distinguishing between Theory, Theoretical Framework, and Conceptual Framework: A Systematic Review of Lessons from the Field. International Journal of Higher Education Vol.7 No.6.
9. Magretta, J. (2002). Why business model's matter. Harvard Business Review 80(5): 86-92. Accessed 5 January 2022
10. Market Watch (2022), At 13% CAGR Meal Kit Delivery Services Market Size is Expected to Exhibit 2,4 Billion USD by 2027. Available from https://www.marketwatch.com/press-release/at-13-cagr-meal-kit-delivery-services-market-size-is-expected-to-exhibit-2414-billion-usd-by-2027-2022-01-13 .
11. Market Watch (2022). Meal Kit Delivery Services Market 2021 : Industry Size, Share and Analysis to Expand At impressive CAGR Through 2026 with Leading Regions and Countries Data. Available from https://www.marketwatch.com/press-release/meal-kit-delivery-services-market-2021-industry-size-share-and-analysis-to-expand-at-impressive-cagr-through-2026-with-leading-regions-and-countries-data-2022-01-16
12. Osterwalder, A. and Y. Pigneur. (2010). Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers. Hoboken, NJ: John Wiley & Sons, Inc. Accessed 4 January 2022
13. PricewaterhouseCoopers (n.d). PwC Deals insights: How to value a start-up business. https://www.pwc.com/lv/en/news/how-to-value-start-up-business.html
14. Sapienza, H.J. (1992). When do venture capitalists add value, Journal of Business Venturing Vol.7 pg. 9–27. Accessed 8 January 2022
15. Scott, D.L., (2003). Wall Street Words: An A to Z Guide to Investment Terms for Today's Investor, Houghton Mifflin Company. Accessed 8 January 2022

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IJCSRR @ 2022
www.ijcsrr.org

16. Valentine, K. (2001). SWOT analysis from a resource-based view. Journal of Marketing Theory and Practice. 9(2): 54-68. Accessed 6 January 2022
17. Walsh, P. (2005). Dealing with the uncertainties of environmental change by adding scenario planning to the strategy reformulation equation. Management Decision 43(1): 113-122. Accessed 4 January 2022
18. Weihrich, H. (1982). The TOWS Matrix A Tool for Situational Analysis. Long Range Planning 5(2): 54–66. doi:10.1016/0024-6301(82)90120-01

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