Startups and Sources of Funding

S. A. Janaji[1], K. Ismail[2], and F. Ibrahim[3]

School of Business, Universiti Teknologi Brunei, Brunei

Email: [1]sitiaisahjanaji@gmail.com

Abstract— Startups often face pressures in commercializing products and services. Considering the limited capital and experiences, startups may not qualify for institutional equity investment at the start. Therefore, it is important for startups at the founding stage to raise funding for short- and long-term growth. This paper attempts to highlight relevant literature review and research gaps related to startups' sources of funding. One of the significant findings in this paper is investors' decision in providing funding. This paper will add growing literature on factors that influence investors' decision-making, and guide in examining startups' stages of funding sources in Brunei.

Keywords— Startups, Funding, Growth, and Decision-making.

I. INTRODUCTION

Startups are one of the most effective creators and innovators of new ideas [1]. The creation of new jobs or filling of patents are reflections of supporting local innovative startups whereby new companies are possibly to be developed, existing product ideas to be expanded thus, strengthening the economic system [2]. Financial constraints, lack of commercial experience and managerial are parts of startups' difficulties [3][4] as startups tend to rely on financial resources as well as enabling infrastructure for survival [5][6]. Additionally, startups rely on establishing trusting relationships with key stakeholders namely financial resource providers [7]. Thus, financial risks are often centered on sustaining liquidity and securing finance [8]. Overtime, startups go through several phases from pre-launch to maturity or exit. However, startups' lack of market legitimacy and credibility reduce the ability to find institutional and industrial partners for cooperation in the innovation processes [9].

II. DEFINITIONS OF STARTUP

Startups are recognised as having high involvement of innovation activities [4]. Startups are seen as a crucial source of innovation [10]. The term "startup" originated from the U.S. in the late 1970s and became popular in the late 1990s as part of the internet hype and technology and blazed out in 2000s [11]. Additionally, the term was established by venture capital to distinguish between new companies and small business which have scalable fast growth potential, and the term is tied to risk funding and technology mindset [11].[12] defines a startup as "*A temporary organization designed to look for a business model that is repeatable and scalable.*" While [13] defines a startup as "*A human institution designed to create a new product or service under conditions of extreme uncertainty.*" Intriguingly, there has been evolution of startups' definitions from the 1970s till present. For instance, [14] defines startups as "*Young, not yet established companies, which are set up to realize an innovation business idea […].*"

In the context of Indonesia, a startup is defined as a temporary phase of an entrepreneurial venture trajectory whereby entrepreneurs reshape and refine business models with a vision to establish and refine business models with a vision to establish a viable, scalable and stable enterprise [15]. Moreover, a startup is a newly young, founded company that is looking for a scalable and repetitive model for an innovative marketable product or service [16]. Based on [17]'s findings, most of the interviewees had an unclear definition of the term "startup". In addition, the several definitions of the term by interviewees included the size of the term, operation duration, work difficulty, informality, financing methods, growth, and absence of a finished product. However, [17] emphasizes that the size of startups is not often started. [17] concluded that albeit startups have been discussed in both non-academic and academic, the definition remains undefined. Thus, it can be suggested that a startup is an innovative firm that has traits such as risk-taking, proactive and seeks to grow continuously.

III. STARTUP'S SOURCES OF FUNDING

In general, startups' capital can be raised from entrepreneurs' or founders' personal fund, family, friends, banks, business angels, venture capitalists, and crowdfunding. Startups that can survive through the "Valley of Death" (VoD) tend to seek venture capital financing. At the later stage, startups either sell the firm to larger companies or go public.

Financial bootstrapping is one of startups' sources of funding in which the term was first coined by [18] whereby it allows a limited financial resource to start a business. [19] identifies bootstrapping methods in which seeding capital can be obtained from namely, customers, internal business optimization, external financiers, business partners, owners, suppliers, and employees. The success factors of crowdfunding have been

All rights are reserved by **UIJRT.COM.**

identified such as human capital attributes [20], terms of equity offering [21], and third-party signals [22]. However, there have been unclear arguments about how and under which conditions bootstrapping techniques can take place [19].

Alternatively, business angels provide early stage in filling the funding gap between the initial startup financing and financing by venture capital [23][24][25][7]. Business angels also invest in non-monetary resources namely, experiences, knowledge, mentoring and contacts [26][27]. [28] assert that startups that are financed by business angels are likely to improve the likelihood of survival for startups [28]. However, there has been a limited attention on how business angels' trust assists and disrupts the entrepreneurs' journey through the VoD [23]. In the findings of [29]'s study, they found that about 70% of sampled business angels invested in the seed stage makes the highest percentage of all types of investors. This resonates with the fact that the business angels possess substantial entrepreneurship experience [26] in which can facilitate startups to formulate strategies while providing funding.

[23] established a process model of sustaining business angels during the passage from research to commercialization stage and bridge business angels' investment, reinvestment, and withdraw funding decisions to the evolution of trust in the entrepreneurs. Albeit the fact that [23] highlight that busines angels' trust is shaped by evaluations and perceptions of entrepreneurs' perspective to understand the trust formation and evolution as their unit of analysis was centered to business angels. Intriguingly, their analysis illustrates that one of the startups was provided reinvestment and recommended to new investors such as VCS as the result of trust which has been consistently built overtime [23]. Thus forth, the trust building cycle empowers entrepreneurs' journey to cross the first stages of the VoD as well as securing to the last stage "product/service commercialization" [23].

Venture capitalists (VC) are another source of funding. A recent study on how VC investment is affecting the startups' sustainable growth and performance based on the sample of 363 startups from 2000 to 2007 by [31] found that startups perform and sustain when they receive investment at the initial stage. How a startup is capable to accept and exploit new resources by VC companies determines the startup's sustainable growth and performance [31]. However, [32] found that the relationship between VC investment and startups' performance is still understudied.

Both investors and entrepreneurs face challenges in 'thin market' in the early stage of entrepreneurial finance [7] whereby [7] cite that the matching process is perceived as a two-stage process; firstly, entrepreneurs look for investors then investors will evaluate the entrepreneurs who look for them [33]. However, entrepreneurs tend to struggle in finding and securing investment whereas investors tend to struggle in identifying and establishing projects that have the investment criteria [33]. The term "thin market" is described in the matching process in venture capital as there are only a few applicable and active investors for entrepreneurs and a limited applicable group of entrepreneurs [33][34].

Venture capitalists tend to face decion-making problems which lead them to rely on psychological state and intuition in making decisions at uncertain investment circumstance [3]. [7] identify four risks that are important in the evaluation of the venture namely, market risk, technology risk, finance risk and policy risk. [7] cite that investors make contract on milestones, develop KPIs, and limit the commitment in the early stages for ventures to unlock further investment [36]. The effect of psychology on individuals into decision-making is systematically raising upon concerns on the decision making under bounded rationally condition [35][37]. Prospect theory has been developed to represent the behavior of venture capitalists' decision-making [38]. This reasonates with the framework of prospect theory [39] which is perceived to be an adaptive framework in reality.

Lastly, crowdfunding is a new emerging landscape for financing projects whereby [40][45] highlight that crowdfunding has emerged as a market for founders where they can raise money from close networks including family, friends, customers, and current stakeholders as well as mass number of investors. Unlike other sources of funding, the distinctive crowdfunding's characteristic is that funders do not necessarily possess profession investment experience and may likely to have other motivations than financial return expectations [41]. [44] cite that over 75% of successfully funded projects delivered later than the expected time while some experienced delays [48]. [29] pinpoint that there is a similar relationship between venture capital and crowdfunding in which the development of crowdfunding could derive from the development of tradition forms of entrepreneurial finance (e.g., business angels and venture capital). [44] highlight that crowdfunding can serve as an introduction

All rights are reserved by UIJRT.COM.

prior to traditional finance. The openness in the innovation process and great amount of information including ideas and sources of external knowledge provided to crowd funders would increase the level of innovation [52].

However, the success of crowdfunding also lies on sophisticated investors' presence who have public profiles in websites or social media that attract other investors to the campaign [42]. In general, crowdfunding is more preferable due to the weaker control rights by crowd funders [49]. To some extent, successful crowdfunding campaigns may not require assistance from venture capitalists and lessen the information asymmetry as it can be seen as a pre-test for product commercialization [50]. In the findings of [51] on the linkage between venture capital and crowdfunding, it was found that firms that raised a large amount from crowdfunding expands the entrepreneur's autonomy and provides signal on the success of the project although venture capitalists demonstrate more indication of success. Hence, [50] argue that venture capitalists and crowdfunding can be substitutes.

This was emphasized by [43] that early investors are critical for the success of a campaign as non-expert investors follow investment decisions of reputable investors. Similar to VC, investors in crowdfunding are not often making rational decisions in funding decisions [44]. It is suggested to further research on how regulatory institutions, approaches and culture affect the development of equity crowd funding market as well as entrepreneur's' motivations, matching of entrepreneurs and investors, and investment dynamics [46].

IV. CONCLUSION

This paper has briefly discussed the types of startups' funding and research gaps that are possibly to be followed up in authors' research. This paper provides understanding that financial is one of the main challenges in which obtaining funding for each growth stage of a firm requires certain criteria and capabilities. Crowdfunding appears to offer alternative opportunities in financing innovative entrepreneurial firms. It should be noted that the role of entrepreneurs' networks, research institutions, and universities is important to new venture performance.

REFERENCES

[1] Schallmo, D. R. A. & Williams, C. (2018). History of Digital Transformation. In: Digital Transformation Now. Springer Briefs in Business. Springer, Cham. DOI: 10.1007/978-3-319-72844-5_2.

[2] Spender, J. C., Corvello, V., Grimaldi, M. & Rippa, P. (2017). Startups and open innovation: a review of the literature. *European Journal of Innovation Management*, 20, pp. 4-30.

[3] Spender, J. C., Corvello, V., Grimaldi, M. & Rippa, P. (2017). Startups and open innovation: a review of the literature. *European Journal of Innovation Management*, 20, pp. 4-30.

[4] Spender, J. C., Corvello, V., Grimaldi, M. & Rippa, P. (2017). Startups and open innovation: a review of the literature. *European Journal of Innovation Management*, 20, pp. 4-30.

[5] Audretsch, D. B., Segarra, A. & Teruel, M. (2014). Small Business Economics., 43, pp. 751-766. DOI: https://doi.org/10.1007/s11187-014-9561-9

[6] Noelia, F. & Rosalia, D. (2020). A dynamic analysis of the role of entrepreneurial ecosystems in reducing innovation obstacles for startups. *Journal of Business Venturing Insights,* 14, e00192, DOI: https://doi.org/10.1016/j.jbvi.2020.e00192.

[7] Ko, E. -J. & McKelvie, A. (2018). Signaling for more money: the role of founders' human capital and investor prominence in resource acquisition across different stages of firm development. *Journal of Business venture,* 33, p. 438.

[8] Vazynte, E. & Andries, P. (2019) Entrepreneurial oreitnation and start-ups' external financing. *Journal of Business venture,* 35, pp. 439-458. DOI: 10.1016/j.jbusvent.2019.01.006

[9] Polzin, F., Sanders, M. & Savlöt, U. (2018). Do investors and enterpreneurs match? – Evidence from The Netherlands and Sweden. *Technological Forecasting and Social Change,* 127, pp. 112-126. DOI: https://doi.org/10/1016/j/techfore.2017.07.016

[10] Grill, L., Latifi, G., MrKajic, B. (2019). Institutional Determinants of Venture Capital Activity: An Empirically Driven Literature Review and A Research Agenda. *Journal of Economic Surveys,* 33, pp. 1094-1122. DOI: https://doi.org/10.1111/joes.12319

[11] StartupsCommons. (2021). What is a startup?. Accessed on: https://www.startupcommons.org/what-is-a-startup.html

[12] Blank, S. (2013). Spotlight on entrepreneurship: Why the Lean startup changes everything. In: Harvard Business Review.

[13] Ries, E. (2011). The Lean Startup: How Today´s Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses, p. 18.

All rights are reserved by **UIJRT.COM.**

[14] Achleitner, A. (2018). Start-up Unternehmen. In: Gablers-Wirtschaftsle-xikon.

[15] Sasakawa Peace Foundation. (2018). Start-up assistance Organizations in Indonesia. Performance, Challenges and Solutions – Special Focus on Gender Inclusion.

[16] Jasemann, I., Beichter, T. Herburger, K., Constantinescu, C. & Rüger, M. (2020). Migration of the Lean-Startup approach from High-Tech startups towards product design in large manufacturing companies. *Procedia CIRP 91,* pp. 594-599.

[17] Cockayne, D. (2019). What is a startup firm? A methodological and epistemological investigation into research objects in economic geography. *Geoforum,* 107, pp. 77-87. DOI: https://doi.org/10.1016/j.geoforum.2019.10.009

[18] Bhide, A. (1992) Bootstrap Finance: The art of start-ups. *Harvard Business Review*, 70 (6) pp. 109-117.

[19] Horváth, K. (2018). Financial Bootstrapping Techniques: A Systematic Review of the Literature. *On Research,* 1.

[20] Piva, E. & Rossi-Lamastra, C. (2018). Human capital signals and entrepreneurs' success in equity crowdfunding. *Small Business Economics,* 51(3), pp. 667-686. DOI: https://doi.org/ 10.1007/s11187-017-9950-y.

[21] Mochkabadi, K., Volkmann, C.K., 2020. Equity crowdfunding: a systematic review of the literature. *Small Business Economics*, 54 (1), 75e118. https://doi.org/10.1007/s11187- 018-0081-x.

[22] Bapna, S. (2019). Complementary of signals in early-stage equity investment decisions: evidence from a randomized field experiment. *Management Science*, 65 (2), 933e952.

[23] Lefebvre, V., Certhoux, G. & Radu-Lefebvre, M. (2020). Sustaining trust to cross the Valley of Death: A retro perspective study of business angels' investment and reinvestment decisions. *Technovation,* 102159. DOI: https://doi.org/10.1016/j.technovation.2020.102159

[24] Cox, K. C., Lortie, J. & Stewart, S. A. (2017). When to prat to the angeles for funding: the seasonality of angel investing in new ventures. *Journal of Business Venturing Insights,* 7, pp. 68-76. DOI: 10.1016/j.jbvi.2017.03.003

[25] Gregson, G., Mann, S. & Harrison, R. (2013). Business angel syndication and the evolution of risk capital in a small market economy: evidence from Scotland. *Managerial Decision Economics,* 34(2). DOI: https://doi.org/10.1002/mde.2595

[26] Collewaert, V. & Manigart, S. (2016). Valuation of angel-backed companies: the role of investor human capital. *Journal of Business Management,* 54(1), pp. 356-372. DOI: https://doi.org/10.1111/jsbm.12150

[27] Politis, D. (2008). Business Angels and Value Added: What Do We Know and Where Do We Go?. *Venture Capital,* 10(2), pp. 127-147.

[28] Croce, A. Guerini, M. & Ughetto, E. (2018). Angel financing and the performing of high-tech start-ups: angel financing and the performance of high-tech start-ups. *Journal of Small Business Management,* 56(2), pp. 208-228. DOI: https://doi.org/10.1111/jsbm.12250

[29] Block, J., Fisch, C., Vismara, S. & Andres, R. (2019). Private Equity investment criteria: An experimental conjoint analysis of venture capital, business angels, and family offices. *Journal of Corporate Finance,* 58, pp. 329-352. DOI: https://doi.org/10.1016/j.jcorpfin.2019.05.009

[30] Daly, P. & Davy, D. (2016). Structural, linguistic and rhetorical features of the entrepreneurial pitch: lessons from Dragon's Den. *Journal of Management Development,* 35, pp. 120-132.

[31] Valentim, L., Veríssimo, J., & Franco, M. (2016). Knowledge Management Practices and Absorptive Capacity in Small and Medium-Sized Enterprises: Is There Really a Linkage?. *R&D Management, 46*(4), pp. 711-725. https://doi.org/10.1111/radm.12108

[32] Jeong, J., Kim, J. Son, H. & Nam, D. (2020). The Role of Venture Capital Investment in Startups' Sustainable Growth and Performance: Focusing on Absorptive Capacity and Venture Capitalists' Reputation. *Sustainability,* 12 (8), 3447. DOI: 10.3390/su1208344

[33] Bertoni, F., D'Adda, D. & Grilli, L. (2015). Cherry-picky or frog-kissing? A theoretical analysis of how investors select entrepreneurial ventures in thin ventures capital markets. *Small Business Economics*, 46, pp. 391-405. DOI: 10.1007/s11187-015-9690-9

[34] Hall, S., Foxon, T. J. & Bolton, R. (2016). Financing the civic energy sector: how financial institutions affect ownership models in Germany and the United Kingdom. *Energy Research & Social Science,* 12, pp. 5-15.

[35] Tian, X., Xu, Z. Gu, J. & Herrera-Viedma, E. (2018). How to Select a Promising Enterprise for Venture Capitalists with Prospect Theory under

All rights are reserved by UIJRT.COM.

Intuitionistic Fuzzy Circumstance?. *Applied Soft Computing,* 67, pp. 756-763.

[36] Bengstsson, O. & Hsu, D. H. (2015). Ethnic matching in the U.S. venture capital market. *Journal of Business Venture,* 30, pp. 338-354.

[37] Paul S. (1972). Psychology study of human judgment: Implications for investment decision making. *Journal of Finance*, 1972, 27(1), pp. 779-800.

[38] Bock, C. & Schmidt, M. (2015). Should I stay, or should I go?. How fund dynamics influence venture capital exit decisions. *Review of Financial Economics,* 27.

[39] Kahneman, D. & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. Econometrica, 47(2), pp. 263-291.

[40] Ralcheva, A. & Roosenboom, P. (2020). Forecasting success in equity crowdfunding. *Small Business Economics,* 55, pp. 39-56.

[41] Mckenny. A. F. & Allison, T. H., Ketchen, D. J., Short, J. C. & Ireland, R. D. (2017). How should crowdfunding research evolve? A survey of the entrepreneurship theory and practice editorial board. *Entrepreneurship Theory and Practice,* 41(2), pp. 291-304.

[42] Vismara, S. (2018). Information Cascades among investors in Equity Crowd. *Entrepreneurship Theory and Practice,* 42(3), pp. 467-497.

[43] Kim, K. & Viswanathan, S. (2019). The experts in the crowd: the role of experienced investors in a crowdfudning market. *MIS Quarterly,* 43 (2), pp. 347-372. DOI: 10.25300/MISQ/2019/13758

[44] Ren, J., Raghupathi, V., & Raghupathi, W. (2021). Exploring the subjective nature of crowdfunding decisions. *Journal of Business Venturing Insights,* 15, e00233.

[45] Cai, W., Polzin, F., Stam, E.. (2021). Crowdfunding and social capital: A systematic review using a dynamic perspectvive. *Technological Forecasting and Social Change,* 162, 120412. DOI: https://doi.org/10/1016/j.techfore.2020.120412

[46] Yasar, B. (2020). The new investment landscape: Equity crowdfunding, *Central Bank Review.*

[47] Mollick, E., Kuppuswamy, V., 2016. Crowdfunding: evidence on the democratization of startup funding. Revolutionizing Innovation: Users, Communities, and Open Innovation. MIT Press, 537–559.

[48] Brown, R. Mawson, S., Rowe, A. & Mason, C. (2018). Working the crowd: Improvisational entrepreneurship and equity crowdfunding in nascent entrepreneurial ventures. *International Small Business Journal,* 36 (2), 169-193.

[49] Herve, F. & Schwienbacher, A. (2018). Crowdfunding and Innovation. *Journal of Economic Surveys,* 32 (1). DOI: 10.1111/joes/12274

[50] Colombo, M. G. & Shafi, K. (2016). Does crowdfunding help firms obtain venture capital and angel finance? *ENTFIN Conference.* Retrieved from www.em-lyon.com/minisiteen/ReCEntFin/ENTFIN-Conference-2016/Papers.

[51] Stanko, M. A. & Henard, D. H. (2017). Toward a better understanding of crowdfunding, openness and the consequences for innovation. *Research Policy,* 46 (4), 784-798.

All rights are reserved by UIJRT.COM.