

The Influence of Startup Business Characteristics on Investment Decisions of Business Angels: A Case Study in Indonesia

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Abstract

A startup company (startup or start-up) is an entrepreneurial venture which is typically a newly emerged, fast-growing business that aims to meet a marketplace need by developing or offering an innovative product, process, or service. Creative ideas initiated by young people have made the number of startups in Indonesia on the rise. A startup is considered to have good business potential, thus attracting investors to invest. These investors could be institutional and individuals. Individual investors that invest their funds in startup companies are called business angels or angel investors. In this context to make an investment decision, there are a few things that need to be considered to appraise whether the investment is feasible. The purpose of this research is to see how business angels appraise the characteristics of the startup business in which they invest. There are three characteristics to be considered - the characteristics of the founder, product characteristics, market characteristics. This study uses a quantitative method by making use of questionnaires as the data collection technique. The questionnaires were distributed to startup investors domiciled in Yogyakarta with a sample size of 100. The research findings reveal that founders' characteristics, product characteristics, market characteristics can affect the investment decisions of business angels.

Keywords: Investment Decision, Angel Investor, Founders' Characteristic, Product Characteristics, Market Characteristics

JEL Classification Code: D9, E3, E6

1. Introduction

Startups may be small companies but they can play a significant role in economic growth. They create more jobs which mean more employment, and more employment means an improved economy. Not only that, but startups can also contribute to economic dynamism by spurring innovation and injecting competition. A startup business is defined as an early-stage firm that might potentially become a company, a partnership, or a temporary organization accompanied with the development of capacity and technical capabilities,

as well as entrepreneurial managerial that has the potential to grow business values and competitiveness innovatively and creatively within a certain period. The advent of startups begun with the widespread use of the Internet and rapidly developing technology. Creative ideas from millennials have allowed maximum use of the Internet to generate products useful for the increasing startup business growth.

In Indonesia, startups are growing fast. According to the data from Dailysocial.id stemming from Communication and Information Technology Creative Communities of Indonesia (MIKTI) supported by Creative Economy Agency (BEKRAF), there have been 1,500 local startups in the country (WCCE, 2018). Each year, new startup founders come to existence and are ready to expand their businesses. The minister of Informatics and Communication, Rudiantara, stated that the digital economy in Indonesia would reach US\$ 130 billion or Rp 1.831 trillion in 2020. This has accounted for 11% of the GDP (Rumata & Sastrodybroto, 2019). It is not surprising that the Indonesian government is making a hard effort to increase the number of startups in the country. Various supports are also provided so that startups can grow and develop, one of which is through the Indonesian government's movement to create new startup businesses,

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namely the 1,000 Startup Digital National Movement. This movement is a 6-month continuous coaching program from the government for the common people in building digital startups (CfDS, 2020). The 1,000 Startup Digital National Movement has started in ten cities, one of which is Yogyakarta. In these ten cities, an innovation center will be established as a gathering point for technological, creative, and cultural communities and as a co-working space for local creators to collaborate in creating solutions for society's needs. This movement is expected to generate new entrepreneurs who will be the starting point for creating the future of Indonesia's digital economy (CfDS, 2020).

Currently, Indonesian startups acquire numerous investments. Google, Temasek, and Bain Company showed that the funds this country gained is US\$ 1.8 billion or Rp 23.8 trillion per the first Semester of 2019 (Rumata & Sastrosybroto, 2019). As it is well-known that establishing and developing a startup requires huge funds since adequate funding determines the viability of the startup. The financing source in early-stage business could be from formal and informal parties. The former is carried out by venture capital companies, banks, and governmental institutions, while the latter from individuals who have family relationships or those with no family relationships or usually called angel investors or business angels (Nofsinger & Wang, 2011). Cox et al. (2017) found that more than 75% of business angels serve as the financing source for startups in their early stage.

Business angels are investors who invest an amount of money in startup businesses. When investors put their interest in a startup by providing financial assistance, the startup must have had a big business potential and has a large opportunity to grow in the future (Dollinger, 1999). Therefore, there are a few criteria that need to take into account before investors (business angels) invest their funds in the startup - the characteristics of the management and founders, products and services, and market. These three criteria can be made into a strategy to appraise the quality of the management team in investment appraisal (Rostamzadeh et al., 2014).

In relation to the first criterion, the quality of the startup's management and founding team is considered to increase the startup growth. The quality comprises their work experiences, entrepreneurial soul, and educational background. Some literature reveals that entrepreneurial soul is considered an important appraisal for business angels (Sudek, 2006). To put it another way, those who have once worked in a similar sector with the sector in which they work currently will be the key consideration compared with those having work experience as a manager that deals with the different industry sector (Carpentier & Suret, 2015). In addition, the founders and team with various work experiences are inclined to succeed more in establishing a business as they have more work experiences in their previous jobs and broader social

networks which in turn benefit the startup business. These are what make the business angels convinced with the founders to gain more success (Talaia et al., 2016). Another aspect of the founders' characteristics is their educational background. It relates to managerial and financial capabilities to identify and explain the proportions of values, strategies, business plans, and determine market and customer targets (Talaia et al., 2016).

Maxwell et al. (2011) included product characteristics in one of the considerations in investment appraisal. Product characteristics comprise the product appeals, benefits, product innovations, and what products fit the market demand. Nofsinger and Wang (2011) strengthened that business angels highly pay attention to the products. If the startup produces new products, the business angels will put a higher appraisal on the startup. To put it simply, the products with uniqueness are considered to stimulate thoughts and emotions of the consumers that the products gain a high value (Ottavia, 2014). In addition, the products that always go through technological-based innovations will also receive a higher appraisal for the startup (Iruarrizaga et al., 2017). Carpentier and Suret (2015) confirmed that investors will refuse to invest in a startup business whose product characteristics do not match the market demand and have no uniqueness which may result in the absence of competitive advantage.

The third characteristic used as consideration for investment appraisal by business angels is market characteristics. Appraising the market aims to provide information about market needs, market size, and competitors. There are a few things that need to be considered in selecting a startup business based on its market characteristics. First, the startup founder is required to design a market target and market size to facilitate creating products that match consumers' wants and needs. Business angels also consider whether at this time and in the future, there will be similar competitors. Their interests will be more likely to drop down if the startup does not have considerable competitors (Carpentier & Suret, 2015). Another thing to be considered in appraising market characteristics is the level of market growth opportunities. In this case, business angels tend to be more interested in the startup business with better market growth prospects (Nofsinger & Wang, 2011). This criterion is supported by Iruarrizaga et al. (2017) who stated that a high potential growth rate will affect their appraisal in investment decisions.

Based on the explanation, this research study aims to find out the characteristics the investors (business angels) prefer in investing their funds in a startup business. It is expected that these research findings can be useful for the founders who plan to establish a startup business or those running a new venture, to facilitate initial capital acquisition for business viability.

2. Literature Review and Hypothesis Development

2.1. The Investment Decision Process of Business Angels

Investment decisions are made by investors and investment managers. Investors generally carry out investment analysis by making use of fundamental analysis, technical analysis and hunches. Investment decisions are often supported by decision tools (Brigham and Houston, 2014). In the decision-making process, investors need various considerations given that the decisions made have long consequences. Therefore, planning investment decisions is of great importance. It is considered critical since the number of funds spent on investment is large and it will be tied up for a long period of time to gain a return from the funds. Investment decisions are closely associated with the expectation to earn returns in the future. The mistakes that occur in investment forecasting will lead to over or under-investment. The decision-making process by business angels is the process that occurs before deciding to invest in a new venture or startup. There are a few steps conducted by business angels before making an investment decision. First, one member of the business angels carries out an early screening to select a business according to the criteria set by the business angels (Sabden, 2018). After appraising the business plan, the next step is contacting the entrepreneurs to collect information on the company. The company that has gone through the early screening stage, is then evaluated in detail by the business angels. In this stage, the entrepreneurs perform presentations in front of the business angels. The business angels will then conduct due diligence, and if the outcomes fit the criteria, they will individually determine whether they will do the investment or not (Mason et al., 2016).

2.2. The Influence of Startup Founders' Characteristics on Investment Decisions

Sohl and Blease (2015) showed that the high-quality characteristics of the startup founders will decrease the investors' concerns when allocating funds to a business measured through previous work experiences in developing a business, the experience working in the current business, and the education to make strategic decisions. Talaia et al. (2016) stated that the factors that influence startup financing are the founders' educational background in relation to financial understanding and managerial skills. These factors have a significant effect on the amount of capital received. The better the knowledge level of the founders, the larger the number of funds received; this is because the investors trust

that the startup success is high. The founders with professional educational backgrounds are considered to be able to develop business plans. In addition, managerial knowledge and financial competence are also required to identify and explain the proportions of value, strategies, and business models of a new business, market target, and customers. Kor (2003) explained that the founders' knowledge is the key source of organizations to determine the initial goals and resources to be exploited. Knowledge can be an important asset in developing capabilities that lead to growth opportunities for an organization. Another factor is prior entrepreneurial experiences or prior work experiences in a similar industry that can be a powerful factor for a business to succeed. In this case, the founders with prior entrepreneurial experiences will be more familiar with the process of building a complex business and allow fewer mistakes compared with those who newly start a business (Barringer & Ireland, 2019). Additionally, Carpentier and Suret (2015) showed that one with work experience in an industry like the current industry one is working in is considered to have a higher appraisal compared with the one with work experience from a different industry. Another finding by White and Dumay (2018) revealed that the personal experiences of the founders and team members influence the investment decision-making process of business angels as they think that prior personal experiences will affect company equity. Thus, hypothesis 1 is proposed as follows:

H1: The characteristics of the startup founders have a significant influence on the investment decisions of business angels.

2.3. The Influence of Startup Product Characteristics on Investment Decisions

Business actors need to understand the needs and wants of consumers when entering the market in the early stage. Many startups failed due to the inability to adjust the products being offered to the market demands (Picken, 2017). Therefore, to create products, there are a few questions that need to be analyzed by the founders so that the business will succeed. First, will there be consumers who wish to purchase the products? Second, are products created to match the trend in society? Such as economic, social trends, and technological advances. Do the products being offered can solve the problems in society? Third, do the products being offered have designs and concepts that already exist in the market? To put it another way, do the products have a particular uniqueness compared with other products from other brands (Barringer & Ireland, 2019). A study by Li et al. (2014) indicated that the products that fit the market growth have a significant effect on investment appraisal. This finding is supported by Zinecker and Bolf

(2015) who revealed that creating products that match the market demands has a significant effect of 85.71% on investment. Similarly, a study by Rostamzadeh et al. (2014) showed that products with innovations, based on technology, and having selling potential in the market can attract business angels to invest. Thus, hypothesis 2 is proposed as follows:

H2: *The characteristics of startup products have a significant influence on the investment decisions of business angels.*

2.4. The Influence of Startup Market on Investment Decisions

Three things need to be considered in selecting the market - market segmentation, determination of market target, and positioning (Phillip & Armstrong, 2008). In selecting the market segment, companies need to see the segment growth and the segment attractiveness. Good market growth is usually considered an interesting rationale to enter the market due to its opportunity to generate profits as expected. However, most of the markets with good growth currently have considerable competitors, and if the startup does not have sufficient resources, the market aimed will be highly competitive. Thus, the startup has an alternative to select a smaller segment by creating a new market. By doing so, the startup has fewer competitors to be able to introduce new products to consumers in which such products will be said to be new products in the market. If the startup remains entering the market filled with high competitors, it is expected that the founders should be familiar with the industry for keeping the competitive advantage and strong positioning in the market (Barringer & Ireland, 2019). A study by Iruarizaga et al. (2017) showed that market characteristics measured by good market growth potential have a significant influence on the investment decisions of business angels. Rostamzadeh et al. (2014) revealed that market characteristics measured by market size, and business growth potential influence investment appraisal. The research finding by Zinecker and Bolf (2015) also revealed that market characteristics measured by creating a business in accordance with current market growth have a significant influence on the criteria

of investment appraisal of 85.71%. Similarly, Cox et al. (2017) stated that market characteristics with good potential influence investment appraisal. Ottavia (2014) also found in Taiwan that market characteristics affect the investment decisions of business angels. Thus, hypothesis 3 is proposed as follows (see Figure 1):

H3: *The characteristics of the startup market have a significant influence on the investment decisions of business angels.*

3. Research Methods

3.1. Population, Sample, and Data Collection Technique

The population in this research is the investors who have or are currently investing directly in startup businesses in Yogyakarta. Snowball sampling - the technique determining sample which initially is small then becomes large; that is existing study subjects recruit future subjects from among their acquaintances. Snowball sampling is a non-probability sampling technique in which the samples have traits that are rare to find. The data collection technique is based on primary data in the form of a questionnaire distributed through a google form which in turn obtained 100 investor respondents who have or are currently investing directly in startup businesses in the city. This research study makes use of a 5-Likert scale with the following answer format: Strongly Disagree with a score of 1, Disagree with a score of 2, Neutral with a score of 3, Agree with a score of 4, and Strongly Agree with a score of 5. The validity and reliability tests of questionnaire results were conducted to find out whether the questionnaire being used is feasible or not.

3.2. Research Variables

This research study has three variables - founders' characteristics, product characteristics, and market characteristics. These three variables are further explained in the form of a questionnaire. Table 1 displays each indicator used in the three variables.

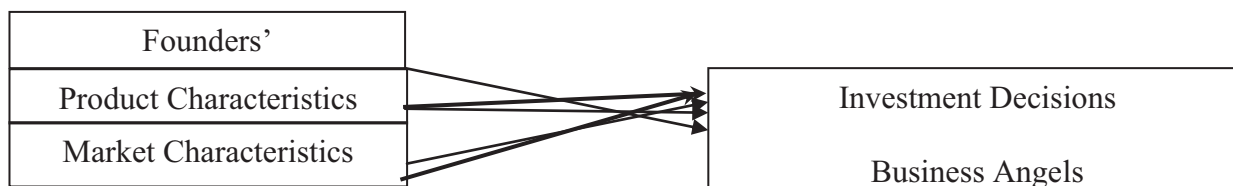


Figure 1: Research Framework

Table 1: Definition of Research Variables

Research Variables and Indicators
Founders' characteristics are the capability and knowledge stemming from prior work experiences that become the basics in managing a variety of activities in a company. There are 5 indicators:
Investors prefer founders who are able to organize the management team.
Investors prefer to consider the founders' experiences.
Investors prefer founders who have an entrepreneurial soul.
Investors will consider founders' knowledge of the current business they are handling.
Investors will consider the educational background of the startup founders.
Product characteristics are the things offered to the market to attract attention, uses, or consumptions that satisfy the needs and wants. There are 3 indicators in this type of characteristics:
Investors consider more the products that match the current market demands.
Investors consider more technology-based products.
Investors consider more product uniqueness.
Market characteristics. In selecting the market, market segmentation can be done by dividing the market into small groups in accordance with different needs, characteristics, or behavior of each segment. Determining the market target is necessary as it aims to evaluate the attractiveness of each segment for selecting one or more segments to get into it. There are 3 indicators in this type of characteristics:
Investors consider more the startup businesses that create a new market.
Investors consider more the startup businesses that have a market target with a good level of growth.
Investors consider more the already recognized startup business industry.

4. Results

4.1. Validity Test and Reliability Test

The research instrument in this study is related to the startup business characteristics and investment decisions that have 11 statements; the number of respondents is 100. Table 2 presents the results of the reliability test. It can be seen from the table that all item questions are declared reliable.

The average results of each variable show the average results of the three characteristics that affect investment decisions. These can be seen in Table 3.

Table 4 shows that the founders' characteristics have the largest average value of 4.16. It indicates that the variable "founders' characteristics" is the key consideration. A further consideration is the variable "market characteristics" with an average value of 3.87, and the last is the variable "product characteristics" with an average of 3.86. Having discovered the average values, the further step is testing the hypotheses by using the method of One-Sample *t*-Test. This method is used to find out whether each variable of the characteristics has a significant influence on investment decisions. The results of hypothesis testing are presented in Table 4.

5. Discussion

Founders' characteristics in this research study are measured by five questions. The first question is investors prefer the founders who are able to organize the management team. The finding reveals that 74% of the respondents answered *Agree* and *Strongly Agree*. The second question - investors will consider the founders' experiences; 82% of the respondents answered *Agree* and *Strongly Agree*. The third question is investors prefer the founders who have entrepreneurial souls; 77% of the respondents answered *Agree* and *Strongly Agree*. The fourth question - investors will consider the founders' knowledge concerning the business they are dealing with; 85% of respondents answered *Agree* and *Strongly Agree*. The fifth question - investors will consider the founders' educational background; 83% of the respondents answered *Agree*. So, these findings show that business angels investing in startups in Yogyakarta highly care about the founders' characteristics. By appraising the experiences, capabilities, and educational background of the startup founders, the business angles will put more trust in the founders for running the business well. Work experiences of the founders also decrease the potential work mistakes both

Table 2: Validity and Reliability Test of Startup Characteristics

Item Questions	R count	Information	Cronbach Alpha	Information
Item 1	0.824	Valid	0.821	Reliable
Item 2	0.781			
Item 3	0.845			
Item 4	0.837			
Item 5	0.528	Valid	0.804	Reliable
Item 6	0.819			
Item 7	0.863			
Item 8	0.860			
Item 9	0.835	Valid	0.785	Reliable
Item 10	0.861			
Item 11	0.812			

Table 3: Descriptive of Research Variables

Founders' Characteristics	
1. I prefer the founders who are able to organize the management team.	
2. I will consider the founders' experiences.	
3. I prefer the founders who have entrepreneurial souls.	
4. I will consider the founders' knowledge of the business currently they are dealing with.	
5. I will consider the founders' educational background.	
Mean	4.16
Product Characteristics	
1. I consider more products that match the current market demand.	
2. I consider more technology-based products.	
3. I consider more the product uniqueness.	
Mean	3.86
Market Characteristics	
1. I consider more the startup businesses that create a new market.	
2. I consider more the startup businesses that have a market target and a good level of growth.	
3. I consider more the already recognized startup business industry.	
Mean	3.87

in the management and operational aspects, thus minimizing costs and leading the startup to success. This research finding is in line with Talaia et al. (2016), Carpentier and Suret (2015), White and Dumay (2018), Iruarrizaga et al. (2017), Cox et al. (2017), and Sohl and Blease (2015) who indicated that founders' characteristics affect the investment decisions of business angels.

The second variable is product characteristics which have three questions. The first question is investors consider more the products that match the market demand. There are 79% of respondents who answered *Agree* and *Strongly Agree*. The rationale is that the products that match the needs and wants of consumers gain good market positioning. The second question is business angels

Table 4: Results of One-Sample *t*-Test

Variables	Sig. 2-tailed	Terms	Conclusion
Founders' Characteristics	0.00	0.05	Ho is not supported
Product Characteristics	0.00	0.05	Ho is not supported
Market Characteristics	0.00	0.05	Ho is not supported

consider more technology-based products. The result shows that 73% of respondents answered *Agree* and *Strongly Agree*. The rationale is that technology-based products are considered to match the current industry trend in society and can resolve the existing problems. The third question is business angels consider more the startup business that has product uniqueness. The result reveals that 66% of respondents answered *Agree* and *Strongly Agree*. The rationale is that products with uniqueness have a product concept that differs from competitors' products and it means having a different concept can be a competitive advantage for the startup. This research finding supports Zinecker and Bolf (2015), Iruarrizaga et al. (2017), Sudek (2006), Rostamzadeh et al. (2014), Liet al. (2014), and Carpentier and Suret (2015) who revealed that products characteristics significantly affect the investment decisions of business angels.

The third variable is market characteristics which contain three questions. First, investors consider more the startup that creates a new market. The results show that 75% of respondents answered *Agree* and *Strongly Agree*. The rationale is that respondents think that the startup that chooses the market with fewer competitors and is able to offer the product that matches the current trend will create a new market so that the startup will be the leader. Second, investors will consider the startup that has a market target with a good level of growth. The results from the questionnaire show that 73% of respondents answered *Agree* and *Strongly Agree*. The rationale is that a good level of market growth is considered an interesting reason to enter the market due to its opportunity to generate profits as expected. But, a good level of market growth usually contains considerable competitors. Therefore, if a startup business does not have a competitive advantage, the startup will lag. Third, investors will consider the already recognized startup. The results of the questionnaire show that 77% of respondents answered *Agree* and *Strongly Agree*. The rationale is that investors prefer to invest in the startup they are familiar with. If the startup is well-known, it must have had a competitive advantage and positioning in the market. Thus, market characteristics have

become one of the considerations by the business angels who invest in startups in Yogyakarta. This research finding corroborates the findings by Rostamzadeh et al. (2014), Iruarrizaga et al. (2017), Carpentier and Suret (2015), Sudek (2006), Zinecker and Bolf (2015), Ottavia (2014), and Cox et al. (2017).

6. Conclusion

Based on the hypotheses testing, all hypotheses are supported, which means the characteristics of startup business comprising the founders, product, and market characteristics have a significant effect on the investment decisions of business angels. Business angels believe that the experiences, entrepreneurial souls, and educational background of the founders are considered to be able to promote solving business problems and bringing the startup to success. Another belief is the startup that can generate profits for investors is the one who can create products acceptable in the market - that is the one who can satisfy the needs of the consumers in accordance with the current trend, based on technology, and have a particular uniqueness. Another variable that business angels believe is the market aspect. A startup is believed to succeed if it gets into a new market and has a market target with good growth. The last point for the market aspect is the well-known startup is believed to have a competitive advantage and positioning in the market. So, these three characteristics are believed by business angels in Yogyakarta to have an impact on the startup businesses to succeed and have become the conditions they consider to invest.

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