

## SUSTAINABILITY FOR STARTUP BUSINESS: THE ROLE OF HUMAN CAPITAL

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### **Abstract**

*The development of digital business is currently driving the rapid growth of the startup business. Startups are required to develop their capabilities through human resources, which are important human capital for the business they run. This research was conducted on a sample of startups located in the city of Bandung. The research was conducted for four months with the aim of determining the factors that affect human capital in a startup business and how the influence of human capital on company performance. The research method used is descriptive and quantitative methods with SEM PLS data analysis tools. The results of the study show that the role of human capital is quite large in startup performance. The results of the study also show the influence of all the factors studied, especially HR management and the role of the government as the factors that contribute the most to human capital.*

**Keywords:** *human capital; digital business; startup business performance; city of Bandung*

### **INTRODUCTION**

The pandemic conditions have caused most business activities to come to a halt, resulting in an increase in the number of unemployed and reduced income in the industry (Hakovirta & Denuwara, 2020). In 2020 the impact of the Covid-19 pandemic on the economy in developed countries was felt by a decline in GDP (Gross Domestic Product) of 7%. In countries that are included in the category of emerging market and developing economies, GDP is estimated to fall by 2.5%. In countries in Southeast Asia, it is estimated that the economy will contract by 2.7%, declining economic conditions also occur in Indonesia (World Bank, 2020). The weakening of the economy in Indonesia can be seen from the GDP (Gross Domestic Product). Based on BPS data in the first quarter of 2020, Indonesia's GDP growth was only 2.97%.

Many sectors or business fields have been affected by the Covid-19 outbreak, especially in small business groups. However, there are businesses that are relatively enduring and even growing during the pandemic, namely startup businesses. Based on information from the Global Digital Report (2020), internet users in Indonesia are 64% and the number is expected to continue to increase (Abdul Halim et al., 2016). Even after the pandemic where Covid-19 was considered less dangerous, the wfh (work from home) policy by utilizing digital technology has become a work model that is maintained in many businesses because it is considered more efficient.

The rapid development of technology causes the digital economy as an economy based on technology and information to have the opportunity to grow. However, high competition, especially with large-scale companies at national and international levels, causes startups to have to think about how the company's main resources can be maximized for business sustainability (Prohorovs, 2020). Human resources (HR) as the main resource should be human capital for companies that play an important role in business sustainability.

Technology and HR paradigms must be the company's priority (Tapaneeyangkul, 2001). Human capital is human resources who have knowledge, skills, and abilities that have value for the organization (Shafeek, 2016). Although its role is not easily quantified, human capital is recognized as having a significant role in the company's performance. Based on the results of a survey conducted by the Creative Economy Agency (BEKRAF), and the Indonesian Information and Communication Technology Creative Industry Society (MIKTI), it is clear that many startups fail because they are faced with capital and human resource problems.

Indonesia still needs to increase the intensity of digital use in various sectors. Problems with the availability of capital and the low quality of internet access are the main reasons for the low level of digitalization among Indonesian businesses. Despite low digitization in key Indonesian sectors, startups are proliferating and growing rapidly. This is where the role of human capital becomes increasingly important. The amount of human capital is important to note so that startups are expected to grow and contribute to the progress of the Indonesian economy. Human capital is expected not only to take advantage of opportunities for business progress, but also to be able to overcome the problems of startup burdens after the pandemic.

Hossain & Roy. Ishita (2016) said that human capital consists of the intangible resources that workers provide to company owners. Human capital is a human factor in the organization; the combination of intelligence, skill and expertise that gives the organization its distinctive character. Human capital as individual knowledge, skills and expertise to ultimately make the company work and succeed. Coppin (2017) said that human capital is the knowledge, skills, competencies, and attributes contained in individuals that facilitate the creation of personal, social and economic well-being. Ernst and Young, a consulting firm that has a human resources practice, defines it as: referring to the professional skills and knowledge of organizations as well as their commitment and motivation and their ability to lead, collaborate or innovate. Strategic human resource management or human capital management is aimed at gaining competitive advantage through one of the most important assets, namely people (Ployhart & Moliterno, 2011). Creating a workforce that provides competitiveness and company profits, and can create a learning and motivational environment is a human capital advantage that competitors imitate. Therefore, companies must constantly evaluate the human factor. Schwab (2013) also concluded that the ability to create unique teams is the most cost-effective way to create sustainable profits.

The way an organization manages its people can affect its performance. Employee participation, empowerment and job design, including team based production systems, extensive employee training and contingent performance incentives are widely believed to improve organizational performance. Therefore, an important differentiating factor between companies is the extent to which companies are able to own and develop human capital. (Hossain & Roy. Ishita, 2016) said that creating an organization that relies on human capital for competitive advantage requires serious attention not only in the recruitment process, but also in all HR management processes. That is, organizational systems are designed to attract, develop, retain and motivate human capital. The following is Table 1. Regarding the role of HR management in encouraging human capital in generating competitive advantage.

Table 1. Human Capital as a Competitive Advantage

Competitive Advantage	HR Role	Source of Competitive Advantage
Has a value, cannot be imitated, a set of resources and capabilities that cannot be replaced	HR value optimization	Internal
Managerial, input-based, Competence-based transformation and output	Competency development	Internal
Integration from specialized knowledge into organizational capabilities	HR Training	Internal
Organizational resources and capabilities that are developed beyond the boundaries of the organization	HR capability development	Interactional
Role behaviors required by competitive strategy	Stimulate role behavior	Interactional
Alignment of HR system vertically and horizontally	Performance improvement	Interactional
The company's ability to be efficient in different ways, a key success factor in a specific industry	Activities provide support	External

Sumber : Uzzal Hossain and Ishita Roy (2016)

Startups have played an important role in the growth of the world economy in recent years. They create jobs, spur innovation, and generate competition. Overall, they substantially contribute to economic dynamism and value creation in society. The term 'startup' has been used very frequently since the 1990s to describe unequally young businesses, trendy apps, technology companies, and small businesses in general. Usually startups are considered as small companies (i.e. with a relatively low number of employees), with a high growth rate, which have just started operating in an immature market highly correlated with technology. (Yanuarti & Dewi, 2019).

Maes et al., (2006) said that startups are recognized for their performance with various innovations and performances that have been produced. Although many factors are important however Maes et al., (2006) noted that the age and education of the top management team had an effect on startups. Furthermore, human capital

can also affect the managerial process. Human capital is a source of knowledge needed to effectively build and use a company's financial and other capabilities, such as R&D management and human resource management. However, the role of human capital is not only direct, but also indirectly in the managerial process and use of resources. The ability of human capital to innovate is an indirect effect on the company's success. Factors that can affect human capital can be seen in the research model as shown in Figure 1.

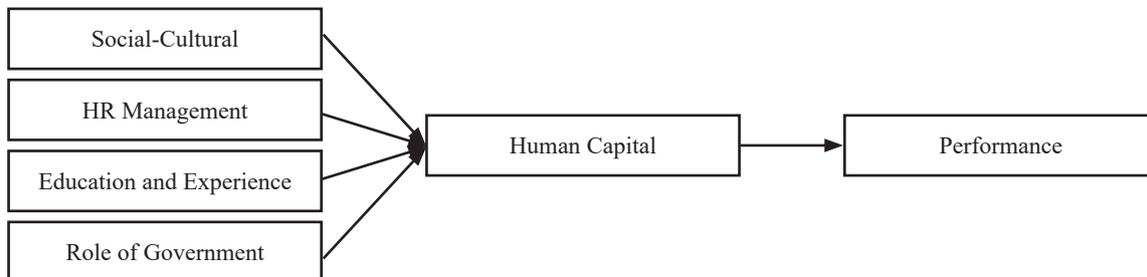


Figure 1. Research Model

The very large number of population and internet users in Indonesia should be an opportunity for startup companies to develop their business (Balqish et al., 2014). The education system, government support and HR management factors in the company are predicted by several parties as factors that make it difficult for startups to get human capital to be able to respond to market demands. (Dabić et al., 2011). Based on this background, this research was conducted to determine the factors that play an important role in the formation of human capital and how much human capital contributes to startup performance.

## METHODS

Data collection in this study was carried out by various methods, but primary data as the main data was collected by distributing questionnaires to respondents. Meanwhile, the object of this research is a start-up company in Bandung. Bandung as the capital of West Java Province which has been awarded the title as a creative city for a long time, so that start-up businesses are mushrooming in the city. Another reason for choosing the City is because the number of start-ups is increasing. The definition of the variables in the study can be seen in Table 2.

Table 2. Definition of Variable

Variable	Definition
Human capital	Important knowledge, skills and abilities that can increase the value of the organization and the success of his career in the organization (Subramaniam & Youndt, 2005).
Education and Experience	The process of increasing one's skills and knowledge through both formal and informal education and work experience (Hartog & Brink, 2007; Martin et al., 2013).
Role of Government	Various facilities provided by the government to support SMEs such as infrastructure, technology, regulations (Nganga et al., 2011).
HR Management	Employee recruitment and selection policies, training and compensation systems (Svelik & Costea, 2007).
Social – Cultural	Conditions outside of entrepreneurs and companies that affect business continuity (Nganga et al., 2011).
Performance	Creation of new products or new qualities of existing products, introduction of new methods, opening of new markets/market expansion, opening of new suppliers, and new organizations (Abdul Halim et al., 2016; Ojokuku & Sajuyigbe, 2015).

In this study, the sample consisted of 78 startup companies in Bandung with accidental sampling technique. Determining the magnitude of the role of important factors for human capital in a start-up business is carried out through a survey by distributing questionnaires. The data were then analyzed with the help of SEM-PLS (Structural Equation Model – Partial Least Square). The analysis was carried out using statistics to test the hypothesis using the SEM-PLS structural equation model analysis technique (Hair et al., 2012).

## RESULTS

The results of the descriptive analysis for the socio-cultural condition variable showed an average value of 2.79 and this result showed that the respondents' responses were not good. This indicates that start-up founders have not been involved with the family business since childhood. Another indicator, namely family background and the surrounding environment, shows that both families and communities are less likely to become entrepreneurs. Therefore, it can be said that in addition to being less likely to come from entrepreneurial families, respondents with entrepreneurial backgrounds have not been involved in their family businesses since childhood.

HR management at business startups shows an average score of 3.32 and this is an unfavorable result. This means that startup companies do not consider environmental concerns in managing human resources. Both in recruitment, training, and rewarding, there is no respect for human resources who care about the environment. Another possibility is that there are not many human resources who care about the environment, so the company does not consider environmental concerns in recruitment, training, or giving rewards.

The education and experience variables at startup companies in the study showed an average value of 3.01 and was categorized as poor. This means that the startup companies studied lack good experience in various businesses, especially experience in the same business field. On average, the education taken by the respondents is in accordance with their current business. Overall education and training as well as respondents' experience in business can be said to be lacking, especially experience in the same business which is usually a very important factor for startups in determining strategies so that their business can survive or succeed in the current competition.

Meanwhile, the government support variable shows a good average result with a value of 3.51. This means that the government provides support for the development of entrepreneurs and startup businesses. Infrastructure, especially internet technology, which is getting easier and cheaper, has helped startup entrepreneurs gain various skills through online training and helped improve marketing through the internet. Other government support is in providing funding sources, both in the form of grants and light credits needed by the company to develop its business.

The human capital variable is measured by three dimensions consisting of business skills, technical skills and attitude. Where for the three dimensions of the measurement are in the interval and good category. This shows that startup businesses always improve their abilities, attitudes and skills in running their business.

The performance of startup companies shows a good average score with an achievement of 3.55. This shows that according to the respondents, the business they are currently running is quite successful or their performance is good. One of the good performances is the company's ability to generate innovation. The innovations produced by the company make the company superior to competitors and get appreciation from the community. Some companies believe that by paying attention to environmental sustainability, the company will be more successful.

Based on the hypothesis that has been made, hypothesis testing is done by calculating the effect of all hypothesized variables. The calculation results show that the standard deviation and significance of most of the parameters produce coefficients that are accurate or unbiased, and significant. This is evident from the good estimation value as can be seen in Table 3.

Table 3. Structural Model Calculation Results

	Path Coefficient	T Statistics ( O/STDEV )	P Val-ues	Results
Social-Cultural → Human Capital	0.058	1.290	0.197	Not Significant
HR Management → Human Capital	0.401	5.709	0.000	Significant
Education and Experience → Human Capital	0.215	4.420	0.000	Significant
Role of Governement → Human Capital	0.370	4.615	0.000	Significant
Human Capital → Peformance	0.792	18.296	0.000	Significant

Based on the Table 3, it shows that all research hypotheses are accepted and have a positive influence (P Values <0.05), except for the socio-cultural condition variable. Hypothesis testing is carried out by observing the t-statistical value through bootstrapping procedure with a sub-sample of 78. For a significant level of 90% ( $\alpha = 0.10$ ), the hypothesis is accepted if the t-statistic value is above 1.64. The overall results of hypothesis testing can be seen in the Table above. The total t-statistic value is greater than 1.64 so that almost all hypotheses are stated to have a significant effect. There is only one hypothesis that is rejected, namely the influence of socio-cultural conditions on human capital. The picture of the research model can be seen in Figure 2.

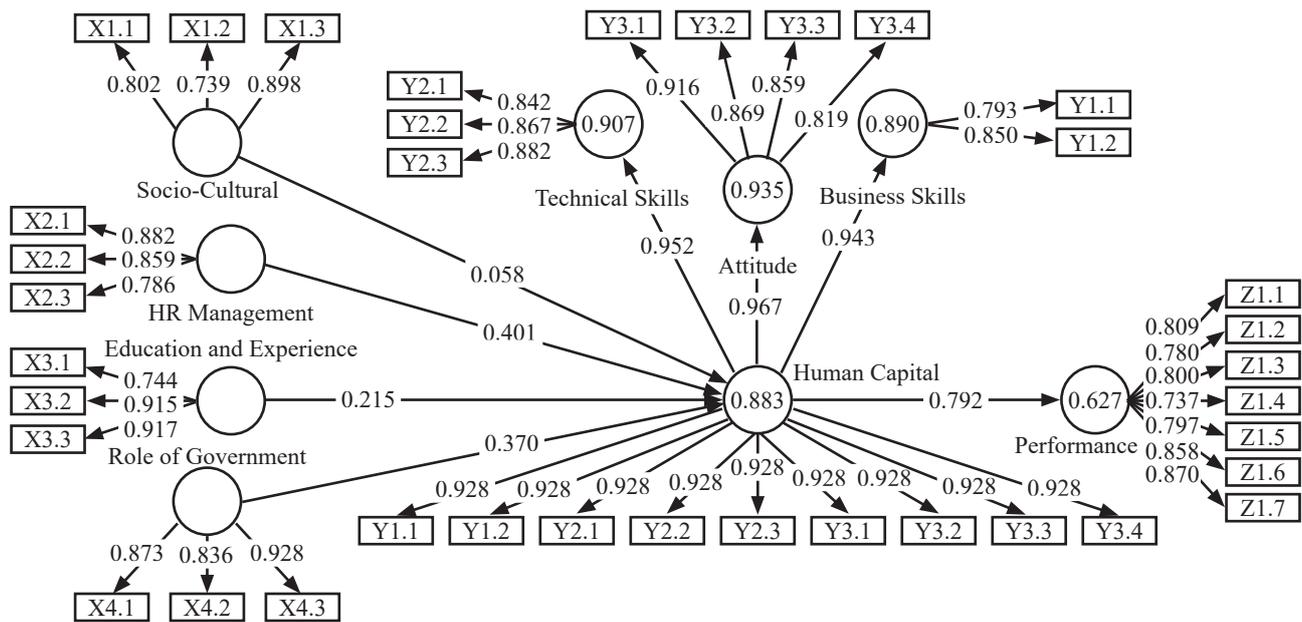


Figure 2. Research Model Calculation Results

### DISCUSSIONS

The results of this study indicate that the influence of HR management is greatest on human capital in startup companies, especially in the city of Bandung. Of course, this big role cannot be separated from the company's ability to recruit prospective employees who have talent, not only recruiting employees who have the skills needed today, but also in the future. Human capital is recognized as playing an important role in improving company performance (Horn et al., 2010; Oforegbunam & Okorafor, 2010). The next function of HR management in developing or growing human capital is the ability to provide compensation and a reward system that makes employees who have talent feel at home and want to work optimally. (Cabello-Medina et al., 2011; Quader, 2007).

On the one hand, the ability in HR management is important, but on the other hand, the reality faced by startups is the lack of attention from company owners in HR management because they lack the time and ability to do so. This is important to be considered by the government so that the role of the government occupies the second position after HR management in influencing the formation of human capital in startup companies (Ojokuku & Sajuyigbe, 2015; Onkelinx et al., 2016).

The government has a significant role and its contribution is quite large in the formation of human capital. The government can create new human capital by changing the culture in society regarding the spirit and motivation of entrepreneurship. Through policies and regulations as well as training and development provided by the government, startups can be assisted in meeting the needs for training and human resource development as well as access to sources of capital. The role of education and experience, as well as socio-cultural conditions get the third and fourth positions in influencing human capital in startups. This does not mean that education and experience are less important. In fact, this shows that in HR management, a very important function is to increase human capital competence through education and experience.

The experience of startup entrepreneurs and employees can be enhanced through community support. The socio-cultural conditions of the community must be directed at a culture that encourages entrepreneurship both at the family and community levels of an area (Davidsson & Honig, 2003; Martin et al., 2013; Oreopoulos et al., 2003). The support of educational institutions is also important by providing a curriculum that makes it easier for the student community to be able to carry out the educational process along with doing entrepreneurship.

### CONCLUSIONS

Socio-cultural conditions faced by startup companies today can be said to be less supportive, especially in the involvement of entrepreneurs in their childhood in businesses run by their families. This also happens to HR management in startup companies, which currently receive less attention, especially in the employee recruitment process that is not in accordance with the expected competencies. This is in accordance with the

results of previous studies which showed that there was a lack of attention to HRM in startup companies because at the beginning of their growth they preferred to focus on efforts to create innovation and market the products they produce.

Education and experience in this study are separated from HR because of their important role in encouraging the formation of human capital. Education and experience for startup entrepreneurs is still limited, mainly relying on the level of education and seminars organized by external parties. Most startup entrepreneurs lack experience in business. In general, both education and training as well as experience for startup entrepreneurs are still lacking. Experience is one of the obstacles in the startup company's ability to maintain its sustainability. Family background and lack of experience are one of the problematic factors.

The last aspect to be examined is government support. The government's role is very important in supporting the sustainability of the startup business, but until now it is still felt to be lacking. In general, it can be said that there is no problem with human capital but startup performance still needs to be improved. Human capital has a great influence on the sustainability of startups with government support which contributes the most to increasing human capital.

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