

## Sustainable Competitive Advantages :Conceptual Framework And Determinant

Memem Kustiawan<sup>1</sup> , Erik Nugraha<sup>2</sup>, Tevi Leviany<sup>3</sup>, Sofyan Iskandar<sup>4</sup>

### Abstract

*This research aims to create a conceptual framework and factors that can increase competitiveness in the form of sustainable competitive advantages of an industry. The industrial context in this research focuses on the micro-business sector. Various factors influence the success of an industry in growth; intellectual capital is one dimension of the internal environment, which is an essential factor in management strategy. The method used in this research is a nonempirical review of the literature with the development of a conceptual model that can be tested in further research. Almost all industrial sectors experienced a decline in their economic performance, and the micro, small, and medium enterprises (MSME) sector is no exception, especially for creative industry players. To increase competitiveness, efforts can be made by carrying out innovations focusing on green innovation and internal improvements by encouraging investment in intellectual capital.*

**Keywords:** *sustainable competitive advantages, intellectual capital, UMKM, nonempirical review.*

### Introduction

Problems related to environmental issues have become serious problems, so countries in the world have committed to dealing with them. In 2015, in Paris, an agreement was agreed upon, which was attended by 195 (one hundred and ninety-five countries) and contained a joint commitment to hold the increase in global average temperature below 2 degrees Celsius. Climate change poses a severe threat to global economic growth. The results of the IMF analysis show that a comprehensive policy strategy to mitigate climate change can increase global economic growth in the first 15 years of the recovery period due to COVID-19. The figure is around 0.7% of the average global gross domestic product (GDP), and the jobs created can reach 12 million people (Setiawan, 2021)

Climate change will have the potential to change the business environment to a competitive one, and companies are required to be able to adapt to commitments related to caring for the environment by carrying out business operations that emphasize energy savings and innovating products that are more environmentally friendly. Currently, Southeast Asian countries are developing policies to reduce the impacts of national and regional climate change. Singapore carries out a national movement policy to make the country greener, encourage green innovation, and encourage all individuals to live a sustainable lifestyle. At the same time, Malaysia focuses on low-carbon development, and

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<sup>1</sup> Master of Accounting Science Study Program, Universitas Pendidikan Indonesia,

<sup>2,3</sup> Accounting Study Program, Faculty of Economics, Universitas Sangga Buana

<sup>4</sup> Curriculum Development Study Program, Universitas Pendidikan Indonesia Kampus Purwakarta

Indonesia has also made efforts to increase capacity and adaptation to climate change by reducing gas emissions. Greenhouses and greener development (Setiawan, 2021).

Problems related to environmental issues have brought changes for most people to adopt environmentally friendly lifestyles. This has led to a shift in consumer behavior, with consumers buying products that have a small impact on environmental damage (N. Chang & Fong, 2010). The market need for environmentally friendly products has changed the competitive map of the business world. In a green market, companies will compete with green competitors to meet the need for environmentally friendly products for green customers. Greenmarket orientation is an extension of market orientation that companies can adopt to create excellence in sustainable development, where companies that focus on the green market aim to increase competitiveness in an increasingly competitive business environment (Tjahjadi et al., 2020).

Efforts made to increase competitiveness are by increasing innovation. Innovation is a pillar for improving competitiveness (Mariz-Perez et al., 2015). In Indonesia, innovation is necessary to maintain industry sustainability amid crisis conditions such as the COVID-19 pandemic, which has weakened consumer purchasing power and the economy in all sectors (Sukarno, 2020). Through innovation, a nation can increase its productivity so it has the competitiveness to transform into a developed country (Okezone, 2021). However, the World Economic Forum (WEF) in the 2019 Global Competitiveness Report shows that Indonesia's competitiveness has decreased by five places, from 45th to 50th (Jayani 2019). Industry players can respond to challenges and produce products that have high competitiveness if they innovate, especially during the COVID-19 pandemic, which requires them to continue to meet market needs (Kemenperin, 2020).

Innovation related to promoting products, services, and new ways of conducting business activities is an essential element of post-COVID-19 recovery (Roper & Turner, 2020). Innovation involves promoting a new product and introducing new ideas, methods, brands, business models, offers, and supply chains (Sawhney et al., 2006). The existence of innovation is expected to produce a new product or develop an existing product. The successful development of a product will be an essential determinant as a source of profit in the future (Y. S. Chen, James Lin, et al., 2006). Innovation has been considered necessary for companies' survival and an essential determinant of success in maintaining competitive advantage and driving economic growth (Allameh, 2018; Rhee et al., 2010).

Through the Ministry of Research and Technology, the Indonesian government is trying to encourage the implementation of innovation that is inseparable from the SDGs with the spirit of green innovation (KalderaNews.com, 2020). Green innovation will not only be an essential way for a business entity to gain a competitive advantage in the future. Still, it will also become a fundamental need for companies to gain legitimacy amidst pressure from the government, society, and investors who encourage companies to use new business methods. Production, distribution processes, or creating new, more environmentally friendly products (Agustia et al., 2019; D. Li et al., 2017). Green innovation is a strategy related to environmental issues in developing a business by not polluting the environment and making efficiency associated with the use of resources so that it can create a competitive advantage (Sezen & Çankaya, 2013; Soewarno et al., 2019).

Various factors influence the success of an industry in growth, and intellectual capital is one dimension of the internal environment, which is an essential factor in management strategy (Omerzel & Jurdanab, 2016). Green intangible assets are needed to produce sustainable competitive advantages, enabling companies to occupy the best position in protecting the environment or green innovation where their competitors cannot imitate the strategies implemented. Green intangible assets are all intellectual property at a company's individual and organizational levels (Chen & Chang, 2013). Intellectual capital describes an organization's intangible assets (Bueno et al., 2004), which helps organizations achieve sustainable success because the impact of intellectual capital influences innovation (Subramaniam & Youndt, 2005).

Intellectual capital is a series of knowledge and information in a company or organization that helps increase the value of a product and service for the company or organization. Intellectual capital represents total intangible assets or can also be called knowledge assets (Allameh, 2018). Management of knowledge assets has become a significant part of the sustainability of a business entity (Torres et al., 2018). Intellectual capital has been recognized as an essential source for organizations to gain an advantage (Hardeep & Bakshi, 2015). Previous research has empirically proven that intellectual capital is a factor for a business entity to achieve sustainable competitive advantages (Chatzoglou & Chatzoudes, 2018; Hardeep & Bakshi, 2015; Kamukama, 2013; Khan & Waheed, 2019; Lu et al., 2021; Mohammad Shafiee, 2021) and innovation of an organization is also influenced by intellectual capital (Ali et al., 2021; Allameh, 2018; C. H. Chang & Chen, 2012; Chen, 2008a).

Developing a knowledge-based economy has urged many businesses to exploit knowledge-based resources to ensure complete sustainability and competitiveness (Muda et al., 2020). To maintain business continuity, an entity must strive to produce environmentally friendly product innovations, called green competitive advantages (Y.-S. Chen, 2008). Business entities that can provide products in response to consumer demands and complaints regarding product quality, market demand, and product innovation will direct the company to achieve sustainable competitive advantages (Kuncoro & Suriani, 2018). Currently, the responsibility of a business entity is no longer required at the single bottom line (SBL), where the focus is only on company value as reflected in economic conditions. Still, business entities in the current era focus on triple bottom lines (TBL) responsibilities, which are reflected in values of economic, social, and environmental conditions (Bintara et al., 2023).

The technology, information, and innovation era is experiencing increasingly rapid development. This development has complexity so that companies find it challenging to maintain sustainable competitive advantages, even though sustainable competitive advantages are an essential factor related to the perception of evaluating goods and services, which must be considered as an element for increasing competitiveness (Dagnino et al., 2021; Guimarães et al., 2017). In this research, strategic management accounting and information technology capabilities are internal company resources, both tangible and intangible, that impact sustainable competitive advantage and company performance. (Phornlaphatrachakorn & Na-Kalasindhu, 2020), By implementing strategic management accounting, companies can minimize costs, carry out planning and control, make strategic decisions, assess competitors, analyze customer profitability, and create added value for business continuity (Sumkaew & Intanon, 2020).

Research related to sustainable competitive advantages is not something new. To maintain the continuity of an entity's business, it strives for green competitive advantages. However, the research is essential to answer current challenges during the COVID-19 pandemic, especially in the Indonesian context. , where the handling of COVID-19 in Indonesia has not been successful, as indicated by the continuing increase in positive cases. The following is data on confirmed positive cases up to July 2021 :

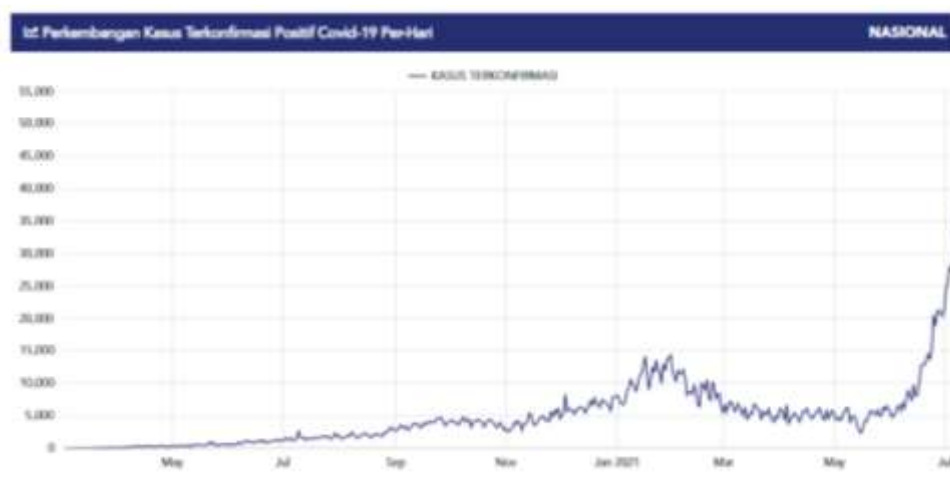


Figure 1 Data on confirmed positive cases up to July 2021 (Source: COVID-19 Handling Task Force, 2021)

In the economic sector, the COVID-19 pandemic caused a contraction of the global economy, which has never happened in previous crises, not only on the demand side of the economy but also on the supply side of the economy, which caused its pressure on growth to be felt in many countries (Modjo, 2020). As a result of the global economic contraction and large-scale social restrictions, the economy has been paralyzed, especially for specific business sectors, including the micro, small, and medium enterprises (MSME) sector. The Indonesian economy is supported by a large variety of businesses, especially from the Micro, Small, and Medium Enterprises (MSME) sector, which dominates around 90% of the total companies in Indonesia. This sector has also proven capable of supporting the Indonesian economy during the monetary crisis (Istianingsih & Suraji, 2020) - Figure1.

This research aims to create a conceptual framework and factors that can increase competitiveness in the form of sustainable competitive advantages of an industry. The industrial context in this research focuses on the Micro, Small, and Medium Enterprises (MSME) sector, especially for creative industry players. Innovation is the breath of the sustainability of the creative industry in Indonesia, where when innovation and creativity can go hand in hand, economic recovery, especially the creative economy, will be easier to realize, and it is hoped that they will have confidence, knowledge and be ready to compete in the global market (Humas Setkab, 2021; Kemenparekraf, 2021). Apart from that, it is predicted that in 2030-2040, Indonesia will experience a demographic bonus period where the number of people of productive age is greater than the population of unproductive age so that skills development strategies, especially those related to human capital, become an essential factor to increase competitiveness. (Afandi, 2017).

## LITERATUR REVIEW

### Sustainability and Sustainable Development

Sustainability is a concept related to attention to the environment caused by human activities that can damage the environment. This has given rise to reflections on various topics such as economic development, agricultural production, social equity, and biodiversity (Shearman, 1990). Sustainability means that it depends on the context in which it is used, where its use is based on an ecological, social, or economic perspective (Brown et al., 1987). Sustainability is about integrating social, economic, and environmental values where there are differences concerning how such concepts should be interpreted and how sustainability can be operationalized. These differences arise due to varying levels of

emphasis on the three primary value concepts (ecological, social & economic perspective) and the different approaches brought to the integration process (Dixon & Fallon, 1989; Milne, 1996).

The concept of sustainability increasingly attracted significant attention after the publication of *Our Common Future*, known as the Brundtland Report, which was adopted by The World Commission on Environment and Development in 1987 and led to research on the relationship between sustainable development and environmental issues (Du Pisani, 2006; Quental et al., 2011). Brundtland Report mendefinisikan sustainable development sebagai “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” (Du Pisani, 2006). The World Commission on Environment and Development (1987) combines various perspectives in integrating development with conservation so that the need to achieve sustainable development is (Shearman, 1990) :

- a) Develop a political system that guarantees citizen participation in the decision-making process;
- b) Structuring an independent and sustainability-based economic system to generate profits and technological knowledge;
- c) Building a social system that produces resolutions for problems caused by development inequality;
- d) Maintaining a production system that supports ecological development;
- e) Developing a technology system that continuously seeks new solutions;
- f) Having an international system that helps in improving models in the fields of finance and trade And
- g) A management system that is flexible and can self-correct.

The existence of the Brundtland Report has increased international awareness about sustainable development and contributed to the success of the Rio Declaration in 1992 (Quental et al., 2011). The Rio Declaration contains three main commitments, namely (a) paying attention to environmental sustainability aspects in development; (b) Developing countries are starting to apply green development models in continuing their development; and (c) Developed countries are obliged to assist developing countries both in terms of funding and technology transfer to implement environmentally friendly development models (Sihombing, 2012).

The sustainable approach is based on the interaction of three main areas: environmental (or ecological), social, and economic, or the three pillars of sustainability. The main objective of sustainable development is to determine and achieve the balance between these three pillars because it underlies the sustainable development strategy (Goodland, 1995). Sustainable development refers to a radical change in the conception of the relationship between humans and nature, humans and other humans, and between different generations (Hopwood et al., 2005). In supporting sustainable development, economic, social, and environmental resources contribute to the wealth of existing and future generations (Glavič & Lukman, 2007).

In this context, environment, economy, and society are components of sustainable development that require social justice, economic growth, and environmental protection, thereby increasing awareness regarding the relationship between economic growth and environmental protection by emphasizing the certainty of economic development for developing countries, as well as the need for transition. Towards a sustainable development perspective (Du Pisani, 2006). Sustainable and sustainable development can be concluded as a concept that emphasizes solving environmental, social, and economic crisis problems.

The concept of sustainability from the social and economic perspective has been further developed into an idea, namely the triple bottom line (TBL), where a company is not only limited to maximizing profits in its operational activities, but the company must still pay attention to the impact on the environment and social relations resulting from

operational activities (Rendtorff, 2019). Triple bottom line (TBL) relies on Elkington's approach, which argues that companies have environmental, social, and economic responsibilities that must be balanced (Gray, 2006). This balance causes a company to aim to maintain its existence by considering the value system in society, and the community is expected to be aware of the company's efforts (Jones, 2010).

### **Competitive Advantage and Sustainable Competitive Advantage**

Competitive advantage has become the center of attention in discussions about business strategy. The term competitive advantage in literature relates to the value creation theme. The basic argument for emphasizing competitive advantage is the company's superior position, leading it to perform better than its competitors (Porter, 1985). Furthermore, competitive advantage is the heart of a company's performance in a competition for market share where the company has a competitive strategy goal of gaining knowledge about the market through understanding and predicting economic factors, especially the behavior of other competitors. (Porter, 1985).

According to (Peteraf, 1993), competitive advantage is higher profit retention than usual. According to (Kay, 1993), Competitive advantage is a unique advantage of a company compared to competitors or groups of competitors in a market. To achieve a competitive advantage, a company must consider its external position (Porter, 1985) and internal capabilities (Barney, 1991). The issue of competitive advantage in a company is related to understanding its sustainability over time. Sustainability does not refer to a specific calendar period or exist indefinitely (Mcgrath et al., 1995).

Companies in the midst of increasingly competitive competition must be able to maintain an advantage in order to maintain the sustainability of their business. A company is said to have a sustainable competitive advantage when it implements a value creation strategy where at the same time, their competitors cannot imitate and benefit from the strategy (Barney, 1991). Untuk mendapatkan sustainable competitive advantage, suatu perusahaan harus dapat menunjukkan bahwa tidak hanya produk dan/atau atribut sistem pengiriman harus signifikan kepada pelanggan, agar dapat berkelanjutan dibutuhkan juga kemampuan untuk melakukan diferensial (Coyne, 1986).

A company has a sustainable competitive advantage when the company consistently produces products and/or delivery systems with attributes that meet the main criteria for the majority of customers in its target market share (Richard, 1993). Sustainable competitive advantage results from the differences in capabilities possessed by a company; one of the differences in capabilities is found in intangible assets in the form of patents and licenses, reputation, and knowledge (Hall, 1992). Sustainable competitive advantage is an ability that cannot be duplicated (Bharadwaj et al., 1993). The essence of sustainable competitive advantage is a process that meets current needs without sacrificing the organization's ability to meet future competitiveness by developing a dynamic concept that includes an orientation towards conservation because no organization has unlimited resources and is oriented towards the future by placing the organization in long-term resource development to generate strategic advantages (Chaharbaghi & Lynch, 1999).

### **METHOD**

The method used in this research is a nonempirical review of the literature with the development of a conceptual model that can be tested in further research (Amoako, 2020). Nonempirical research is review research or research in the form of a review. The types of nonempirical review of the literature are (a) theory articles which attempt to propose a new conceptual model or determine the influence of existing variables when applying theory on social issues, educational issues, or learning concepts; (b) substantive review articles that try to summarize and explain existing literature, researchers who write articles in this field must be deeply rooted in the concepts they want to explain or discuss; and (c) critiques which attempt to explain why a field of study is moving in the wrong direction, researchers

must observe critically and pay attention to elements of deviation or shortcomings in the field of study they wish to criticize (Cropanzano, 2009).

## RESULT AND DISCUSSION

### **Determinant Sustainable Competitive Advantage**

Over the past few decades, businesses worldwide have competed to remain sustainable by trying to manage existing resources in a way that puts them in an advantageous position compared to their competitors (Guimarães et al., 2017; Lu et al., 2021). The resources and capabilities of a business entity include all aspects of the financial, infrastructure, human capital, and organizational assets used to develop, produce, and deliver products or services to its customers (Barney, 1995). Innovation is seen as the primary source of sustainable competitive advantage, which is based on information processing where external information is collected and used, so companies need to develop innovation, which ultimately results in a capacity to limit imitation, which ultimately leads to sustainable competitive advantage (Johannessen & Olsen, 2009).

An innovation carried out by a company is an important part of maintaining the company's survival and creating and maintaining competitive advantage (Chiou et al., 2011). The innovation carried out can enable the company to place the company in a profitable market position, improve the company's reputation, surpass its competitors, make a breakthrough, and attract more customers so that the success of an innovation will help the company to increase its competitiveness (Lin et al., 2013; Mu et al., 2009; Nanath & Pillai, 2017). Innovation is basically an update that can create value. This novelty is applied so that it is helpful for new products and services, a tool for process improvement, a development tool in management and marketing as well as a breakthrough in the business model (Cabrilo et al., 2018).

Eco-innovation will help a company to build innovation capabilities and improve sustainable business performance so that it is difficult for competitors to enter the same market share (Díaz-García et al., 2015; Fernando et al., 2019). Through a differentiation strategy of producing environmentally friendly products, it will create a sustainable competitive advantage (Chen et al., 2009). Existing literature illustrates that to maintain a competitive advantage from a newly developed resource, the resource indicators that a company must have to achieve sustainable competitive advantage are value, rareness, inability to be imitated, and imperfect substitution. (Barney, 1991) which is a basis for the resources used in developing a capacity (Shams, 2016). A company is said to have a sustainable competitive advantage when existing or potential competitors cannot duplicate it, so companies that can innovate will gain a sustainable competitive advantage (Kuncoro & Suriani, 2018).

A business entity must be able to respond to pressures related to environmental issues in running its business, so in this case a business entity must be able to develop new resources by preparing itself internally for innovation (Wang, 2019). Green innovation refers to the innovation process of a product that emphasizes energy savings, pollution prevention, waste recycling, and environmentally friendly product design in every product/service produced (Y. S. Chen, Lai, et al., 2006). Green innovation practices play an essential role in increasing overall competitiveness in an industry, and the ability to innovate refers to the adoption or successful implementation of new ideas, processes, or products. (Omerzel & Jurdanab, 2016; Shafique et al., 2017).

Innovation is an essential indicator in facing future competition. Innovation can be seen from three aspects, namely: (a) green product innovation, (b) green process innovation, and (c) green managerial innovation, and these three aspects are empirically proven to increase competitive advantage (Chiou et al., 2011). Business entities increasingly investing in developing green products and process innovation will be more substantial in achieving a competitive advantage (Y. S. Chen, Lai, et al., 2006). Green

innovation allows a business entity to create new opportunities that lead to a competitive advantage. This concept shows that competitive advantage can be obtained using green innovation to create new market shares, providing opportunities for a business entity to enter that market. (Wang, 2019). A strategy that competitors cannot imitate is one of the strategies of green innovation, where a business entity, by implementing this strategy, obtains more benefits compared to its competitors by improving product design and quality through green innovation and can reduce costs through material, energy, and water savings so that it will lead to competitive advantage (Gürlek & Tuna, 2018).

The existence of innovation carried out consistently is related to a business entity's performance and competitive ability (Ar, 2012). The results show that green product innovation strongly impacts competitiveness, which will help achieve competitive advantage (Al-Abdallah & Al-Salim, 2021). The implementation of green innovation will help a business entity to achieve a green competitive advantage (Zameer et al., 2020), which, in the end, can gain a sustainable competitive advantage because sustainable competitive advantage plays an essential role in the long-term survival and success of small and medium-sized enterprises, through innovation in creating new products and services and meeting changing customer needs. Small and medium-sized enterprises can obtain and maintain sustainable competitive advantage (Anwar, 2018; Arsawan et al., 2020). From this description, the first proposition in this research is :

**Proposition 1:** the better a business entity innovates in the aspects of green product innovation, green process innovation, and green managerial innovation, the more the business entity will achieve a sustainable competitive advantage.

The existence of the fourth industrial revolution has encouraged business entities to innovate in production processes by implementing environmentally friendly practices to ensure sustainability (Saudi et al., 2019). Innovation will undoubtedly create a sustainable competitive advantage; innovation is influenced by intellectual capital factors, which have a central role in increasing innovation (Chatzoglou & Chatzoudes, 2018). A business entity has realized that intellectual capital will play a role in fostering innovation and ultimately increasing its competitiveness to maintain business continuity (Al-Dujaili, 2012). Small and medium-sized enterprises increasingly invest in building intellectual capital, which is closely related to innovation performance. This is relevant considering that countries have excellent competitiveness in an industry related to innovation (Agostini et al., 2017). A higher level of intellectual capital will encourage innovation in a business entity. This is important and essential to maintain an atmosphere of innovation and develop sustainable innovation capabilities in a competitive environment (Allameh, 2018).

Resources in the form of intangible assets dominate business models in improving the economy (Cohen & Kaimenakis, 2007). Intangible assets are reflected in intellectual capital, an essential factor for improving innovation performance in a business entity (Ali et al., 2021; Y. Li et al., 2019; Ur Rehman et al., 2021). Intangible assets are an essential determinant of the competitiveness of a business entity in the knowledge economy era (C. H. Chang & Chen, 2012). Intellectual capital memiliki dampak positif terhadap competitive advantage dimana intellectual capital berfokus pada bagaimana mengelola aset tidak berwujud berupa human capital, structure capital, dan relation capital untuk dapat menciptakan nilai bagi sebuah entitas bisnis (Y. S. Chen, 2008b). Furthermore, intellectual capital has three components, namely (a) human capital consisting of human resource skills, expertise, and motivation; (b) structural capital is an ability that includes infrastructure, systems, and procedures as well as organizational culture; and (c) relational capital related to a value embedded in the industrial relations network (Cabrilo et al., 2018).

Internal-based resources in the form of intellectual capital are a determining factor in generating competitive advantage, especially in the human capital dimension (Hardeep & Bakshi, 2015). Research conducted by Lu et al., 2021 provides recommendations for



increasing or obtaining sustainable competitive advantage by encouraging investment in intellectual capital, especially in human capital, because intangible assets in the form of intellectual capital are a crucial element in a business entity for sustainability (Huang & Kung, 2011). A business in a developing country will benefit significantly from intellectual capital to compete in a market. Intellectual capital can also help access valuable resources needed for growth, product development, and market penetration in building a sustainable competitive advantage (Khan & Waheed, 2019). From this description, the second and third propositions in this research are:

Proposition 2: the better a business entity encourages investment in intellectual capital, the more the business entity can support increased innovation in the aspects of green product innovation, green process innovation, and green managerial innovation.

Proposition 3: the better a business entity is at encouraging investment in intellectual capital, the more the business entity will achieve sustainable competitive advantage.

Based on the three propositions above, the model proposed in this research is as follows:

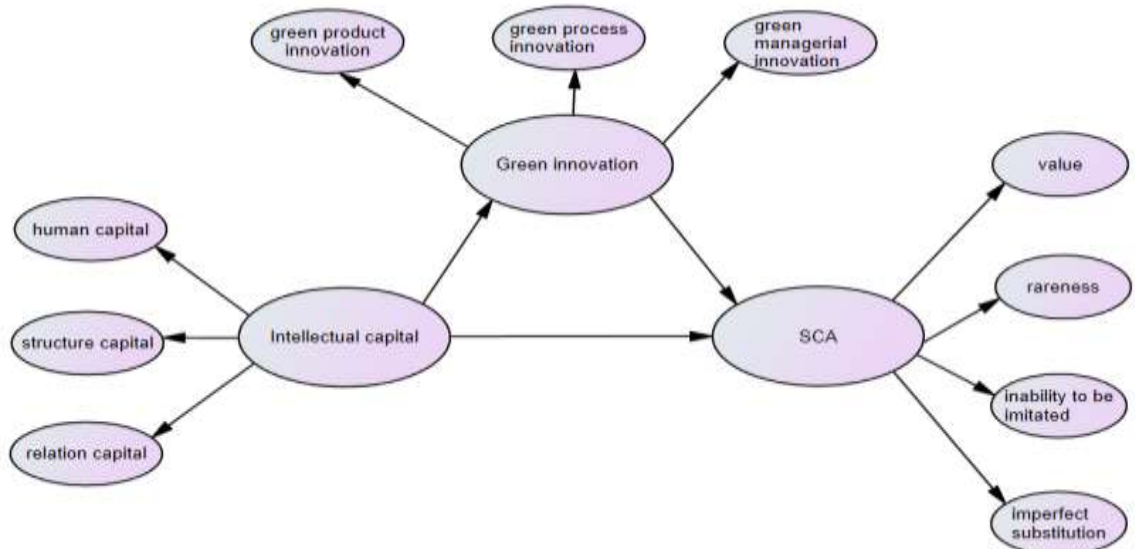


Figure.2 Mapping Model of Sustainable Competitive Advantages : Conceptual Framework And Determinant

Based on previous literature, a business entity must respond to environmental issues in carrying out its business activities. One way is to carry out innovation that focuses on innovation to support sustainable development, namely by carrying out green innovation, which includes three aspects: (a) green product innovation, (b) green process innovation, (c) green managerial innovation so that a business entity can achieve sustainable competitive advantage. In carrying out green innovation, business entities need to pay attention to intangible asset factors in the form of intellectual capital, which include (a) human capital, (b) structural capital, and (c) relationship capital, whereby strengthening and focusing on investment in intellectual capital, it is hoped that a business entity can achieve sustainable competitive advantage.(figure 2)

## CONCLUSIONS AND LIMITATIONS

Business entities are facing conditions full of uncertainty due to the Covid-19 pandemic. Almost all industrial sectors experienced a decline in their economic performance. This is no exception for the Micro, Small, and Medium Enterprises (MSME) sector, especially for creative industry players. To increase competitiveness, efforts can be made by carrying out innovations focusing on green innovation and internal improvements by encouraging investment in intellectual capital. In this way, it is hoped that the competitiveness of Micro, Small, and Medium Enterprises (MSMEs), especially those in the creative industry, can increase, thereby leading to sustainable competitive advantage. This research has limitations in that it is only a conceptual model that has not been tested empirically, so it is hoped that future researchers can test and develop this conceptual model empirically for the context of increasing the competitiveness of Micro, Small, and Medium Enterprises (MSMEs) in Indonesia in the context of accelerating recovery after the Covid-19 pandemic.

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