

Observation the Implementation of Business Knowledge Management System in Creative Industry in Achieving Competitive Advantage (Study in Visual Communication Design Business in Riau Province, Indonesia)

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Abstract

The purpose of this study is to analyze the effect of business Knowledge Management System (KMS) of creative industry in the visual communication design sub-sector to attain sustainable competitive advantage. This research is a quantitative research using survey method with a questionnaire as the instrument. The population in this study consists of business owners, business managers, and creative workers in the business of visual communication design sub-sector located in Riau, Indonesia. The sample size is 202 and the sampling method used is purposive sampling, there are 34 questions in the questionnaire and analyzed by using SEM AMOS. This study found that KMS of the business effect sustainable competitive advantage. Both basic competing strategies and strategic competitiveness can be used as dimensions of sustainable competitive advantage. This study is conducted in Visual Communication Design so that it needs to be extended to other sub-sectors to further validate the model.

Keywords: Knowledge management system; Sustainable competitive advantage; Creative industry.



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1. Introduction

Creative industry businesses doing their main activities through commercializing ideas and skills possessed by creative talent in producing wealth and prosperity. The growth in the creative industry business is growing along with the government's efforts to make the creative industry the backbone of the Republic of Indonesia's economy and also the challenge of the industrial revolution 4.0 which is characterized by a digitization and computerization system that increasingly facilitates access to economic activities.

Based on data obtained from Creative Economy Agency (Bekraf – Badan Ekonomi Kreatif) it was shown that GDP at current prices & the Creative Economy Contribution in 2010-2016 continuously increased. Data showing in 2010 GDP and creative economic contributions amounted to Rp 525.96 Billion (7.66% of total GDP), in 2011 amounting to Rp 581.54 Billion (7.43% of total GDP), in 2012 amounting to Rp 638,39 Billion (7.41% of total GDP), in 2013 amounting to Rp 708.27 Billion (7.42% of total GDP), in 2014 amounting to Rp 784.87 Billion (7.43% of total GDP), year 2015 amounting to IDR 852.56 Billion (7.39% of total GDP), in 2016 amounting to IDR 922.59 Billion (7.44% of total GDP). The contribution of the amount of rupiah given has indeed increased, but the growth and comparison of the percentage of economic contribution to total GDP have not increased significantly and even decreased compared to the creative economic contribution to total GDP in 2010 (Sabdarini, 2018).

Data obtained from the Indonesian Creative Economy Statistics Infographic Summary shows that of the 16 creative economic sub-sectors there are 5 (five) sub-sectors with the highest growth, namely the Television and Radio sector (10.33%), Film, Animation & Video (10.09%), Performing Arts (9.54%), Visual Communication Design (8.98%), Application & Game Developer (8.06%). This is of course due to the ability of each creative economic sub-sector to produce creative economic products that are in line with market expectations and public support to advance the domestic or local creative economy.

In the new economy era, characterized by uncertainty, high intensity of competition, lack of commitment and workforce loyalty, and increasing consumer expectations has become a challenge faced by all types of businesses. Therefore, analyzing opportunities and improving the company's resources through the perspective of Resource Based View (RBV) and Knowledge Based View (KBV) as a way to improve the company's dynamic capacity in facing challenges of uncertainty in the new economy era is very necessary. Turbulence caused by massive entry of knowledge requires a serious effort by companies to adjust their competencies to be able to face these challenges. Knowledge management capabilities spearhead the company's success in increasing competitiveness. Through the

implementation of the management knowledge process, strategic knowledge and capabilities can be obtained to produce sustainable competitive advantage (Nguyen and Neck, 2008).

Knowledge of the company includes implicit and explicit knowledge. Knowledge continues to be improved and adapts as Nonaka's knowledge spiral (Nonaka I., 1994). However, knowledge in the creative economy business is more than that, there is important knowledge which is the core of its business activities, which is called tacit knowledge. In the book National Creative Economy System it is known that creative ideas, skills (tacit knowledge) are both inputs and outputs in the business of creative economics. Tacit knowledge in this case is in the form of ownership of the uniqueness of the talents and skills obtained from the experience or process of learning that is carried out continuously. Tacit knowledge can be shared but cannot be easily accepted and owned by other parties than the knowledge owner because it is exclusive and that makes it have a high value as knowledge was described by Plato that knowledge as 'justified true belief'.

Besides that, another thing that cannot be forgotten is that in the creative economy business, tacit knowledge is not sufficient in carrying out organizational activities. The creative economy business also requires business management knowledge such as knowledge in marketing and consumer relations activities, knowledge in logistics supply, Human Resource Development, budgeting and so on. So that in the creative economy business collaboration between tacit and explicit knowledge is carried out in an effort to achieve organizational goals to gain competitive advantage.

Creative economic business processes the knowledge management system in responding to the challenges of the new economy and in collaboration with tacit and explicit knowledge. In some literature the knowledge management process can improve the company's competitive advantage (Gold *et al.*, 2001; Nguyen and Neck, 2008). In this study, because collaboration knowledge is applied in business activities, the knowledge management process is an activity carried out on every knowledge received and possessed by the organization, including everything that becomes an opportunity and threat from external and internal strengths and weaknesses owned by the organization. So that the knowledge management system process is carried out in an effort to acquire or possess knowledge, then conversions and adopted are made to the capacity and identity or image of the company, then the implementation of knowledge collaboration and to the protection stage to avoid theft or irresponsible actions.

This study conducted as an empirical study on the business of creative economy as a sector that served as the backbone of the Indonesian economy. Efforts to help the development of creative economy business are very important because this sector can open employment opportunities and become a sector that can empower local people to produce creative economic products that require good knowledge of the social context of the community, and the regional economy. So that the creative economic business that is present is to describe the identity and local characteristics. In addition, the creative industry can also produce complementary products that can help business activities in other sectors.

Based on data obtained from the Creative Economy Agency (Bekraf) employment in creative economy businesses continues to increase. It is known that in 2014 there were 15.17 million people who had the main job of the creative economy (13.23% of the share of the creative economy workforce towards the national), then there was an increase in 2015 of 15.96 million people who had the main job of creative economy (13.90% of the share of the creative economy workforce towards the national), still experiencing an increase of 5.95% to 16.91 million people who have creative economic jobs (14.28% share of the creative economy workforce towards the national). Therefore studies in the effort of developing a creative economy business are very important so that at the organizational level it is known to empower the resources owned by the company, and especially in the efforts that can be made in creative economy business in facing the challenges of the new economy. So that this study conducted an empirical study of the influence of knowledge management systems in achieving competitive advantages of sustainable creative economy business (Sabdarini and Irene, 2017; Sabdarini, 2018).

Riau Province is geographic, geo-economic and geopolitical, located on a very strategic route related to its location in the regional and international trade routes in the ASEAN Region through the collaboration of IMT-GT and IMS-GT. Riau is an area with economic activity that is dominated by the oil palm plantation industry, service industry, trade, property. So that the creative economy business of visual communication design can support economic activities in Riau. Visual communication design is one of the creative economic sub-sectors that is massively present in Riau.

The visual communication design business in Riau has generally been carried out both traditionally and in a modern way. Traditionally this business is managed by focusing on individual / business orders that occur accidentally, and modernly because the VCD business is managed not only to focus on find a demand that occur accidentally but also to have established a network of cooperation that is carried out continuously with clients.

As a business based on ideas, the creative economy business of visual communication design faces high competition challenges in Riau. So that efforts to win competition through the creation of sustainable competitive advantage needs to be done. VCD business that is able to produce visual design products that are unique, attractive, understandable, and acceptable to the target community continuously makes this business sustainable in the long run. So businesses need to implement knowledge management in achieving competitive advantage

The aim of this study is to provide an analysis of the role of the business knowledge management system towards the sustainable competitive advantage of the creative industry business. So in facing of an uncertain situation, that is the new economy era and challenges from the wave of industrial revolution 4.0, then implementation of the knowledge management system will be able to bring the creative industry business to achieve sustainable competitive advantage. This research becomes more interesting because in the creative economy business talents and skills are tacit knowledge. Tacit knowledge is different from the implicit knowledge that can be

shared and transformed into explicit knowledge. Tacit knowledge that is owned exclusively by creative workers cannot be moved quickly and cannot be easily accepted by other parties because the knowledge possessed by creative workers is derived from long-term experiences and learning processes. This is different from other types of businesses, in the creative industry tacit knowledge is the main force in business activities even though business knowledge is equally important. So that the creative industry business needs to do knowledge collaboration. Knowledge management capability in synergizing this knowledge can be done through the implementation of the knowledge management system. The KMS process is carried out as an appropriate strategy in running a business so that overall business activities can run effectively and efficiently and produce valuable outputs of creative industries business and can improve superior competitiveness.

2. Material and Method

2.1. Knowledge Management System

Knowledge, specifically, is divided into two types, namely implicit and explicit knowledge. Implicit knowledge is obtained through the learning process, through observation and guidance of a master. Implicit knowledge is divided into two: technical implicit and cognitive implicit. The technical implicit is related to knowledge of know-how, and cognitive implicit knowledge is wealth of beliefs, presuppositions, and experiences shared specifically within cultural groups (nation, company, family, etc.). Furthermore, explicit knowledge refers to books, manuals, procedures and printed guidelines that express information clearly through language, images, sounds or other means of communication. This knowledge is in the form of procedures and standards that can be used to regulate the organization (Polanyi, 1958).

The literature states that the creation of corporate knowledge is obtained through the conversion of implicit knowledge to be explicit. Furthermore, explicit conversion to implicit is to arrive at the process of how knowledge continues to change and be updated. And so on this process is called the Nonaka knowledge spiral for the purpose of New Product Development (Nonaka I., 1994).

But organizational knowledge is not enough without collaborating with the knowledge of creative talent in organizations that make ideas, expertise and skills as producers of wealth for organizations such as the creative industry. Creative talent acquires knowledge, on a self-taught basis, namely knowledge in the form of expertise acquired from the learning process itself. Knowledge gained from self-taught process is not without a formal learning process through observation or understanding from an expert. Creative talent knowledge is derived from the perseverance that shapes the talent it has to be of high selling value. Not all knowledge possessed by creative talent can be converted into explicit knowledge, but even though it can be converted into explicit knowledge, it cannot replace itself (the knowledge owner). So that creative talent knowledge leads to tacit knowledge. Tacit knowledge can be converted into explicit knowledge. But on certain characteristics of creativity, tacit knowledge tends to be exclusive. Like Designer Anne Avantie, it has its own method of producing kebaya designs that have high selling value and are not based on guidelines for books or tutorials that are explicit in nature.

The creative industry as a profit-oriented organization creates and upgrades knowledge not limited to the motivation of New Product Development (NPD) but for the long-term goal of making the creative industry have a sustainable competitive advantage. Which means the creative industry is present to answer the economic needs of territorial scope. So that the sustainability of creative industries is supported by operations from other industrial activities. Continuous competitive advantage is a collaborative practice between knowledge owned by the organization and the knowledge possessed by creative talent. Creative talent cannot optimally commercialize their creative products without knowledge management practices in the creative industries, whereas creative industries cannot have sustainable competitive advantages without the knowledge possessed by creative talent.

Knowledge is an asset and valuable resource for each organization (Said, 2015). Knowledge management focuses on the company's strategic goals such as innovation, performance improvement, competitive advantage, success, knowledge and understanding of the experience of Lesson Learned Organizational Process Asset.

Knowledge management is considered as the memory of the organization that is utilizing the collective knowledge of the company from one project to another, and makes the company will invest in tools used for supporting knowledge management such as technology infrastructure. KMS combines: creating and capturing new knowledge, supporting and facilitating content management, and sharing and reusing knowledge to produce value (Alavi and Dorothy, 2001).

Knowledge management (KM) is generally defined as the acquisition, storage, retrieval, implementation, generation and review of an organization's knowledge assets in a controlled manner (Ajmal *et al.*, 2010; Brelade and Chris, 2003; Kebede, 2010; Pathirage *et al.*, 2008; Pitt and Matthew, 2008), although precise definitions depend heavily on the context and relevance of certain business sectors where their application is applied. KM emphasizes changes in the relevance of information according to the context and needs. The essence of KM is the relationship between two dimensions, people and information, which is mediated by systems and processes.

Traditionally organizational knowledge is obtained, used and stored through the process of coding knowledge that is used as a guide to redirect the knowledge back if needed to use it. So that knowledge gained through the coding can guide finding knowledge, such as people, documents or databases, knowledge that is termed knowledge maps or yellow pages systems (Barber *et al.*, 2006; Davenport and Klahr, 1998). But in this study knowledge through the Knowledge Management System is a process that is used not only to determine who, what and why in a process, but also how and when knowledge is obtained, implemented upgraded and protected through a collaborative system of knowledge obtained from various elements of the party relating to the existence or presence of the creative industry as a business entity and as an illustration or identity of the territorial-based creative economic context.

Collaborative knowledge is at the heart of the creative industry. Knowledge collaboration is obtained through the creative industry work system which is a combination of creative talent, organization, territorial, and social knowledge. This is supported by a number of literatures which initially connected creative industries with institutions such as universities, industry, government (triple helix) (Etzkowitz, 1995) then developed as quadruple helix, namely academician involvement, community, business, government (Carayannis and David, 2009). Furthermore, it developed into penta helix, namely the involvement and synergy between academics, business, community, government, media (ABCGM) which was initiated in the development of tourism and creative economy formulated by the Minister of Tourism Republic of Indonesia (Yahya, 2017). So that the term knowledge management in the creative industry emphasizes the interaction of knowledge from various elements or entities that can influence the achievement of the objectives of each element in general and specifically the creative industry to achieve sustainable competitive advantage. So if the literature mentions the process of knowledge creation in organizations with the term knowledge management, then in the creative industry it would be very appropriate if the process of knowledge creation is called the knowledge management system (KMS) because knowledge of creative industries is a collaboration of knowledge from interacting elements or entities. This means that creative industry knowledge comes from processes and knowledge that are fully created from knowledge collaboration for the purpose of producing high-value creative products that are identity or reflection of territorial and social contexts.

2.2. Sustainability Competitive Advantage

Sustainability is the main goal sought by the company to continue to exist and grow in the market. External and internal environments can encourage the realization of such sustainability. Sustainability can be supported. The drive to a sustainability orientation can be encouraged externally or internally (Gibbs, 2009; Masurel, 2007; Santiago, 2013). For example the government, for example, can urge organizations to adapt sustainable practices and green processes. The government then provides levies or tax incentives. There is also a growing ecological awareness of consumers who can push businesses towards marketing green products or reward those who project more social responses.

An individual entrepreneur is an important milestone in every entrepreneurial business (Volery, 2002). This view is also supported that the mindset of the environment must be on entrepreneurs rather than managers who have the possibility of leaving the company and thus taking its substantive character (Santiago, 2013; Schaltegger, 2002).

Even among entrepreneurs, responses to sustainability issues are different (Baumgartner, 2009). Some of them will take a more introverted approach by complying with government regulations. There are entrepreneurs who will take an extroverted approach by highlighting their achievements in the sustainability report. Others might take a conservative approach by focusing on environmentally friendly practices such as energy conservation and waste management. This is a visionary strategy that originates from entrepreneurs who integrate sustainability issues to be applied in business operations (Walley and David, 2002).

In another article his research deals with the reinterpretation of Schumpeter's creative disruption theory (Schumpeter, 1942) stating that the long-term viability of the economic system depends on its ability to create and maintain sustainable economic processes that involve value creation and current needs without compromising the needs of future generations (Ghisetti *et al.*, 2015; Lopes *et al.*, 2016).

Creating competitive advantage in market conditions with rapid and unexpected changes, resource based view (RBV) and Knowledge based view (KBV) are used in dynamic market conditions (Eisenhardt and Jeffrey, 2000; López, 2005). In a study conducted by Nguyen and Neck (2008) it was stated that in dynamic market conditions with high competition intensifies, knowledge based resources are a way for companies to have different competitive advantages. Knowledge Management implementation, can change, update and exploit knowledge-based resources representing knowledge related to the company's dynamic capabilities. Knowledge Management creates a corporate spiral of knowledge, so companies do not only generate new knowledge but upgrade the state of knowledge-based resources (Nielsen, 2006). In the face of dynamic conditions, the process of creating organizational knowledge will always be followed by upgrading and exploitation of knowledge to create sustainable competitive advantages.

3. Theoretical Development and Hypothesis

3.1. Knowledge Management System Terhadap Sustainable Competitive Advantage

Sustainability is a current and comprehensive issue for the economy, companies and populations, which is considered a systemic concept (Buys *et al.*, 2014) related to the continuity of economic, social (including cultural), and environmental problems (Ribeiro *et al.*, 2016). The capacity of an organization to maintain its ability to generate ideas and innovate is based on its capacity to learn, expand its knowledge base, and people share their knowledge (Teece *et al.*, 1997). Thus, in a dynamic market where competition and the intensity of risk and product or service life cycles become shorter, sustainable competitive advantage can only be found in learning sustainable organizations, knowledge management (KM) and creativity (Nonaka Ikujiro., 2007).

Knowledge is a valuable asset and resource for every organization. Knowledge management focuses on the company's strategic goals such as innovation, performance improvement, competitive advantage, success, knowledge and understanding of the experience of Lesson Learned Organizational Process Asset.

Knowledge collaboration is the core of business activity in the creative industries. Collaborative knowledge is obtained through the work system of creative industries which is a combination of creative talent, organization, territorial economic and social context. Some literature initially connected the creative industries with their ecosystems including universities, industry, government (triple helix) (Etzkowitz, 1995). In a broader sense and

consideration, it is then developed with the term quadruple helix, which consists of innovation of academics, community, business, government (Carayannis and David, 2009). Furthermore, this ecosystem is developed into the penta helix, which consists of involvement of academicians, business, community, government, media (ABCGM) for the development of tourism and creative economy formulated by Arief Yahya, Minister of Tourism Republic of Indonesia (Yahya, 2017). Creating competitive advantage in market conditions with rapid and unpredictable changes, then the resource-based view (RBV) and Knowledge-based view (KBV) are used in dynamic market (Eisenhardt and Jeffrey, 2000; López, 2005). The KM process can change, update and exploit knowledge-based resources representing knowledge related to the company's dynamic capabilities. KM creates a spiral of corporate knowledge, so that companies not only produce new knowledge but upgrade the state of knowledge-based resources (Nielsen, 2006). In the face of dynamic conditions, the process of creating organizational knowledge will always be followed by upgrading and exploitation of knowledge to create sustainable competitive advantage.

New knowledge, developments, and new ideas that are needed by the creative industry in maintaining their industry to be competitive will be obtained through the implementation of a knowledge management system (KMS). So in this research the following hypotheses are built:

Hypothesis: Knowledge Management System Business Visual Communication Design has an influence on sustainable competitive advantage

4. Method and Data

The study examines the effect of Business Knowledge Management System on Sustainable Competitive Advantage in the creative industry business. Research design is quantitative research by testing hypotheses using survey research methods through collecting data using questionnaire instruments. Instrument measurements from each variable based on those adapted from the relevant literature using 5 point Likert scales from 1 (strongly disagree) to 5 (strongly agree). The research instrument testing is done by validity test and reliability test. The hypothesis testing technique uses Structural Equation Modeling (SEM) using AMOS software because this technique is very good for validating the model.

The population in this study were the owners, managers and workers of the creative industry business in Riau and the sampling method in this study was non-probability sampling with the technique used purposive sampling. The sample selection criteria is that the creative economy business of the Visual Communication Design sector is a sector that is commonly found in Riau because its presence supports regional economic activities dominated by the manufacturing, trade, plantation, oil and gas, and services sectors. The respondents chosen in this study were owners, managers, and business workers of Visual Communication Design (DKV) in Pekanbaru, Indonesia. The sample size used was 202 respondents. Data was collected through a questionnaire consisting of 34 questions.

In the process of distributing research questionnaires, researchers used 4 (four) student volunteers consisting of 2 students from the Sekolah Tinggi Ilmu Ekonomi Pelita Indonesia and 2 students from the Universitas Riau. In the process of distributing research questionnaires, the volunteers gave all respondents the form of craft, agenda, pens and name cards of the researcher, with the aim that the respondent gave the correct and appropriate answers to all questionnaire questions.

The distribution and collection of this questionnaire was carried out for almost a full month. This is due to the spread of the creative industry business in the visual communication design sub-sector not concentrated in one area and at the time of collecting the questionnaire some respondents asked for more time to give answers so that volunteers again had to follow up the respondents. A total of 202 questionnaires were returned and all were eligible for input into the data processing process.

Based on a review of the literature dimensions and indicators used to measure latent variables are as follows; the knowledge management system variable consists of 4 dimensions, namely: acquisition process, conversion process, application process, protection process. 6 questions for the acquisition process, 6 questions for the conversion process, 7 questions for the application process, 7 questions for the protection process adapted from Gold *et al.* (2001), Nguyen and Neck (2008). Furthermore, the sustainability competitive advantage variable consists of 2 dimensions, namely: Basic Competing Strategies, and Strategic competitiveness. 4 questions for Basic Competing Strategies, and 4 questions for Strategic competitiveness (Byrd and Turner, 2001; Porter, 1985). Dimensions of competitive advantage in this study include dimensions of strategic competitiveness which is an adaptation of variables organizational performance. This was included in the study because the creative economy business is generally included in the category of SMEs so that the ability to have good performance is an effort to increase levels at a higher business size as a company motivation that can lead to increased business competitiveness.

Based on the total number of 34 questions before the pretest was carried out after the validity and reliability of the instrument were tested, the total number of questions became 30 questions, because there were 4 questionnaire questions that were invalid so they had to be removed from the questionnaire which would then be widely disseminated. The number of respondents used to test reliability and validity is 50 people. The measurement of this research model is carried out by considering the acceptance indicators with the provisions of the reliability test, stated that if the intercept value (constant) is greater than 0.6 then the variable is statistically reliable (Sekaran, 2003). According to Ghozali (2012) a construct or variable is reliable if it gives the value of Cronbach Alpha > 0.6 . Furthermore, the validity of the question indicator is tested by using the value of Corrected Item Total Correlation if $r_{count} > r_{table}$, then the item question is valid, on the contrary if $r_{count} < r_{table}$ then it is invalid with a 2-sided test at the 0.05 level of significance. The magnitude of r_{table} with a significance level of 0.05 with $df-2$ is 0.2732.

Data that has been collected through surveys begins with the process of assessing sample characteristics, and identifying normality. Using a two-step approach to structural equation modeling (SEM) using AMOS version 20.

The first step is to carry out confirmatory factor analysis to assess the proposed measurement model and construct validity while step two aims to develop and estimate structural models to test the significance of theoretical relationships (Anderson and Gerbing, 1988; Hair *et al.*, 2014).

Before describing the characteristics of respondents, identifying normality, the results of hypothesis testing first explained the operational definition of the research variable. The definition operational variables used in this study is described in the table below:

Table-1. Defenition of Operational Variables of Knowledge Management System

Knowledge Management System	The ability to acquire, develop, share, and apply knowledge has been key to obtaining sustainable CA and sustainable superior performance (Grant, 1996a; Hamel and Prahalad, 1994; Ho, 2008; Powell and Snellman, 2004; Sharkie, 2003; Teece <i>et al.</i> , 1997; Verona and Ravasi, 2003) through the synergy of knowledge from each party collaborating with the creative industry business in order to create strategic competitiveness.
Aquisition Processes	Oriented to gain knowledge that can be explained by many other terms such as obtaining, searching, producing, creating, capturing, and collaborating, all with a general theme - accumulation of knowledge (Gold <i>et al.</i> , 2001).
Conversion Processes	Oriented to make existing knowledge useful (Gold <i>et al.</i> , 2001) which can be activated by several processes such as regulating (Davenport and Klahr, 1998; O'Dell and Grayson, 1998), representing (Marshall <i>et al.</i> , 1996), integrating (Grant, 1996b; Nielsen, 2006), combining, structuring, coordination (Miller, 1982; Moore, 1996; Sanchez and Mahoney, 1996), or spreading knowledge (Davenport <i>et al.</i> , 1996; Davenport and Klahr, 1998; Zander and Kogut, 1995).
Application Processes	Oriented to the actual use of knowledge (Gold <i>et al.</i> , 2001) makes knowledge 'more active and relevant for companies in creating value (Bhatt, 2001).
Protection Processes	Oriented to the protection of knowledge in an organization from illegal or inappropriate use or theft (Gold <i>et al.</i> , 2001).

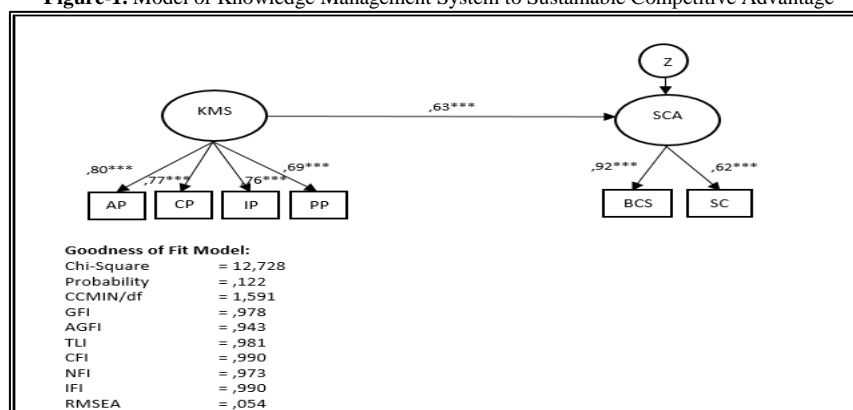
Table-2. Defenition of Operational Variables of Sustainable Competitive Advantage

Sustainable competitive advantage	The objective of organizational strategies (Porter, 1985) which are measured in many dimensions such as innovation, market position, mass customization, and difficulty in duplication (Byrd and Turner, 2001).
Basic Competing Strategies	Strategy to compete through the core competencies of the organization.
Strategic competitiveness	A strategic effort by organizations to be able to compete in dynamic situations to achieve sustainable competitive advantage.

Researcher first conducted this study by examining the respondents of the study. For descriptive statistics to the respondents, it is known that: [a] male 72.3 % and female 27.7 %, [b] married 34.16 %, unmarried 65.35 % and single parents 0,5 %, [c] age 21-25 years (41.1 %), age 26-30 years (25.25 %), age 36-41 years (4 %), [d] self-owned capital 76.5 %, funding from banks and financial institutions 9.4 %, joint venture/cooperation 9.4 %, bank / financial institution accompanied by own capital 4.7%.

Then it was further revealed that all the values of skewness and kurtosis of the five interval variables in this study were found not to exceed the absolute value of 2 for skewness and 7 for the kurtosis index and, therefore, the data set considered to have a normal distribution could then be used in the next process (Hair *et al.*, 2014; Kline, 2011). Measurement of Goodness of Fit Model obtained by Chi-Square = 12,728; P = 0.122; CCMIN / df = 1,591; GFI = 0.978; AGFI = 0.943; TLI = 0.981; CFI = 0.990; NFI = 0.973; IFI = 0.990; RMSEA = 0.054 and based on these results it is known that overall the fit model assessment indicators are on good criteria, then the results are used to test the hypothesis through Regression Weights.

Figure-1. Model of Knowledge Management System to Sustainable Competitive Advantage



Source: data analysis, processed

The results of AMOS SEM analysis found that the Knowledge Management System affects Sustainable Competitive Advantage (CR 7.417) at a level of significance of 0.001 (***), then based on the results obtained by the Knowledge Management System dimension consisting of the acquisition process, conversion process, application process, and process Safety protection is a dimension of KMS with a significant level of 0.001 (***) and the dimension of Sustainable Competitive Advantage which consists of basic competing dimensions, and strategic competitiveness dimensions can be accepted as dimensions of SCA with a significant level of 0.001 (***).

4. Discussion

Based on the results of this study, it was found that the implementation of knowledge management systems in the creative industry business will influence the creative industry business in enhancing sustainable competitive advantage. Knowledge Management System in several literature related to the use of information technology systems in the implementation of knowledge management. Creative industry business activities make the "system" a synergy and collaboration with various parties involved in creative industry business activities. There are various parties with different knowledge specifications and capacities involved in the creative industry business. So that knowledge is the key to business sustainability. Knowledge that is the key to success in achieving business sustainability is not limited to the results of organizational performance but is obtained from the learning process, perseverance and also the experience possessed by each party is in the form of collaboration from tacit and explicit knowledge. So that through the implementation of the knowledge management system comprehensive knowledge is obtained regarding the resources and competencies of the company and the capacity of the company which is ultimately used to produce creative economic products that have commercial value. The implementation of knowledge management systems in the creative economy business is very important to study because business activities in creative industries are based on different specifications of knowledge and capacity. Knowledge is an important asset that can create a sustainable competitive advantage. Knowledge is embedded in each individual and party so that the implementation of the knowledge management system needs to be carried out in an effort to synergize knowledge which is the competencies of the organization for the capability of the organization in accommodating that competencies into a valuable product. This is important because the creative industry is different from other industries where the implementation of knowledge management focuses more on the process of localizing, acquiring, developing (creating), sharing, disseminating, leveraging, and storing knowledge (Probst *et al.*, 2002). So that creative industry business owners can understand that the implementation of a business knowledge management system can help achieve sustainable competitive advantage. In addition, ecosystems in the creative economy, namely academics, business, community, and government can conduct capacity-based interactions through the implementation of a business knowledge management system to conduct knowledge collaboration to produce products that are in line with market needs and local identity. So that knowledge collaboration through the implementation of knowledge management systems is very important for business sustainability.

5. Conclusion

The implementation of the knowledge management system in the creative industry business is very important because it will affect the achievement of sustainable competitive advantage. The implementation of the knowledge management system in the creative industry based on the results of respondents' responses is indeed still lacked. So far, the emphasis in creative economic business activities is only on the competencies of creative talent, the creative economic impact on national economic growth. Knowledge related to markets and customers is still not optimally done. So that creative talent does not totally do the work because business efforts in the creative industry in determining their position in the market have not been carried out optimally. So that creative economic products tend to lack differentiation and diversification through emphasizing the creativity of creative talent. This also causes creative talent to be unprofessional and less committed to the organization. In addition, the creative industry business in the visual communication design sector has no effort to protect the knowledge of creative talent against unexpected use from outside the business itself. So that it makes creativity and innovation as an important part of business in the creative economy to be very poorly encountered. This is because efforts to win competition in business are not important. So that efforts to continue to develop the skills and expertise of creative talent cannot be expected from a creative economy business, but from stakeholders who are concerned about the existence of creative economic businesses, both creative communities, business owners, regulators. The government as a policy maker besides being able to use creative economic products, can also direct companies in the region to use local creative economy products. So that it can develop the skills and expertise of creative talent through providing experience to creative talent and motivating the creative industry to offer superior products. Academics can also be involved in researching phenomena that occur in creative economic business activities both micro and macro. Research related to the implementation of KMS in improving competitive advantage needs to be done by the next researcher in the sub-sector based on heritage. Culture as identity and self-image in dynamic and uncertain conditions, it is necessary to study the effect of implementing KMS in achieving competitive advantage and sustainability.

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