Conference Paper

# The implementation of quadruple helix model and competitive advantage to the growth of creative industries in Malang District

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**ABSTRACT**

The purpose of this research is a concept based on the Quadruple Helix model and Competitive Advantage towards the development of the creative industry in Malang Regency. The variables used in this study include Variable freedom consisting of the variable Competitive Advantage and Quadruple Helix variables, on the other hand, the dependent variable is the development of the Creative Industry in Malang Regency. The population in this research is all Creative Industries in Malang Regency. The illustration of this research is the leaders and managers who represent the Creative Industry in Malang Regency which has 30 respondents. The method of analyzing information in this research uses Partial Least Square with the Smart PLS M3 application. PLS is a procedure for creating a predictable building model when there are many aspects. Based on research results, it can be shown that competitive advantage can provide significant donations to the development of the creative industry. Quadruple Helix cannot distribute a significant donation for the development of the Creative Industry.

Keywords: Quadruple helix, competitive advantage, creative industry growth

## Introduction

The creative industry sector is an industrial zone that originates from the creativity, expertise, and talents of people to generate welfare and employment that can be used as well as people's talents, skills, and talents that have the ability and ability (Subagja, 2017). In contrast to the typical industrial characteristics, the Creative Industry consists of a group of industries consisting of various types of industries, each of which is related to the process of utilizing the idea of intellectual property or intellectual property into a large economic value that can produce welfare and jobs (O'Connor, 2010).

Malang Regency is a district in East Java Province, Indonesia. The industrial zone in Malang Regency is mainly engaged in the processing and trading of agricultural products. The processing and trade industries include the refined sugar processing industry, processed food industry, milk processing industry, free-range chicken meat processing industry, and free-range chicken meat processing industry, and wood processing industry.

There are so many superior products from the creative industry in Malang Regency. Creative products include woven wood and rattan handicrafts, unfavorable mask crafts, and fashion products such as shoes and bags. Rattan and wood crafts in Bantur, Gedangan, Kepanjen, and Pujon districts created products in the form of lampshades. Mask crafts are often found in Kromengan and Kepanjen Districts which produce masks of Malang. Not only the Malang mask, Kepanjen Regency also performs mask dance performances for local and foreign tourists. Craft mode can be found in Kepanjen and Nganjum sub-districts which produce leather bags and shoes. But the SMEs

that produce these handicrafts have not been able to create quality products. Oftentimes, UKM faces difficulties meeting consumer demands and ends up losing opportunities to earn a profit.

One of the sectors of the creative industry is the handicraft and fashion business. Creative activities related to the creation, production, and distribution of products produced by craftsmen starting from the design to the production process. The Central Bureau of Statistics reported that Indonesia in 2018 has produced a Gross Domestic Product (GDP) of 9,109,129.4 billion rupiahs. This figure has increased over GDP in 2017 amounting to 8,241,864.3 billion rupiahs. Growth occurred around 10.52%. Meanwhile, the creative industry sector contributed 641,815.4 billion from a total of 9,109,129.4 billion rupiahs. This contribution puts the creative economy sector at 7th out of 10 economic sectors with a percentage of 7.05%.

The development of business potential in the Malang Regency has given a different perspective on the meaning of entrepreneurship in the Regency community. Entrepreneurship, which is often interpreted as a business or a profession, has now turned into a separate lifestyle inherent in modern society. This fact is experienced directly in modern society who is also a business actor in Malang Regency because many of them have concurrent core work by doing business at home, be it a physical business or online.

The problems faced by Creative Industry players in East Java, especially Malang Regency itself are faced with a problem that is now no longer a problem of capital, but a problem of the competitiveness of a product, where Creative Industry players have not been able to increase competitiveness in producing their products so that they have high selling value (Hidayat & Asmara, 2017). The competitiveness of Creative Industry players is constrained by a lack of strengthening knowledge and broad market access to be able to compete both in the domestic market and in the global market. This results in Creative Industry players unable to develop and increase their productivity to the maximum.

The problem of the creative food processing industry which is a potential characteristic of Malang Regency which he described in his research is product innovation which is still not competitive because the production of processed food products such as chips products is still produced and packaged manually and traditionally. Lack of knowledge and ability as well as maintaining the traditional ways of their ancestors traditionally are an inhibiting factor for competitiveness to be able to provide more innovative packaging and taste. This is a matter of attention and consideration of the Malang Regency government to create a program that can encourage actors to innovate while still adhering to its traditions so that the food processing typical of Malang Regency can develop both in local and international markets (Tanuwidjaja & Wirawan, 2012).

Basically, the problems of the Creative Industry that have been described above can be resolved slowly if the role of the government in carrying out its empowerment function can be more optimal to increase the productivity of Creative Industry players in Indonesia, especially the Malang Regency. Based on the results of observations made by researchers in the field, almost similar problems were found as stated by the Head of the Cooperative and Creative Industry Office of East Java Province above, especially the Creative Industry in Malang Regency which was the location of the researcher in conducting research (Novie, 2017). Researchers identified how the empowerment carried out by the Malang Regency Government through the Malang Regency Creative Industry and Trade Industry Cooperative Office in empowering the potential of the Creative Industry in Malang Regency to increase its empowerment so that it can face its problems.

Based on the background description above, the problem can be formulated as follows: "Does the application of the Quadruple Helix and Competitive Advantage models affect the growth of the creative industry in Malang Regency?

**Material and Methods**

The purpose of this study was to determine the effect of the application of the Quadruple Helix and Competitive Advantage model on the growth of the creative industry in Malang Regency. The variables used in this study include:

1. Competitive Advantage (X2) is defined as the benefits strategy of companies that work together to create a more effective Competitive Advantage in their market.
2. Quadruple Helix (X2) is the relationship between the three elements (business, intellectuals, government, and civil society). Each element is an independent entity, has its role to synergize in growing creative industries.
3. Creative Industry Growth (Y) is a measure of achievement obtained from the activities of the overall marketing process of a company or organization.

The population in this study were all Creative Industries in Malang Regency. The sample in this study were leaders and managers representing the Creative Industry in Malang Regency, representing 30 respondents. The data analysis technique in this study used Partial Least Square (PLS) with the help of Smart PLS 2.0 M3 software. PLS is a method for constructing predictable models when the factors are too many. In testing the hypothesis it can be seen from the t-statistical value and the probability value. To test the hypothesis that is by using a statistical value, for alpha 5% the t-statistic value used is 1.645. So that the criteria for acceptance/rejection of the hypothesis is that Ha is accepted and H0 is rejected when the t-statistic is> 1.645. To reject/accept the hypothesis using probability, Ha is accepted if the p-value is <0.05

**Results and Discussion**
***Results***

The results of research on testing the effect of *Competitive Advantage* and *Quadruple Helix on the* Growth of the Creative Industry are as follows:

*Reliability test*

*Composite reliability* is an index that shows the extent to which a measuring tool can be trusted to be relied on. If a tool is used twice to measure the same symptoms and the measurement results obtained are relatively consistent, then the tool is reliable. In other words, reliability shows the consistency of the measuring device in the same symptoms. The complete results can be seen in the following table:

Table 1. Data reliability

|  | Composite Reliability |
| --- | --- |
| *COMPETITIVE ADVANTAGE* (X1) | 0.595635 |
| GROWTH OF CREATIVE INDUSTRIES (Y) | 0.776337 |
| QUADRUPLE HELIX (X2) | 0.824494 |

Source: processed data

The reliability of the construct is measured by the value of composite reliability, if the construct is reliable if the value of composite reliability is above 0.70 then the indicator is said to be consistent in measuring its latent variables. The test results show that the Quadruple Helix construct (variable) and the Creative Industry Growth have a composite reliability value greater than 0.7. So it is reliable. As for the Competitive Advantage variable, the composite reliability value is smaller than 0.7, so the reliability is low.

Testing of the structural model is carried out by looking at the R-Square value which is the goodness-fit model test. Inner model testing can be seen from the R-square value in the equation

between latent variables. The R2 value explains how much the exogenous (independent/ free) variable in the model can explain endogenous variable (dependent/ bound).

*Causality test*
Table 2. Causality test

|  | Path Coeffi-cient (O) | Sample Mean (M) | Standard Deviation (STDEV) | Standard Error (STERR) | T Statistics (| O / STERR |) |
|---|---|---|---|---|---|
| *COMPETITIVE ADVANTAGE* (X1) -> GROWTH OF CREATIVE INDUS-TRIES (Y) | 0.515923 | 0.565492 | 0.239383 | 0.239383 | 2.155216 |
| QUADRUPLE HELIX (X 2) -> GROWTH OF CREATIVE INDUS-TRIES (Y) | 0.215220 | 0.187251 | 0.182642 | 0.182642 | 1.178375 |

Source: processed data

Based on the table above shows that:
1. *Competitive Advantage* (X1) affects the growth of the Creative Industry (Y) with a path coefficient of 0.5159, it is acceptable where the T-Statistic value = 2.1552 is greater than the Z value α = 0.10 (10%) = 1.645, then Significant (Positive).
2. QUADRUPLE HELIX (X2) has no effect on Creative Industry Growth (Y) with a path coefficient of 0.2152, unacceptable where the T-Statistic = 1.1783 is smaller than the Z value α = 0.10 (10%) = 1.645, then it is Non-Significant (Positive)

**Discussion**
*The effect of competitive advantage on the growth of the creative industry*
Based on the results of research that has been tried, it is found that Competitive Advantage affects the development of the Creative Industry is acceptable (Sutapa et al., 2017). The reports that competitive advantage and innovation simultaneously have a significant and positive effect on variables that affect the batik creative industry. Thus accepted early is accepted. Partially (t-test) the results of the study are convincing that there are no variable markers for the Competitive Advantage and Innovation variables which have a positive and significant influence on the variables that affect the development of the batik creative industry. The initial hypothesis reports that Competitive advantage has a positive effect on development. Creative Industry, can be accepted because in this study the results of research that Competitive Advantage have a positive effect on the development of the Creative Industry.

The comments on the influence of Excellence on products, the influence of Competitive influence can influence the development of the Creative Industry, and increase consumer purchasing priorities and consumer repurchases (Kandampully et al., 2015). Competitive Advantage must have the courage to be creative so that in the eyes of consumers it looks different or is unique from the others and the delivery of messages must be clear and planned. As well as belonging to formed certain energy for these products, so that it can be formed in the area of consumers or tourists who come to these tours. Based on the results of the explanation, the attractive Competitive Advantage increases the Development of the Creative Industry.

*The effect of the Quadruple helix on the growth of the creative industry*
Based on the results of research that has been tried, it is found that the Helix Quadruple does not affect the Development of the Creative Industry. It is not acceptable.

Creating a second hypothesis that reports that the Quadruple Helix has a positive effect on the development of the Creative Industry are unacceptable because in this study the results of this study show that the size of the Quadruple Helix (Government) does not affect the development of the Creative Industry.

This case could be because the size of the government is not very large in distributing donations for the development of the creative industry. Most big economists have the reality that a legal and political order is needed to establish the conditions for buildup and what is controlled by the control authority and market discipline, an efficient financial system, the labor market, and legal protection from capitalists. property rights. As well as government markers about community empowerment, they distributed a little on the Quadruple Helix. Although the academic and business measures in Quadruple Helix share positive donations in markers. Although industry managers and owners believe that Quadruple Helix is a synergy of ABG (Academic. Busines, Government) which is popular in the industry in Indonesia today, industry owners also have a personal level in managing Creative Industry Development. So even though the Quadruple Helix level is not available to influence Creative Industry Development.

The reports that the Quadruple Helix and simultaneous innovation do not have a significant and positive effect on variables related to the development of the palm sugar creative industry in Pacitan Regency. Thus, accepted is not accepted. Partially (T-test) the results of the study are convincing that not all the independent variable markers for the Quadruple Helix variable and innovation do not have a positive and significant effect on the dependent variable on the development of the Creative Industry.

## Conclusion

The results of the study concluded that:
1. *Competitive Advantage can* make a meaningful contribution to the growth of the Creative Industry.
2. Quadruple Helix can not make a significant contribution to the growth of the Creative Industry.

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