The effect of the external environment, internal resources, organizational capability, and competency on the competitiveness of creative industry in South Sulawesi

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Abstract. The creative industry plays an important role in increasing people's incomes and fostering economic growth in South Sulawesi. The purpose of this study was to analyze the effect of external environment on competitiveness, to analyze the effect of internal resources on competitiveness, to analyze the effect of organizational capabilities on competitiveness, and to analyze the effect of competency on competitiveness of creative industries in South Sulawesi, primarily in Tana Toraja Regency and North Toraja Regency. This study used a questionnaire as the main data collection tool. The research sample was 180 business units which determined by using proportional random sampling technique. These respondents included managers or business owners. The method of analysis that used both descriptive statistics analysis, and multiple regression analysis. The results showed that external environment has a positive and significant effect on competitiveness. Internal resource has a positive and significant effect on competitiveness. Then, organization capability has a positive and significant effect on competitiveness. Moreover, competency has a positive and significant effect on competitiveness. Furthermore, this study also found that variable of internal resources was an important factor in enhancing the creative industries' competitiveness compared other variables.

1. Introduction
Creative industries have an important and strategic role in the national economy. In 2014-2015 the highest growth in the creative economy was achieved by the craft sub-sector with export growth of 11.81 percent. Therefore, increasing competitiveness is the focus of the development of the creative economy in the 2015-2019 period, especially for the creative economy which driven by Small Medium Enterprises [1]. Organization growth is inseparable from the influence of external business environment. Business environment consists of both internal environment, and external environment. Internal environment consists of structure, culture, and resources. While external environment is an environment which lies outside the organization whose changes are very dynamic [2].

There are two main perspectives relating to the concept of external environment, namely: (1) a perspective that views of external environment as a provider of resources, and (2) a perspective that views of external environment as a provider of information for organization under conditions of uncertainty environment [3]. The external business environment consists of economic, social, technological and ecological factors. In addition, external factors also are related to competitive
positions, profiles of customers, suppliers, creditors, labor market, macro-economic factors, which include credit, interest rates, and taxes [4].

External business environment factors also refer to government policies, legal forces and politics, technology, resources, competitors, and customer preference that can affect the management of companies. The external business environment is an environment that lies outside the organization that has a direct or indirect effect on organizational activities. The study conducted by [5] found that the level of certainty of external business environment had a positive effect on competitiveness. Likewise, external environment factors include information technology advanced aspect have a significant effect on company performance [6].

The resource-based view perspective emphasizes the importance of managing internal resources, organizational capabilities, and competencies for each organization to maintain its survival and growth. Each organization will achieve sustainable competitive advantage if they have a set of internal resources, capabilities, and competencies that are valuable, unique, rare and difficult to replicate [4,7–9]. According to [10] there are five factors of internal company, namely: (1) marketing and distribution factor, (2) research & development, and engineering factor, (3) production and operation management, (4) human resources factors, and (5) financial and accounting factors.

Internal factors include internal resources, organizational capabilities and organizational competencies which are a source of strengths and weaknesses of the organization [2]. Internal factors also include human resources, company resources, physical resources, and organizational culture that regulates employee behavior [11]. The study conducted by [12] found a positive influence between internal factors, external factors, entrepreneur skills, strategies, and performance toward company’s competitiveness. In line with previous study. Hence, the external and internal factors have a positive effect on SMEs performance as well as competitiveness.

Furthermore, [13] found that external factors have a non-significant effect on the performance of small medium enterprises (SMEs) in Jakarta. The finding of this study was different with some of previous study which conducted by researchers. Related to the testing of organizational capabilities and competencies towards the companies’ competitiveness, [14] found that organizational capabilities has a positive and significant effect on competitiveness. In addition, competency also has a positive and significant effect on competitiveness of organizations/companies. Then, [15] also found that organizational capability has a positive effect on competitive advantage and organizational performance.

The concept of competitiveness refers to the ability of a company to be superior to its competitors in the market place based on dimensions of quality, price, flexibility, speed of submission, responsiveness, and innovation [16,17]. Organizational competitiveness is influenced by many factors including external factors and organizational internal factors as well as organizational capabilities and competencies [2,11]. The external environment is measured through aspects of social-economic, aspects of information technology, aspects of government policy, and aspects of competitors [4,13]. Internal resources are measured through indicators of raw materials aspects, human resources aspects, marketing aspects, production and operation aspects, and financial& accountancy aspects [12,13]. Organizational capability refers to organization ability in developing human resources, product, information and technology, and the ability in building relationships between an organization with competitors, suppliers, distributors, and customers in long-term [18,19]. Furthermore, organizational competency is related to aspects of initiative, risk-taking, and future orientation [20].

This study aimed to analyze the effect of variables of external environment, internal resources, organizational capabilities, and competency toward creative industries’ competitiveness in Tana Toraja Regency and North Toraja Regency, South Sulawesi Province of Indonesia. This study can fill the gap and strengthen previous studies that relevant to this topic area.
Based on the review result on the relevant literature, and some previous studies, then research hypothesis can be formulated as follows:
1. Hypothesis (H₁): external environment has a positive effect on creative industries' competitiveness.
2. Hypothesis (H₂): internal resource has a positive effect on creative industries' competitiveness.
3. Hypothesis (H₃): organizational capability has a positive effect on creative industries' competitiveness.
4. Hypothesis (H₄): competency has a positive effect toward creative industries' competitiveness.

2. Methods
This study conducted in two regencies, namely: Tana Toraja, and North Toraja. Both of these regions are well-known as the center of craft industries in South Sulawesi Province, Indonesia. The total population of the study was 720 business units, while the number of samples was 180 business units or 25% of the population [21]. Respondents come from business managers or owners. This study used a proportional random sampling technique in determining sample quota for each region. Research variables are consists of independent variables, namely: (1) external environment, (2) internal resources, (3) organizational capabilities, and (4) competency, while the dependent variable was competitiveness. We measured variables and indicators by using Likert Scale, where each item or indicator will be get score 1 to 5 (strongly disagree = 1, disagree = 2, neutral / doubtful = 3, agree = 4, and strongly agree = 5) depend on respondent's perception.

We tested both validity and reliability of the instrument before the questionnaire used to collect primary data. Testing the validity of indicators or items was done by using Pearson correlation technique, where each indicator could be said valid if those indicators or items have a correlation value greater than 0.30 [21,22]. Then, testing the variable reliability was done by using Alpha Cronbach’s technique, where each variable or construct could be said reliable if those variables have an Alpha Cronbach value greater than 0.60 [21,22]. Furthermore, the results of testing the research instruments can be presented in the table below.
Table 1. Results of Instruments Test

| Variables/Indicators | Total of indicators/items | Pearson correlation (r) | Alpha Cronbach’s (α) | Description |
|----------------------|---------------------------|------------------------|----------------------|-------------|
| 1. External environment – X₁ (X₁.1; X₁.2; X₁.3; X₁.4) | 4 | 0.42; 0.68; 0.38; 0.55 | 0.788 | Valid & Reliable |
| 2. Internal resources – X₂ (X₂.1; X₂.2; X₂.3; X₂.4; X₂.5) | 5 | 0.33; 0.47; 0.72; 0.61; 0.60 | 0.890 | Valid & Reliable |
| 3. Organizational capabilities – X₃ (X₃.1; X₃.2; X₃.3; X₃.4) | 4 | 0.69; 0.41; 0.73; 0.78 | 0.772 | Valid & Reliable |
| 4. Competency – X₄ (X₄.1; X₄.2; X₄.3) | 3 | 0.59; 0.40; 0.64 | 0.812 | Valid & Reliable |
| 5. Competitiveness – Y (Y₁; Y₂; Y₃; Y₄; Y₅; Y₆) | 6 | 0.63; 0.50; 0.52; 0.37; 0.40; 0.65 | 0.820 | Valid & Reliable |

Table 1 above shows that all indicators or items used in the questionnaire were valid (r > 0.30), likewise all variables tested in this study were reliable (Alpha Cronbach > 0.60). This study used a descriptive statistic analysis to describe the characteristics of respondents, indicators, and variables. While testing of research hypothesis conducted by using multiple regression analysis. Furthermore, data processed by IBM SPSS for windows to obtain high accuracy results.

3. Results and discussion

The research hypothesis was tested by using a multiple linear regression model. This analysis is used to analyze the direct effect of independent variables on dependent variable in a model. In addition, to see the results of statistical test for determining whether the hypothesis proposed in this study is supported by empirical data. In the regression model, competitiveness variables as dependent variable (Y), while external environment (X₁), internal resources (X₂), organizational capabilities (X₃), and competency (X₄) as independent variables. Furthermore, the summary results of multiple regression analysis can be seen in the table below.

Table 2. Summary Results of Multiple Regression Model

| Variables | Reg. Coefficient (β Unstandardized) | Description |
|-----------|-----------------------------------|-------------|
| External environment (X₁) | 0.366* | Positive and significant |
| Internal resources (X₂) | 0.580* | Positive and significant |
| Organizational capabilities (X₃) | 0.410* | Positive and significant |
| Competency (X₄) | 0.282* | Positive and significant |

Constant = 0.122

\[ r = 0.844; \quad R^2 = 0.712; \quad F_{Value} = 18.455; \quad \text{Sig.} = 0.000 \]

\[ n = 180; \quad F_{table} = 2.423; \quad \alpha = 0.05 \]

Based on the calculation results of the regression model in the table above, then it can be formulated a multiple linear regression equation models for this study as follow:

\[ Y = 0.122 + 0.366 X₁ + 0.580 X₂ + 0.410 X₃ + 0.282 X₄ \]

The interpretation of the equation model above as follows: (1) the constant value = 0.122, shows that without the influence of independent variables, then value of competitiveness variable is positive...
but not significant, (2) when independent variable added 1 point, it can increases the competitiveness value in sequence by 0.366; 0.580; 0.410; and 0.282 points with assuming other variables constant, (3) the value of correlation coefficient \((r) = 0.844\), that indicates that relationship between independent variables include \(X_1\), \(X_2\), \(X_3\), and \(X_4\) with dependent variable \((Y)\) in this study is positive and very strong, and (4) Value of determination coefficient \((R^2) = 0.712\), indicating that 71.2% of the data variation of competitiveness variable is influenced by external environment variables \((X_1)\), internal resources \((X_2)\), organizational capability \((X_3)\), and competency \((X_4)\). While, remaining 28.8% is influenced by another variables outside the model of this study.

The F-test used to test significance level the effect of variable external environment variables \((X_1)\), internal resources \((X_2)\), organizational capability \((X_3)\), and competency \((X_4)\) on competitiveness \((Y)\) simultaneously. The tested is done by comparing F-value with F-table value at a significance level of 0.05 or \(\alpha=5\%\) and level of confidence of 95%. The result shows that value of F-value is greater than score of F-table \((18.445 > 2.413)\). Hence, it can be inferred that simultaneous way variable of external environment, internal resource, organizational capability, and competency has a positive and significant effect on creative industries' competitiveness in South Sulawesi Province of Indonesia.

Related to the hypothesis test, then partial effect is tested by using T-test. Where, it used to examine the effect variable of external environment \((X_1)\), internal resource \((X_2)\), organizational capability \((X_3)\), and competency \((X_4)\) toward competitiveness \((Y)\). Moreover, it can also be used to know the dominant effect among independent variables on dependent variable in the model. The tested is done by comparing the score of t-value with t-table at a significance level of 0.05 or \(\alpha=5\%\), and level of confidence of 95%. Briefly, the results of test can be seen in the table below.

### Table 3. Results of Hypotheses Test

| Relations Between Variables | Reg. Coefficient (\(\beta\) Standardized) | t-value (Prob.) | Description |
|-----------------------------|------------------------------------------|-----------------|-------------|
| External environment \(\rightarrow\) Competitiveness | 0.303* | 2.823 (0.016) | H1, supported |
| Internal resource \(\rightarrow\) Competitiveness | 0.445* | 5.744 (0.000) | H2, supported |
| Organizational capability \(\rightarrow\) Competitiveness | 0.348* | 3.655 (0.001) | H3, supported |
| Competency \(\rightarrow\) Competitiveness | 0.216* | 2.360 (0.032) | H4, supported |

*) Significant at \(\alpha = 0.05\); \(n = 180\); t-table = 1.973

Based on data at table above, it can be explained that variable of external environment has a significant effect on competitiveness. It indicates by score of t-value greater than t-table \((2.823 > 1.973)\) and probability value smaller than \(\alpha = 0.05\) \((0.016 < 0.05)\). The results of hypothesis test also indicate that variable of internal resource has a significant effect on competitiveness with score of t-value greater than t-table, and probability value smaller than \(\alpha = 0.05\) \((5.744 > 1.973; 0.000 <0.05)\). Variable of organizational capability has a significant effect on competitiveness. It indicates by score of t-value greater than t-table \((3.655 > 1.973)\) and probability value smaller than \(\alpha = 0.05\) \((0.001 <0.05)\). In addition, variable of competency has a significant effect on competitiveness. It indicates by score of t-value greater than t-table, and probability value smaller than \(\alpha = 0.05\) \((2.360 > 1.973; 0.032 <0.05)\).

The results of the hypothesis test explain the direct effect of external environment, internal resources, organizational capabilities, and competency on creative industries’ competitiveness. Completely, the results of the empirical model can be presented in the figure below.
*) Significant at $\alpha = 0.05$

**Figure 2.** Empirical Model of Effect of External Environment, Internal Resources, Organizational Capability, Competency on Creative Industries’ Competitiveness

This study found that variable of external environment has a positive and significant effect on competitiveness. The value of regression coefficient (standardized) of 0.303 shows that there is a positive and significant impact of external environment variable on creative industries’ competitiveness. Then, this result is an indication that variable of external environment include social-economic aspects, information technology aspects, government policy aspects, and competitors aspects can improve the company's competitiveness. Results of this study are in line and support on previous research that found external environmental factors have a positive impact on companies' competitiveness [5,12,13,17].

The variable of internal resource has a positive and significant effect on company’s competitiveness. The value of regression coefficient (standardized) of 0.445 shows that there is a positive and significant impact of internal resource variables on creative industries’ competitiveness. The results of this study are in line with the previous findings such as [12], and [13] found that the better in managing internal resources include aspects of raw materials, human resources, marketing, production, and finance can generate both better competitiveness and company performance.

Then, variable of organizational capability has a positive and significant effect on company competitiveness. The value of regression coefficient (standardized) of 0.348 shows that there is a positive and significant effect of organizational capability variables on creative industries’ competitiveness. Better in managing organizational capability related to human resource development, product development, utilization of information and technology, and ability to build relationships with suppliers, distributors, customers, and competitors. Therefore, the findings of this study are in line with [18], and [19] that organizational capability is one of the important factors in improving company competitiveness. The findings of the study support the results of research by [15], and [14] who found that organizational capability has a positive effect on competitive advantage as well as organizational performance. Hence, better organizational capability can create best competitiveness within an organization [6,23].

The result of this study also found that organizational competence reflected by aspects of proactive, risk-taking, and future-oriented has a positive and significant effect on company competitiveness. The value of regression coefficient (standardized) of 0.216 shows that there is a positive and significant effect of the competency variable on creative industries’ competitiveness. The findings of this study support results of previous research by [20] that organizational competency is one of the important factors to improve competitiveness of companies. The better competitiveness can be seen from aspect of position compared to competitors in the dimensions of quality, price, flexibility, speed of delivery,
responsiveness, and innovation. Moreover, The finding of the study is in line with [2] that factors of organizational internal consists of internal resources, organizational capabilities and organizational competencies are sources of strengths and weaknesses of the company. Therefore, each company needs best strategy in managing its competencies to achieve best performance as well as sustainable company competitiveness in the future.

4. Conclusions
External environment variable that consist of social-economic aspect, information technology aspect, government policy aspects, and competitor aspect has a positive impact on companies competitiveness. Then, variable of internal resource include aspects of raw materials, human resources, marketing, production, and finance has a positive impact on companies competitiveness. Furthermore, variable of organizational capability which consist of capabilities to develop human resource, product, utilizing information and technology, and building relationships among organizations (supplier, manufacturer, distributor, and customer) has a positive impact on companies competitiveness. In addition, variable of organizational competency also has a positive impact on companies competitiveness.

Hence, the results of this study provide some recommendations and suggestions to manager or business owners of creative industry in South Sulawesi about the importance of understanding on external environment, internal resources, organizational capabilities, and competencies in improving competitiveness of the firms. The ability of knowledge, concepts, skills, and communication possessed by managers are important factors as materials to translate and change a set of challenges from external environment into strategic and action to improve company's competitiveness as well as performance. In addition, internal resources, organizational capabilities, and competencies are internal factors within organization which are very important to create sustainable competitiveness advantage, especially for creative industries in South Sulawesi Province of Indonesia.

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