Analysis of Creative Economic Situation in Pekanbaru: Statistical Analysis and Word Cloud

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Abstract The creative economy is an important sector that significantly improves Indonesia's economy. The advantages and disadvantages must be evaluated to optimize Indonesia's creative economy. This research aimed to capture the development of the creative economy in Riau Province, especially Pekanbaru, by statistical and word cloud analysis. The population in this evaluation activity is the entire creative economy in Pekanbaru. The sample for this activity was 64 creative economy actors selected purposively. The evaluation instrument is a questionnaire designed and validated in terms of content by evaluation experts and empirical testing of creative economy actors in Indones. Data analysis uses quantitative description and word cloud analysis to explain strengths, weaknesses, opportunities, and threats of the creative economy of Pekanbaru City. The analysis result of descriptive statistics and word cloud analysis showed that human resources, government support, partner support, and finance are in the not-good category, while the indicators of human resources, markets, marketing, production, technology, and infrastructure are in the excellent category.

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169

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1 Introduction

5

The creative economy (EKRAF) is a concept in the new economic era that intensifies information and creativity by relying on ideas and know 12 lge from human resources as the main factor of production. The strength of the creative economy rests more on the superiority of the human resources, which originate from the creative ideas of human thought. According to Law Number 24 of 2019, creative economy is the embodiment of added value from intellectual property originating from human creativity based on cultural heritage, science, and/or technology. The stence of a creative economy is urgently needed for the government to strengthen the economy, especially in the real sector.

The characteristics of the creative economy are the existence of intellectual creations, ease of replacement, direct and indirect distribution, required collaborated based on ideas, and no boundaries. The creative economy industry is a sector of micro, small, and medium enterprises (MSMEs) that has the potential to be developed for the economy in Indonesia. The creative economy industry has various elements, including creativity and human resources. In terms of elements of invention, creative industries try to create new and quality product innovations. Meanwhile, in terms of its human resources element, the creative industry is trying to develop and empower its product innovations so that they are easily creatible to consumers. The creative industry is an industry that has the potential to be developed, considering that this industry has unlimited resources, which are based on the intellectuality of its human resources (HR).

According to the Indonesian Creative Agency's (Bekraf) Indonesia Tourism and Creative Economy Outlook report for 2021, the creative economy nakes a contribution that continues to increase when measured by its contribution to the national Gross Domestic Product (GDP). According to data from the Central Statistics Agency (BPS) in 2017, the contribution of the creative economy to the national economy was 7.24%, and the growth rate was 5.06%, equivalent to national economic growth. In 2020, based on the projections made by F13 raf and BPPT at the end of 2019, the creative economy sector was expected to absorb around 19.86 million workers throughout Indonesia. In addition, the contribution to the national economy has also increased. Still, based on the same projection, the creative economy is expected to contribute Rp. 1274 trillion, or around 6.98% of the total national GDP in 2020.

Based on data, out of the 17 creative economy sub-sectors, the most significant contributors to the structure of GDP and exports in Indonesia are fashion, culinary, and handicrafts. The first rank was occupied by culinary with the largest gain, which was 41%, while fashion contributed 17% and handicrafts by 14.9%. The potential for the creative industry is still so great that it can be worked on by business people in Indonesia, especially those with the Pekanbaru City Government. The Pekanbaru

City Government wishes to develop the creative economy as a nation's competitive s because global trends are also heading in that direction. The relatively high contribution of the creative economy to the national economy means that the creative economy needs to be developed and supported to be more developed and more advanced.

Based on the data from Pekanbaru District of creative economy, actors with the Culture and Tourism Office has decreased from 2019 to 2021. Based on the description above, the development of the creative economy is an issue that the Pekanbaru City Government must immediately follow up on through the Culture and Tourism Office; therefore, it is necessary to conduct a study to find out the real conditions for the development of the conduct a study to find out the real conditions for the development of the conduct a study to find out the real conditions for the development of the conduct a study to find out the real conditions for the development of the creative economy in Pekanbaru City so that any obstacles or difficulties can be found in the development of the creative economy in Pekanbaru. Many creative economies are closed because the development of the creative economy in Pekanbaru is not running optimally. Some of the problems that occur are: lack of profit, lack of capital, not optimal government support, lack of facilities, marketing that is not yet strong, and lack of assistance from other business world. These problems have resulted in creative economy actors having to think deeper to continue their creative economic activities. Based on these problems, an analysis of the creative economy situation in Pekanbaru is crucial so that important information is obtained to fix the issues that have been found.

2 Method

13

This research is qualitative research with a case study approach. The research participants were all EKRAF actors and creative economy service, creative economic experts, with a total of 65 participants. Data collection techniques in this study were interviews and Focus Group Discussion (FGD). Some information about the creative economy can be obtained through interviews with business owners/managers, especially regarding the constraints and problems faced as inhibiting factors for business development or factors driving business progress, ascertaining the prevailing phenomena including business progress, business relations with external as well as internal parties, the influence of the environment on business, the level of use of resources, technology, and other infrastructure. The analytical technique used in this study consisted of a qualitative descriptive analysis. Qualitative data were obtained from open questions where creative economy actors were asked to state their strengths, weaknesses, threats, and opportunities for creative economy development. These open questions will be analyzed using text processing techniques with several stages starting from Case Folding, a process for converting text into the lowercase format to provide a standard form to text. The second stage is Tokenizing, or the Lexical Analysis stage, a process of cutting text into smaller parts called tokens. This process also removes numbers, punctuation marks, and other characters considered not to affect text processing. The Filtering or Stopword Removal stage is the stage of selecting words that are considered unnecessary by removing common words that

are collected in stopwords using NLTK. After the data that is considered necessary is collected, a word count process is carried out, by calculating the frequency of occurrence of words which are then displayed in the form of a word cloud.

3 Results and Discussion

3.1 Results

Institutional or Organizational Conditions

Institutional conditions describe the operational standards for establishing an organization, in this case, EKRAF. Six statement items describe the condition of EKRAF in Pekanbaru: marketable, availability of Standard Operating Procedure (SOP), adequacy of administrative costs, business planning in accordance with science and technology developments, availability of organizational structures, and permits. EKRAF's institutions or organizations in Pekanbaru are not in good condition because the frequency of those who answer well is still around 60.17%.

Condition of Human Resources

The human resource indicator describes the ability of employees or staff who assist EKRAF actors in carrying out their daily activities. The analysis shows that around 77.89% responded in the good and very good categories. These results show that in terms of ability, EKRAF employees or staff already have the skills to assist EKRAF actors in running EKRAF. However, what is important to note is that employees' or staff's understanding of Copyrights, Designs, Patents, and Marks is still low.

Conditions of Creative Economy Production in Pekanbaru

Production indicators describe the trend or production capability of each EKRAF subsector in Pekanbaru. The results of the analysis show that the production capabilities of EKRAF players are in a good category because around 80.2% respond in the good and very good categories.

The Conditions of the Pekanbaru Creative Economy Market and Marketing Activities

Market or marketing indicators describe the ability of production results to be marketed to consumers. The results of the analysis show that 73.8% of marketing indicators are responded to very well and well by EKRAF actors.

Creative Economy Financial Conditions in Pekanbaru

Financial indicators describe the financial condition of EKRAF actors in Pekanbaru from the aspect of financial management capability, ease of access to capital loans to banks and non-banks, and capital adequacy to run EKRAF. The results of the

analysis show that financial indicators are in a bad category because only 45% of EKRAF actors answer in the good category.

Condition of Government Support

Government indicators describe the condition of government assistance or attention to EKRAF actors in Pekanbaru. The analysis showed that only 26.4% responded with excellent and good answers. These results indicate that the government's support for EKRAF in Pekanbaru is still not optimal.

Conditions of Creative Economy Business Partnerships

The business partnership indicator is an indicator that describes partner relationships established by EKRAF with various relevant stakeholders. Three items were developed for this indicator: opening opportunities for collaboration, being active in academics, the private sector, and the government in developing EKRAF in Pekanbaru and establishing collaboration with academia, the private sector, and the government. From the results of the analysis, it was obtained a frequency of 60.33% which answered very well and well. These results indicate poor partnership between the Pekanbaru EKRAF actors and academia, the private sector, and the government.

Technology Capability and Infrastructure Conditions

Technology and infrastructure indicators describe the condition of EKRAF actors in utilizing technology in carrying out marketing and other development activities in advancing EKRAF. This indicator describes the availability of compatible and adaptive marketing and sales applications, the level of use of technology in marketing and other transactions, and the availability of facilities and technology in company operations. The analysis results show that 81.5% of respondents answered in the good and very good categories, so indicators of the ability to use technology and infrastructure are in the good category.

Word Cloud Analysis

The results of the analysis in this section are also suppleme 6 d by respondents' answers through open questions. Opportunities for developing the creative economy in Pekanbaru City as a result of mapping the respondents' answers are shown in Fig. 1.

Nationally, the creative economy is sourced from intellectual creativity, which has economic value and benefits that contribute economically to the value of Indonesia's GDP, namely the benefits arising from exploring the local potential of the Indonesian nation and exploring domestic human resources. Efforts to develop creative industries in Indonesia are still wide open.

The uniqueness and distinctiveness of creative economy products are in great demand by consumers at home and abroad. Wide market demand is open for the creative economy of Pekanbaru City to be marketed to Malaysia, Singapore, Brunei Darussalam, and other Asian countries. Advances in information technology provide opportunities for creative economy actors in Pekanbaru City to increase promotions abroad, expand marketing access, and can also assist in sales transactions.



Fig. 1 Respondents' responses about opportunities

The increasing digitalization of marketing applications and transaction applications makes it easier for creative economy actors to be recognized by 6 her nations. In addition to opportunities, there are threats that are felt directly by the creative economy 2 tors in Pekanbaru City. The economic conditions that have not yet recovered due to the COVID-19 pandemic have had a negative impact on creative actors. The results can be seen in Fig. 2.

Based on word cloud analysis, the threats felt directly by creative economy actors in Pekanbaru City are pandemic COVID-19, strategic location, product plagiarism, technological development, quality from competitors, and competitive prices.



Fig. 2 Respondents' responses about threats



Fig. 3 Respondents' responses about strength

Furthermore, the word cloud, which has a function to bring up a visual image of discourse, will analyze the power that can be maximized from EKRAF Pekanbaru City. The results of the analysis can be seen in Fig. 3.

Based on the word cloud in the image above, all aspects of strength consist of product quality, uniqueness, and competitive product prices. The product's identity is the main factor determining whether the product can be categorized as included in the creative economy. Indonesia's creativity can be seen in various methods of processing raw goods into finished goods, the ability to explore resources that were initially useless into something of value, and creativity in creating cultural arts products.

Aspects of the weaknesses of the city's creative economy are mapped through word cloud analysis, as shown at Fig. 4.

According to the respondents' answers, the problems and weaknesses faced include limited capital, insufficient access to international markets, suboptimal business management including financial management, and issues with product attributes such as halal and distribution permits.

3.2 Discussion

The study realts show that four indicators still need to be maximized in supporting the running of the creative economy in Indonesia: human resources, ance, government support, and partnerships. These four factors are important in the development of the creative economy in the future. Human resource is essential because the creative economy must be managed by people with good competence in running the creative economy. The creative economy must be run by creative people starting from the owner and manager, and all staff must be competent in developing the creative



Fig. 4 Respondents' responses about weaknesses

economy [1–3]. The creative economy will not develop optimally if it is not supported by creative and innovative human resources [4–6]. Productive, creative, communicative, and highly competitive human resources who can develop their business to the fullest because they understand what needs to be done in the future are essential in running the creative economy [7, 8]. Human resources who can compete and be updated with information will be able to develop their business properly because if their company develops following the pace of information development, the business will be protected [9–11]. Creative economy development requires creative people to provide diamond ideas for future development.

Government support for developing the treative economy in Pekanbaru still needs to be maximized. This makes it difficult for the pace of creative economy development in Indonesia, especially in Pekanbaru. The government must provide maximum support for the heads of creative eco 60 my actors because the government is an essential variable in supporting the rapid development of the creative economy for oughout the country. The government needs to facilitate the most essential need 4 of creative economy actors so that these facilities can be a significant contribution to the development of the creative economy in Indonesia [12–14]. A government that fully supports creative economy actors should give creative economy actors the freedom to develop their businesses [15–17]. Providing the necessary facilities, facilitating marketing, and providing education about the creative economy are part of the government's tasks as a stakeholder of every business developed by the community 2 ough the creative economy [18]. The government's commitment and integrity in developing the creative conomy are highly expected so that the government performs its duties optimally in developing the creative 10 nomy [19, 20]. The government needs to assess or evaluate the sustainability of the creative economy because the creative economy is part of the government's success indicator in managing an advanced and prosperous society [21].

These results indicate that creative economy actors in Pekanbaru still need sufficient capital to carry out creative economic activities. Capital or finance is an essential and central factor in developing the creative economy, because, without adequate capital, the creative economy may not be able to run [22, 23]. Easy financial access can provide substantial support in developing the creative economy, enabling creative economy actors to purchase materials needed to grow their business [24]. The ease of running a creative economy depends on obtaining funds or access to finance so that the creative economy development journey can run smoothly without any obstacles [25, 26]. Capital readiness in economic development needs to be maximized so that any obstacles can be resolved immediately without any difficulties [27, 28]. Therefore, even though funding or finance is not the sole success factor in business, optimal financial preparedness significantly enhances the likelihood of a business's success.

Partner aspects or indicators need to be running optimally. These results show that creative economy actors in Pekanbaru have yet to partner with essential parties such as the business world, academics, and other private parties who can as 15st in developing creative economy actors in Indonesia. Partners can be a vital part of developing the creative economy because partners can contribute both materially and morally to the development of the creative economy in Pekanbaru [29, 30]. Partner's commitment that has been established optimally with creative actors will have a positive effect on the progress of creative actors [31, 32]. Business partners will prioritize business actors in developing a creative economy that creative entrepreneurs run [33, 34].

4 Conclusion

In general, the economic condition of EKRAF in Pekanbaru could be better. The indicators that need special attention are capital, government support, institutions or organizations, and partners. These four indicators need to be improved optimally so that the development of EKRAF in Pekanbaru can run well. The sub-sector that needs special attention is the culinary sub-sector. The culinary sub-sector is the largest in Pekanbaru and faces significant challenges in its development process. More than 60% of EKRAF do not have a business license, requiring government assistance and streamlined bureaucracy to operate optimally with clear legal standing.



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