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Article

Jember Regency's Use of *Artificial Intelligence* in Community Information Group Formation Policy

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Abstract: This research investigates how the policy of establishing Community Information Groups (KIM) in Jember Regency uses artificial intelligence (AI). The method used is a literature review consisting of Google Scholar article reviews and relevant news. William N. Dunn's public policy theory is the basis of this research. The results show that the implementation of AI in Jember Regency faces several challenges, one of which is the limited human resources (HR) in some villages. Although AI has great potential to improve the effectiveness and efficiency of KIM, limited human resources remain a major obstacle in the implementation of this policy. This study suggests improving the capacity of human resources through education and training as well as developing infrastructure that enables the implementation of AI at the local level. Therefore, artificial intelligence has the ability to support the application of AI and technology at the local level such as neighborhoods/villages in the establishment of KIM in Jember Regency and assist in more effective information dissemination.

Keywords: Artificial Intelligence, Public Policy, Community Information Group

1. Introduction

This research examines the policies used to create a Community Information Center (KIM) using AI in Jember Regency. In this era of digitalization, there are many ways to improve the efficiency and effectiveness of local data management with artificial intelligence[1]. However, various obstacles such as lack of infrastructure and manpower still hinder the use of such technology in various regions. KIM (Community Information Group) is a government institution formed and managed by organizations to provide information and empowerment services to the community according to their needs. From the information above[2], we can confirm that KIM is a media/forum whose activities monitor information from various sources and disseminate it to the community to be applied so as to create a community[3]. Directorate of Social Communication Institutions[4].

This research shows the strong potential of AI to support KIM development. Artificial intelligence can be a powerful tool in making better decisions around information dissemination, data collection and social analysis. The study recommends capacity building through education, training, and infrastructure development to support the use

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of AI at the local level to address labor shortages.This study provides a comprehensive overview of how KIM policies in the Jember region can be improved by using artificial intelligence and strategies to solve existing problems[5].

2. Materials and Methods

In this research, the author uses library methodology by reviewing several journals on Google scholar and also using relevant data[6]. literature study is very useful in providing a conceptual framework and historical context for this research, as well as helping to formulate hypotheses and direct the focus of further research[7].

3. Results and Discussion

In the era of big data, effective analytics is amplified by Artificial Intelligence (AI) techniques and technologies[8]. This is because the data analytics associated with AI greatly improves the predictive power of the systems created. While there is no agreement on a single definition, AI is generally considered to refer to the study of how to train computers so that they can perform tasks, which humans can currently do better or which are usually considered to belong to humanintelligence[9]. AI techniques and technologies have tremendous potential for governments and can help discover new patterns in data to make better predictions. If approached carefully, these technologies can not only help improve decision-making and governance, but also transform government as a whole. (Adawiyah, 2021). In Jember Regency[10]

Policy is one of the most unique topics of discussion. Where policy is a thinking procedure that has long been recognized and carried out in human history (Dunn, 2004). Education has a strategic function in preparing human resources who will carry out functions in various fields of life, such as political, economic and socio-cultural fields[11]. The relationship between education and the fields of life outside education needs to be studied in order to synergize between the internal education system and these external factors. By studying the situation or problems regarding other areas of life outside of education, several problems and challenges in the development of the education system will surface[12]. The policy governing the establishment of Community Information Groups in Jember district has The purpose of establishing KIM is to realize an active community towards information, because information can make the progress of an environment so that it is not left behind by the flow of information independently and does not depend on the government[13]. The Community Information Group (KIM) is an organization that serves as a forum for the community to exchange information, share experiences, and train interests and talents. Therefore, the opportunity to develop young people's talents and businesses in entering the business world and the digital era is very large because there is a lot of training in it[14]. Based on the study of Alfianti and Darajat

(2017)[15], the formation of a community knowledge management team (KIM) aims to create a community that is more active in accessing and using information. This is important because information can drive neighborhood development and help communities not to be left behind by providing independent information without dependence on the government. KIM functions as a community that brings people together to exchange information, share experiences, and attend training according to their interests and skills[16]. With KIM, the opportunity for the younger generation to develop skills and start a business in the digital era is huge due to the many training courses offered. However, despite the provisions in Regent Regulation No. 47 of 2023 on the Establishment of Village/Kelurahan KIMs, there are still problems with KIMs in many areas/villages in Jember Regency. Not all human resources or individuals in the Community Information Group have adequate knowledge of information technology (IT) or artificial intelligence (AI), so this obstacle must be overcome so that KIM can achieve its goals[17].

WILLIAM N. DUNN'S THEORY OF POLICY FOR THE ESTABLISHMENT OF COMMUNITY INFORMATION GROUPS

This study uses William N. Dunn's theory of public policy analysis. This theory includes five factors that influence the success or failure of policy analysis: (1) Policy Problem Formulation; (2) Policy Forecasting; (3) Policy Recommendation; (4) Policy Monitoring; and (5) Policy Assessment. (Muhammad, 2011).

William N. Dunn's theory of public policy analysis was used in the research on the policy used to establish Community Information Groups (KIM) in Jember Regency. This theory includes five main factors: Policy Problem Formulation, Policy Forecasting, Policy Recommendation, Policy Monitoring, and Policy Appraisal. In this study, each factor is explained as follows[18]:

1. **Formulation of Policy Issues**

   Policy problem formulation is the initial stage where problems are identified and described. In this study, the main problem faced in KIM Jember District is the lack of adequate infrastructure and human resources to support the application of AI technology in information management. To create an effective policy, this problem must be understood in depth[19].

2. **Policy Forecasting**

   Policy forecasting is the process of predicting the consequences of various policy options. This study uses data analytics and artificial intelligence to forecast the effectsof implementing AI in KIM. AI can help governments collect data, analyze social circumstances, and disseminate information more efficiently and effectively. Increased local capacity and reduced dependence on the central government are the expected long-term impacts[20].

3. **Policy Recommendation**

A policy recommendation is a proposal for steps to be taken to solve the identified problems. This study suggests capacity building through training and education of human resources as well as the development of technological infrastructure thatsupports the application of AI at the local level. It is hoped that these measures can address the shortcomings of existing infrastructure and human resources and maximize the ability of AI to assist KIMs.

4. **Policy Monitoring**

Policy monitoring is the constant supervision of the implementation of policies to ensure that they are working as planned. In this case, monitoring is done by observingthe use of AI in KIM, including how the technology is used and how it impacts local information management. This monitoring is critical to assessing the success of the policy and making adjustments where necessary.

5. **Policy Assessment**

Policy appraisal is the stage where policies are evaluated for success or failure based on their outcomes. This study assesses the policy of using AI in KIM to see how effective this technology is in information management and how it impacts community empowerment. The results of this assessment can help improve future policies.

Therefore, the establishment of KIM in the Jember region is expected to create an organization engaged in informatics, support environmental development and help the community not to be left behind through independent communication, independent of the government. . However, to achieve this goal, barriers in infrastructure and HR knowledge of IT and AI need to be overcome. Therefore, we can provide some solutions to deal with the gaps in the policy by increasing the capacity of human resources, education and training, increasing the capacity of employees through education and training programs that focus on information technology and artificial intelligence. This can be done through cooperation with educational institutions and technology education providers. Advanced training. Organizing regular training so that KİM members are always aware of the latest developments.

a. Infrastructure development

Technology infrastructure. Create and improve technological infrastructure that supports the application of artificial intelligence at the grassroots level. This includes expanding the Internet, acquiring adequate hardware, and improving information technology systems. Useful tools[21]. Provision of supporting facilities such as technology training centers and facilities equipped with the necessary technology[22] .

b. How to collaborate

Collaboration with Partners. Increase collaboration with various stakeholders, including the federal government, private sector and non-governmental organizations, to support the development of KIM. This collaboration may include financial, technical and strategic support. Civic cooperation. Community participation in policy development and implementation processes to ensure that programs are implemented according to need[23].

c. Monitoring and evaluation.

Time tracking periodically monitors the implementation of the AI policy in KIM to identify barriers and ensure implementation is consistent with the plan. Outcome evaluation analyzes the implications of the policy to determine the importance of AI implementation in KIM and its impact on the community. The results of this evaluation should be used in future policy development[24].

d. Communication and digital literacy

Conduct literacy campaigns to help people understand the importance of information and technology. This campaign can be conducted through various media and social activities. The Technology Awareness Program can raise awareness of the benefits of AI technology through training, workshops, and community-based focus groups. It is hoped that in the implementation of these ideas, the Government of Jember will be able to overcome existing obstacles and support community capacity and sustainable development by utilizing the potential of artificial intelligence in the development of community groups. Jember Regent Regulation No. 47 Year 2023 emphasizes the importance of the formation of Community Information Groups (KIM) as part of the local government's efforts to strengthen the communication and public information sector. The formation of KIM aims to create solid cooperation between various stakeholders, including the government, private sector, and non-governmental organizations, to support the implementation of government affairs in the field of communication and informatics. As technology infrastructure development shows, KIMs can play an important role in improving access to and utilization of technology at the grassroots level. By expanding internet coverage, providing adequate hardware, and upgrading information technology systems, KIMs can help address the digital divide that exists in communities[25]. Providing supporting facilities such as technology training centers and facilities equipped with the necessary technology is also a concrete step in supporting inclusive and sustainable digital transformation. Collaboration with partners is

an important aspect of KIM development. Through collaboration with various stakeholders, KIM can obtain the necessary financial, technical, and strategic support to implement AI-based programs. This Regent Regulation emphasizes the importance of community participation in the process of policy development and program implementation, to ensure that community needs and aspirations are properly accommodated[24].

Monitoring and evaluation are also important elements of AI policy implementationin KIM[7]. By conducting regular monitoring of policy implementation, bottlenecks can be identified and corrective actions can be taken immediately. In-depth evaluation of the results allows the government to analyze the impact of the policy on the community, which then becomes the basis for developing more effective policies in the future. In addition, communication and digital literacy are important aspects in ensuring that people understand and can utilize AI technologies. A comprehensive literacy campaign through various media and social activities can increase public awareness and understanding of the importance of technology. Technology awareness programs involving training, workshops, and community-based focus groups can help people see the real benefits of AI technologies in their daily lives.

If the Jember district government implements these ideas, it hopes to overcome the existing obstacles. In addition, these ideas support community capacity and promote sustainable development. The utilization of artificial intelligence in the development of community groups through KIM will not only strengthen the communication and public information sector, but also have a broad positive impact on society as a whole. Jember Regent Regulation No. 47 Year 2023 provides a clear and strategic framework to achieve these goals, making KIM an important pillar in digital transformation and regional development.

4. Conclusion

The policy of establishing Community Information Groups (KIM) using Artificial Intelligence (AI) in the Jember Regency area can ensure that AI has great potential to improve efficiency and effectiveness in information dissemination, data collection, and analysis. However, the implementation of this policy still faces many challenges, mainly related to infrastructure limitations and the lack of human resources (HR) who have expertise in the IT field. if these obstacles can be overcome, AI can be an alternative in supporting the

development of KIM which is already regulated in the policy of Regent Regulation No. 47 of 2023 and help create an independent society in seeking information .

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