

## OPTIMIZING THE USE OF *ARTIFICIAL INTELLIGENCE* IN INCREASING PUBLIC PARTICIPATION IN DIGITAL SERVICES

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### ABSTRACT

This research aims to explore the potential use of artificial intelligence in increasing digital public participation. The method used is a qualitative method by mapping public service platforms based on digital public participation features, as well as identifying the potential and opportunities for the use of AI in encouraging digital public participation. Data was collected through interviews and *focus group discussions* with informants from the Tangerang City Government which included the Communication and Information Service, the Manpower Office, the Population and Civil Registration Office, and the health Office. Documentation studies are also carried out to strengthen the foundation in the analysis process. The results of the study show that the level of public participation provided in the Tangerang Live application is at the consultation level. Optimization of the use of AI to increase public participation in online services can be designed by opening up participation spaces from various channels, which are then supported by the application of AI. The application of AI should be able to answer the challenge of implementing a digital platform that is able to function as *digital information*, *digital consultation*, and *digital decision making*.

**Keywords:** *Digital Participation, Online Public Service, Digital Governance, Artificial Intelligence, Tangerang Live.*

### A. INTRODUCTION

Innovation in the field of government has led us to the formation of a government model that utilizes digital technology for government administration and development. New concepts emerged that we later know as smart cities (*smart city*), smart governance (*smart governance*), e-government (*electronic government*), and also digital governance (*digital governance*). The rapid

development of technology in the industrial era 4.0 has also given birth to innovations that are very useful for accelerating the government process, namely through artificial intelligence (AI). However, often the application of these innovations ignores humans and civil society in the governance process (Sutrisno & Akbar, 2018).

Tangerang City through the *Peraturan Walikota Nomor 108 Tahun 2018* concerning Masterplan *Smart City* The City of Tangerang 2017-2027 has laid a roadmap for the development of digital governance with an emphasis on the application of the concept of smart governance. Tangerang City since 2016 is also the Tangerang Live Room which functions as a control room for city monitoring and community reports. However, what needs to be observed is the government's readiness in good digital governance, while the readiness of the public to get involved and utilize various online platforms provided by the government, is still low (Rosidi & Sakuntalawati, 2022). The low level of public participation in the use of online public services is an obstacle for city governments to increase public participation in the context of digital governance.

The problem in this study is how to utilize technology to increase digital public participation in Tangerang City through the use of *artificial intelligence* (AI). The important role of public participation in realizing good governance in the digital era cannot be denied, because various digital platforms still require human involvement as the main actor.

The problems faced in utilizing public service applications to increase participation are the aspects of completeness in resolving complaints, lack of application users, and lack of interaction with the user community. Based on the results of the 2023 Tangerang Live Tangerang City User Satisfaction Survey, there are still several things that need to be improved, namely the speed of service completion time (16% stated that it was not fast). However, the overall survey results show that the level of community satisfaction is in the good category with a community satisfaction index (*IKM*) of 3.23 out of a scale of 4. In addition, not all people use the Tangerang Live application, especially *Laksa*, to submit complaints. Based on data from the Tangerang City Communication and Informatics Office, as of August 2024, the number of verified Tangerang Live users is 466,038 people, or 24% of the total population of Tangerang City, which is 1,912,679 people. This shows that the number of residents who participate using the Tangerang Live application is still low. Another problem is that there are still obstacles to increasing interaction between residents and the city government in the process of providing online services (Prasetyo, 2022). This problem is also faced by other local governments in Indonesia that have challenges in public participation when implementing digital public services (Christian et al., 2024).

The concept of public participation has been put forward by many experts. Arnstein (1971) in (Gaber, 2019) There are levels of public participation, namely manipulation, therapy, provision of information, consultation, partnership, delegated power, and citizen control, so various public services can be mapped regarding the existence of public participation instruments in it. Specifically related to the application of *e-government*, then public services carried out online

can also be measured by the digital participation index based on the concept put forward by the United Nations Electronic Government (2022) in (Aljazzaf et al., 2020) Form *e-Participation Index* which consists of *e-information*: public access to information about public services, *e-consultation*: opportunities for the public to provide input and suggestions on public services, and *e-decision making*: public participation in decision-making about public services.

*Artificial Intelligence* It is a simulation of the process of human intelligence in a machine that is programmed to think like a human and imitate its actions. AI applications have real potential to improve the effectiveness and efficiency of public service delivery in a variety of contexts, including greater community engagement (Choi et al., 2021). Various studies show that AI can play an important role in increasing public participation in digital governance, but it also presents challenges. The application of AI has been carried out in public administration to improve services (Supriyadi & Asih, 2021). The use of AI extends to being used for public administration learning, especially the use of AI to facilitate the acquisition of knowledge. Krafft proposes an action-oriented AI policy tool that empowers activists and community advocates to participate in technology advocacy (Krafft et al., 2021). AI-based public policymaking will improve the efficiency of the policy process, encourage responsive, adaptive, intelligent, high-productivity, and citizen-centered governance (*citizen centered*) (Amicone et al., 2023) (Misra et al., 2020). Meanwhile, Margetts suggested that AI can be developed for good governance by increasing government capacity to innovate, build an integrated policy-making model, and address structural gaps (Margetts, 2022). However, it is important to note that the use of AI in the public sector can exacerbate power asymmetry and require a common framework to evaluate its impact (Kuziemska & Misuraca, 2020). Meanwhile, Wisesa highlighted the importance of innovation for public institutions, otherwise the government could lose public trust (Wisesa, 2023).

From these various studies, there is still a gap in the effort to use AI to increase public participation, where there are still very few studies that reveal this. Furthermore, there is still no research in Indonesia that examines the potential use of AI to increase public participation in the context of a government that has implemented digital governance. This study aims to determine the level of public participation in online public service platforms in Tangerang City, as well as explore the potential use of artificial intelligence to increase public participation.

Thus, the novelty in this research is expected to contribute to optimizing the use of AI to increase digital public participation. Digital public participation is important in the era of digital government which emphasizes the need for the involvement of the wider community in government. Thus, this research is expected to be a solution for the government, especially the Tangerang City Government, to be able to increase public participation in the implementation of digital governance.

## B. RESEARCH METHODS

The approach used in this study is a qualitative method. The application of qualitative methods is carried out in stages, namely: (1) inventory, identification

and categorization of public service platforms with digital public participation features; and (2) identifying the potential and opportunities for the use of AI in encouraging digital public participation. The process of inventory, identification and categorization of public service platforms with digital public participation features is carried out on online public service platforms by reviewing 35 service menus on the Tangerang Live application using an analytical framework based on Arnstein's (1971) public participation ladder theory in (Gaber, 2019), which includes *manipulation, therapy, information, consultation, placation, partnership, delegated power* and *citizen control*. Meanwhile, the process of identifying the potential and opportunities for AI utilization is carried out through an analysis of digital literacy surveys, analysis of potential technology acceptance (*technology acceptance model*) as stated by Davis (1989) in (Mohr & Kühn, 2021), and the potential for policy implementation according to Grindle (1980) in (Bichai et al., 2018).

Data was obtained from interviews and focus group discussions with officials within the Tangerang City Government which include the Communication and Information Service, the Population and Civil Registration Office, the Health Office, and the Manpower Office. In addition, interviews were also conducted with *Artificial Intelligence Experts* at the National Research and Innovation Agency (BRIN). The data obtained was then juxtaposed with secondary data obtained such as the results of the digital literacy survey in Tangerang City, as well as other primary data in the form of interviews with Tangerang City residents who are users of the Tangerang Live application.

The steps in the data analysis process are carried out according to the stages proposed by (Creswell & Creswell, 2018). The researcher carried out the extraction process of important statements from each interview conducted, coded the data, harmonized the data, segmented the data, categories, and also labeled the categories.

### C. RESULTS AND DISCUSSION

Tangerang Live is a portal that integrates the Tangerang City Government's public service platform to assist the community in obtaining quality public services.

Based on data from the Tangerang City Communication and Information Service as of August 8, 2024, the Tangerang Live Application has been downloaded by 1,201,827 people, with a total of 466,038 verified users. This application has also been replicated by 49 cities and districts in Indonesia. The 10 menus that are most often used by residents based on data as of January 1, 2024 to August 8, 2024 are: Tangerang Cakap Kerja, TIMSPORT, Taxes and Levies, Sobot Dukcapil, Student Social Assistance, Introduction to RT RW, Services, Tangerang City Events, LAKSA, and e-Rapor.

Tangerang Live consists of 12 services with 35 menus which include:

**Table 1 Public Services in Tangerang Live**

Population Services	Employment Services
▪ Dukcapil Friends	▪ Tangerang Talks About Work
Information Services	Education Services
▪ eNews	▪ Changing Schools
▪ ePaper	▪ Tangerang Learning
▪ JDIH	▪ eReport
▪ Service	▪ Digital Literacy
▪ Tangerang City Gallery	
▪ Abang Jawara	
▪ Pujangga	
▪ Licensing	
▪ Tim Sport	
Complaint Service	Welfare Services
▪ Ten thousand	▪ Sabakota
	▪ Student Social Assistance
Healthcare	RT RW Services
▪ Hospital sympathy	▪ Introduction to RT RW
▪ Vaccination	
Economy Services	Emergency Services
▪ Fresh	▪ Free Ambulance
▪ Taxes and Levies	▪ 119
▪ Siganteng Perumda TB	▪ Free Hearse
▪ Online Market	▪ Emergency Button
Islamic Services	Statistical and Geospatial Services
▪ Let's Zakat	▪ Gross Regional Domestic Product
▪ Prayer Schedule	▪ Tangerang One Data
▪ Nearby Mosques	▪ Tangerang One Map

**Source:** *Tangerang City Government, 2024*

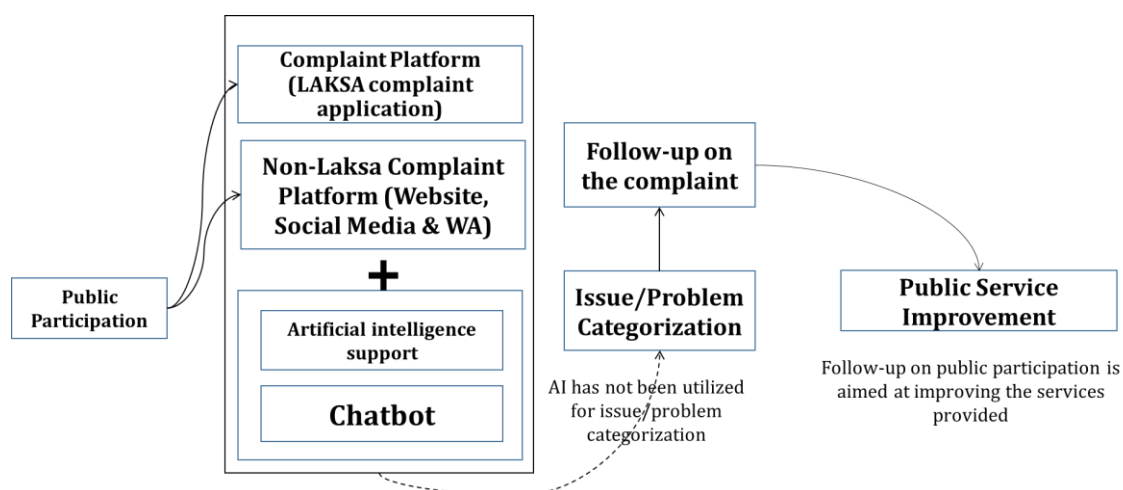
### **Model of Public Participation in Online Services**

The information provided by the Tangerang City Government to the public related to online public services includes guidelines on how to use public service applications, the types of services provided, operational hours, and help desk contacts. The channels used to convey information are through mobile and web-based applications and official social media accounts of the Tangerang City Government or social media accounts of related regional apparatus organizations (*OPD*) and Tangerang TV youtube channels.

On the other hand, the public can provide input related to public services through complaint channels, namely: the *LAKSA* menu and the Assistance menu on the Tangerang Live super apps, through the Tangerang City Government's WhatsApp at the 08111500293 number, [email\\_layanan@tangerangkota.go.id](mailto:layanan@tangerangkota.go.id), *SP4N-Lapor*, and the official social media of the Tangerang City Government and related *OPDs*. According to data from the Communication and Informatics Office, the number of complaints received in 2024 is 11,148 with details of complaints through the *Laksa* application as many as 2,189 (19.6%) and non-*Laksa* channels

carried out through social media as many as 8,959 (80.4%). Of the number of complaints, the categories can be grouped into 5,767 (51.7%) complaints, 5,344 (47.9%) information and 37 (0.3%) citizens' aspirations. The most submitted issues are related to information on online family card (*KK*) submission and updating *KK* data, how to correct passwords and difficulties in registering service applications, reports on repairs to public street lighting, reports related to drainage improvements, and reports related to zoning routes at *PPDB*.

The illustration of the public participation model in online services in Tangerang City is as follows:



### Figure 1 Model of Public Participation in Online Services in Tangerang City

**Source:** *processed researcher, 2024*

Public participation provided in online services through the complaint channel as seen in Figure 1 is through the *Laksa* complaint application platform and also through other non-*Laksa* complaint platforms, namely on *the website* social media, whatsapp, and email of the Tangerang City Government and related regional apparatus organizations. In accordance with the standard operating and procedure (SOP) at the Communication and Information Service, the complaint management process received through the *Laksa* application is processed by the Tangerang Live Room (TLR) operator to be disposed of to each related *OPD*. Furthermore, TLR operators convey the results of each *OPD*'s response to the public. If the complainant community has expressed satisfaction with the response, then the complaint process is declared complete. However, if the complainant community states that they are not satisfied, then the process will be communicated again to the relevant *OPD*. The SOP for complaints submitted other than through *Laksa* has a procedure similar to the procedure above, but when the process has been declared in a completed status, the TLR operator inputs and records the complaint into the *Laksa* application.

The use of *artificial intelligence* (AI) in the complaint management process is only limited to chatbots. The use of AI-based chatbots in government applications and websites to provide information and assistance quickly and

efficiently. The chatbot can handle common questions, help citizens fill out forms, and direct them to the right services. As for the issue categorization process, AI is still not used. Meanwhile, the follow-up of complaints is not directly related to the policy formulation process, but is partly input material for improving public services.

Based on the results of a review of 35 public service menus contained in the Tangerang Live application, an overview of the level of public participation provided by the government is as follows:

**Table 2 Levels of Public Participation Provided by the Tangerang Live Platform**

Citizen Control	➡	0%
Delegated Power	➡	0%
Partnership	➡	0%
Placation	➡	0%
Consultation	➡	40%
Informing	➡	86%
Therapy	➡	0%
Manipulation	➡	0%

**Source:** *processed researcher, 2024*

The results of the review on the Tangerang Live online public service application platform show that the level of public participation provided is "*consultation*." At this level of consultation, residents have the opportunity to submit input or questions to the government. The application menu that has provided a two-party consultation room is *Laksa*, *JDIH*, *Simpat RS*, *Free Ambulance*, *119 Service*, *Hearse*, *Sobat Dukcapil*, *Ransel TBS*, *Siar*, *Tim Sport*, *Ayo Rangkul*, *Tangerang Satu Peta*, and *Dekopinda Online Consultation*. Furthermore, almost all application menus on Tangerang Live provide an "*informing*" participation space, where the government provides various information needed by the public to use the available services. There are three groups of application menus in the provision of public information, namely application menus that present complete information (only 57% of application menus), while the other two groups are application menus that provide little information and limited information. Therefore, at the level of *informing*, the public participation value is 86%, because there is still an application menu that does not provide complete information.

### **The Potential of AI-Based Public Participation Development**

Considering that the level of public participation provided on the Tangerang Live online public service platform has not been able to optimize the role of the community to be involved in public services, it is important to provide policy alternatives so that public participation increases.

One option is to take advantage of the latest technology with the help of AI. The use of AI in public services has become a concern for many researchers. AI is increasingly being adopted in public services across the European Union, with the potential to improve policy-making, service delivery, and internal management (van Noordt & Misuraca, 2022).

The use of AI in government includes automated decision-making, chatbots for the provision of information, and enhanced public safety measures (Henman, 2020). While AI also offers opportunities to streamline operations and improve citizen engagement, it also presents challenges such as ensuring accuracy, avoiding bias, maintaining transparency, and addressing legal and ethical issues (Henman, 2020); (Misuraca & van Noordt, 2020).

AI integration, along with other data science technologies such as IoT, big data analytics, and *blockchain*, ready to revolutionize the administration of government (Engin & Treleaven, 2019). As governments explore the potential of AI, there is a growing need for responsible implementation and governance frameworks to address challenges and maximize the benefits of AI in public services (van Noordt & Misuraca, 2022). The various studies above provide an overview that the use of AI in public services and government is a necessity.

In connection with this phenomenon, it is necessary to analyze the potential for developing AI-based public participation in the Tangerang Live application. The analysis was carried out by examining the level of acceptance of AI technology in the implementation of online public services, in this case the Tangerang City Communication and Information Service.

In relation to the rate of acceptance of technology (*technology acceptance model*) has been widely applied to study the adoption of technology in public services. Research shows that the perception of ease of use positively affects the perception of usability and attitude towards the use of technology, which in turn affects behavioral intentions and actual use (Amali et al., 2022); (Warsono et al., 2023).

The perceived usability is influenced by factors such as the relevance of the work, the quality of the output, and the provability of the results (Chu et al., 2009). TAM model as proposed by Davis (1989) in (Mohr & Kühl, 2021) explained that the acceptance of technology is influenced by *system design features, perceived usefulness, perceived ease of use, attitude toward using and actual system use*.

Based on the results of *the focus group discussion* (FGD) that has been held with the Tangerang City Communication and Information Office, an overview was obtained that from the aspect of accepting AI technology for online public services, the use of AI is urgently needed at this time. In addition, AI has very important benefits for public services. AI will also encourage the aspect of ease of service management, and AI itself is a technology that is easy to master and use.



Meanwhile, regarding the attitude of the implementers towards the use of AI, it was stated to be very positive and enthusiastic. However, the challenge faced is the availability of human resources who have AI expertise which until now the Tangerang City Government has not had. On this basis, the prospect of using AI for public services in terms of technology acceptance by implementing units is very prospective.

Meanwhile, from the policy aspect, a more or less the same picture is obtained, where the Tangerang City Government certainly wants to provide the best public services, through the implementation of AI. However, there are challenges from the aspect of limited budget resources from the Tangerang City Government Budget. For this reason, the Communication and Informatics Office said that the most likely implementation strategy is a gradual implementation that is also adjusted to the development of the digital literacy level of city residents. The government also hopes to collaborate with various stakeholders so that funding problems can be resolved. One of the collaboration models that have been carried out includes the application of AI for waste processing in Tangerang City, which involves universities.

Another aspect that needs to be considered in examining the prospects for the application of AI in online public services is the readiness of the people of Tangerang City. To measure public readiness in the use of digital technology, including AI, the researcher used data from the Tangerang City digital literacy survey. The results of the 2023 digital literacy survey conducted by the Tangerang City Communication and Information Service show that the digital literacy index is 40% or 2 on a scale of 5. The digital literacy index is at a sufficient level.

Based on the data from the 2023 digital literacy survey, the public's readiness to receive public services using digital technology is still low. When compared to the results of the national digital literacy survey in 2022 which shows a digital literacy level of 70.8% or at an index of 3.54 on a scale of 5, the digital literacy value of Tangerang City residents is still very far below the national index. The low level of digital literacy in Tangerang City is mainly due to the low skill of using digital devices and technology (*digital skills*) which is only 20%, far below the *digital skills* of the Indonesian population which is 70%. In addition, the low digital culture in the form of a culture of communication, reading and sharing well contributes to the low digital literacy of Tangerang City residents with an index of 20%.

Based on these factors, namely the level of technology acceptance, policy implementation, and citizens' digital literacy, it can be said that the potential for developing AI-based public participation in Tangerang Live is less prospective. The challenges that must be solved are mainly related to the lack of funding sources (*APBD* capabilities) and the low level of digital literacy of Tangerang City residents.

In detail, the values for each pillar (variable) in digital literacy measurement are as follows:

**Table 3 Digital Literacy in Tangerang City in 2023**

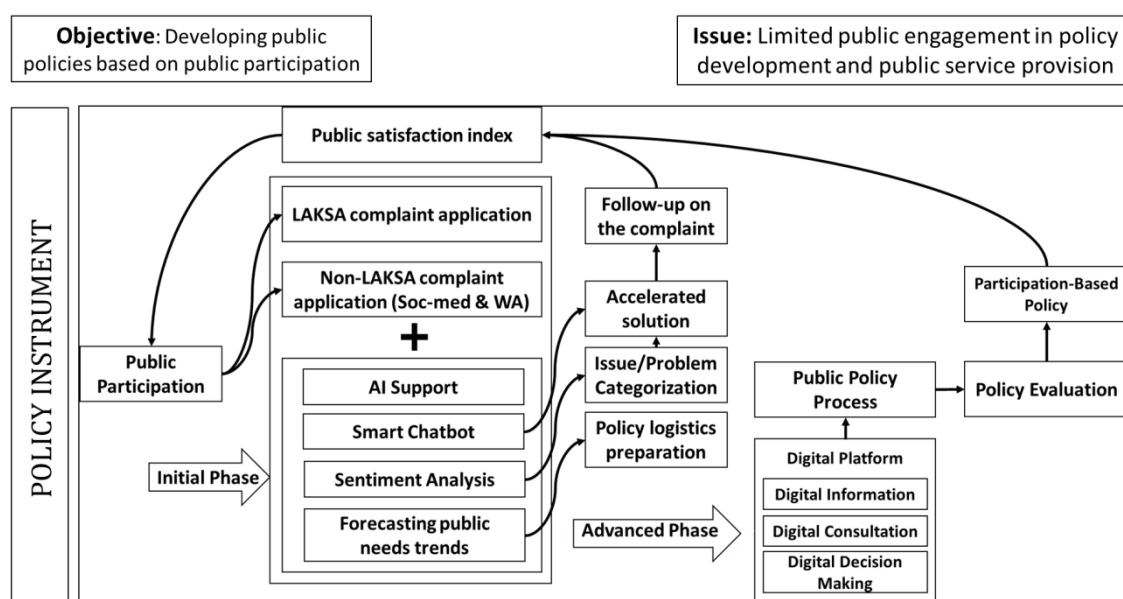
<b>It</b>	<b>Pillar</b>	<b>Statement</b>	<b>Score</b>
1.	<i>Digital Skill</i>	I can connect my device to the internet network	20%
		I can download files/apps	20%
		I can upload files	20%
		I can search and access data, information and content on digital media	20%
		I have the ability to store data, information, and content in digital media	20%
		I am used to finding out if the information I find on a website is true or wrong	20%
		I used to compare different sources of information to decide if the information was correct	20%
		I am able to interact through various digital technology communication devices	20%
		I am used to shopping through the market	20%
2.	<i>Digital Ethics</i>	I don't upload photos with other people's children	100%
		I don't tag a friend when I upload content without needing to tell my friend	100%
		I won't comment rudely if someone posts a negative comment on me	100%
		I didn't create a group and add people without permission	100%
		I will not immediately share accident information	100%
		I will not invite people to comment negatively	100%
		I won't share screenshots of conversations to social media	100%
3.	<i>Digital Safety</i>	I am always wise to interact on the social media that I have	20%
		On social media accounts, I can control who can see my timeline	20%
		I know how to report abuse on social networks	20%
		I can disable the option to show geographic position	20%
		I don't post personal data on social media	100%
		I use the app to find and remove viruses on my device	20%
		I can distinguish e-mails that contain spam/virus/malware	20%
		I'm used to creating secure passwords with a combination of numbers, letters, and punctuation	20%
4.	<i>Digital Culture</i>	I backed up data in several places	20%
		I adjust the way I communicate so that the second party doesn't feel offended	20%
		I consider the feelings of readers who come from other religions	20%
		I included the author's name when reposting	20%
		I consider the feelings of readers who come from other tribes	20%
		I share traditional and contemporary Indonesian cultural	20%

It	Pillar	Statement	Score
	arts digitally		
	I consider the feelings of readers who have different political views		20%
	I always consider and be aware of cultural diversity on social media when sharing messages		20%
	<b>AVERAGE</b>		<b>40%</b>

**Source:** *Tangerang City Communication and Information Service, 2024*

### AI Optimization Policy Content to Increase Digital Public Participation

The content of the policy must at least be able to explain the policy objectives, the problems faced, and the instruments used. Based on the results of the research and discussion above, the recommendations related to policy content to increase public participation in digital public services are as follows:



**Figure 2 AI Optimization Policy Content to Increase Digital Public Participation**

**Source:** *FGD results and researcher processing, 2024*

Considering the problem faced, namely the low participation of the community in the online public policy and service process, it is necessary to design a policy model that aims to develop public policies based on participation. Concepts that are relevant to this are *evidence based policy*, where evidence-based policies (EBPs) aim to improve decision-making by incorporating rigorous research findings into policy development (Head, 2010). In this context, the findings of the study can be obtained from the analysis of data and information derived from public complaints and aspirations. This is because evidence-based policymaking involves making decisions based on evidence and the needs and values of society (Sanderson, 2002). The instrument that can be used is public participation that can be done either through the *Laksa* or *Non-Laksa* platform, but

then it is supported by the application of AI. In the initial phase of AI implementation, it is adjusted to the feasibility of application in the Tangerang City Government, which can be in the form of *Smart Chatbot*, sentiment analysis, and prediction of public demand trends. From a technological point of view, the use of *Smart Chatbot* for public services in Tangerang City is very feasible and strategic, with the support of scientific data and developing technological trends. Adequate technological infrastructure, capabilities *natural language processing* (NLP), as well as support from *cloud computing* and *machine learning* making this chatbot a scalable, safe, and efficient solution. This data-driven approach is predicted to help increase digital public participation by 70-80%, as well as optimize public policies with higher efficiency. Modern NLP technology has an accuracy of over 90%, allowing chatbots to understand local languages effectively. This ensures efficient interaction and accurate responses to increase citizen engagement. The application of *machine learning* Improves chatbot intelligence and enables sentiment analysis *real-time*, helping the government respond quickly to public trends. According to McKinsey, organizations that adopt ML technology have 23% higher decision-making efficiency. In the long run, *Smart Chatbot* will result in significant savings through the reduction of the need for human labor involved in direct interaction with citizens. Today, citizen interactions with the government often require significant time and effort, especially in answering general questions, providing information, and managing feedback.

In the advanced phase, the technology needed must at least be able to answer the challenges of implementing digital platforms in the form of *digital information* (provision of information based on digital technology), *digital consultation* (an online community participation mechanism with digital technology that allows the public to provide input or response to a government policy, program, or project), and *digital decision making* (an online community participation mechanism with digital technology that allows the public to be involved in the government's decision-making process). These efforts will encourage the level of government digital participation as a concept put forward by the United Nations Department of Economic and Social Affairs (2022) in (Androniceanu & Georgescu, 2022). The realization of a policy model based on public participation will improve the quality of the implementation of digital government or digital democracy.

Based on the research findings, the novelty of this study encompasses theoretical, public policy, and technological application aspects. First, the novelty lies in the proposed gradual development of AI, utilizing technologies such as smart chat bots, to enhance public participation, a process not widely implemented at the local government level. Second, the study emphasizes the need for a holistic approach to AI implementation in public policy. This research proposes the implementation of an evidence-based policy that integrates digital public participation and artificial intelligence to improve the quality of government decisions. The proposed model offers a data-driven approach to policymaking, which is underutilized at the local government level. This approach leverages sentiment analysis to optimize understanding of public opinion and optimize

policies in line with evolving public needs. The application of machine learning to forecast public needs trends represents an innovation that facilitates the development of more responsive and adaptive policies. Third, this study makes a significant contribution by identifying major challenges in developing public participation at the local government level, such as low digital literacy and limited AI human resources, and how technological solutions like AI and *catbots* can address some of these challenges. Thus, this research offers a new perspective on how AI can respond to these challenges and provide solutions for local governments to enhance public participation in the digital era. Fourth, this study offers a new perspective on the strategy of gradual AI implementation, tailored to the digital literacy readiness of the community. This gradual approach considers the preparedness of budgets and human resources to integrate AI into public services.

This research has multifaceted implications, particularly in advancing public participation through technology in local governance. By proposing a gradual, evidence-based integration of AI, specifically through smart *catbots* and machine learning, this study offers a practical framework to enhance citizen engagement in public policymaking. AI-powered analysis of public sentiment can help local governments proactively address emerging citizen needs, improving policy responsiveness and adaptability. Furthermore, the research highlights the importance of addressing key challenges such as low digital literacy and limited AI expertise at the local level, providing actionable insights for overcoming these barriers. Policymakers can use these findings to design more inclusive and effective public services, tailoring AI implementation to the community's readiness and ensuring that technological solutions are both accessible and impactful. Ultimately, this research contributes to the development of smarter, more transparent, and participatory digital governance models that can foster greater trust and collaboration between citizens and government.

#### D. CONCLUSION

The level of public participation provided on the Tangerang Live application is at the consultation level. However, participation at the informing level still needs to be improved related to the quality of information available on the service application menus. In addition, the participation of the people of Tangerang City in using the application is also still low.

The potential for developing public participation with AI optimization in the Tangerang Live application when viewed from the side of technology acceptance by the implementing unit is very prospective. However, the challenges faced are from the aspect of low citizen readiness. This is shown by the low level of digital literacy of Tangerang City residents. The next challenge is in the policy implementation aspect, which requires the right strategy to optimize the use of AI in online public services, especially resource commitments for implementation, both the availability of human resources and funding. Collaborative strategies need to be considered with a public-private *partnership* approach as well as collaboration between the government, the private sector, academics, and the community.

Optimization of the use of AI to increase public participation in online services can be designed with the aim of developing public policies based on participation to overcome the problem of low public participation in the policy and public service process. Instruments for policy implementation are designed to provide space for public participation both through the *Laksa* and *Non-Laksa* platforms, which are then supported by the application of AI. In the early phases of AI implementation, it can be in the form of *smart* chatbots, sentiment analysis, and prediction of public demand trends. In the next phase, the technology needed must at least be able to answer the challenges of implementing digital platforms in the form of *digital information*, *digital consultation*, and *digital decision making*.

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