Stakeholder dynamics in local digital governance: evaluating public complaint system in Pekanbaru, Indonesia

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Abstract

This study evaluates stakeholder dynamics in the implementation of Pekan Kita (PEKA), *a digital innovation for public complaints in Pekanbaru City, Indonesia. Using a qualitative approach and a modified Stakeholder Salience Model, the research analyzes the interaction between stakeholder attributes power, legitimacy, and urgency and institutional structures affecting the sustainability of digital public innovations. Data were collected through in-depth interviews, observations, and document analysis involving 16 key informants from policy, operational, and community levels. Findings reveal that although several actors possess formal authority and legitimacy, their sense of urgency remains low due to rigid bureaucratic incentives, sectoral egos, and weak cross-agency coordination. Conversely, citizens demonstrate high urgency but lack institutional power and recognition, marginalizing their role in digital governance. The study identifies seven strategic pillars for sustainable innovation: strengthening cross-agency coordination, redesigning bureaucratic incentives, enhancing citizen co-creation, enabling two-way communication, managing inter-actor conflict, building human capacity and infrastructure, and reformulating the role of the ICT agency as an innovation orchestrator. This research contributes to the theoretical development of stakeholder analysis in e-government by revising the classic salience model to include informal power, bureaucratic incentives, and symbolic local political leadership. The proposed model offers a more contextual and dynamic framework for understanding the complexities of digital transformation in developing-country bureaucracies.*

Keywords: stakeholder evaluation, innovation, e-government, public complaints

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Introduction

The basic principle of democracy gives power to the people. This right gives citizens the freedom to express opinions and complaints (Mounk, 2018) Public complaints have an important role in the government system to maintain government accountability, supervision, feedback, protection of rights, and continuous improvement (Brewer, 2007) (Van Kersbergen & Van Waarden, 2009) Public complaints are a mechanism for the community to convey input, complaints and questions regarding public services, policies and government actions (Fraser et al., 2006). The digital revolution is increasingly bringing freedom of expression to a high level (Balkin, 2017) People express various problems they face either directly, on digital media or social media (Einwiller & Steilen, 2015) (Sun et al., 2021). The slow performance of the government in resolving public problems has triggered the extreme community in conveying the problems faced by society openly through social media, social media has the power to bring about change (Shirky, 2011).

Digitizing the public complaints system can help create sustainable policies (Balogun et al., 2020) Text mining techniques and big data analysis can help governments discover urban residents' policy demands for a variety of issues (Hardy & Maurushat, 2017) Additionally, implementing an online complaint system can improve the reporting process and allow government agencies to correct errors. The use of digital public complaint services can increase accountability through functions such as democratic control, assurance, learning, and performance (Lindquist & Huse, 2017) (Agostino et al., 2022).

Innovation is one of the keys to progress in implementing good governance (Mergel & Desouza, 2013), Current innovation policies have been regulated from the central to regional levels as a basis for developing innovation in government administration. Digitalization is one area of innovation that is widely carried out by local governments (Arduini et al., 2010) However, there are quite a few unsustainable digitalizations (Sontiwanich et al., 2022) as well as overlapping functions (Marche & McNiven, 2003b).

Pekan Kita application or *PEKA* for short is an innovation in the form of digitalization of the Pekanbaru City Government in receiving immediate public complaints to be resolved. As the Mayor's leadership changed, the E-Respon application was developed into the *PEKA* application. This application is present as a concrete manifestation of the Pekanbaru city government's duties in serving the public. With an area of 632.3 square kilometers and 1.122 million people, the Pekanbaru City Government cannot work alone in providing services, there needs to be sensitivity to community complaints.

Research has shown that Innovation policy has the potential to contribute to sustainability, but there are also challenges and risks involved. The lack of comprehensive regulations that address the opportunities and risks of digital technologies for sustainability is a major problem (Santarius et al., 2023) Innovation is not always successful, there are various inhibiting factors such as policy, stakeholder commitment, resources and others that determine the sustainability of an innovation (Dzunuwanus Ghulam Manar & Alfirdaus, 2023) Stakeholders are individuals or groups who can be influenced by or have the ability to influence decisions made by an organization. They play a critical role in the decision-making process and their involvement is critical to the success of any program (Midin et al., 2017).

E-Government implementation involves various Stakeholders who play different roles throughout the process. Successful implementation requires collaboration and strategizing relationships with stakeholders (Rose et al., 2018a) Stakeholders in e-government include government agencies, technologically advanced countries, companies, entrepreneurs, and citizens (Ashaye & Irani, 2019a) Stakeholder roles and duties vary from pre-implementation to post-implementation phases (Do Manh et al., 2023a) An open data-based communication process provides a collaborative platform for Stakeholders to advance public sector innovation (Shareef et al., 2015).

Stakeholder evaluation is an important aspect in formulating e-government projects. A review of the literature reveals that most research in this area focuses on citizens as Stakeholders, ignoring the perspectives of other Stakeholders (Ashaye & Irani, 2019a) However, it is important to consider the interactions between Stakeholders and their influence on their respective perspectives (Rose et al., 2018b) Stakeholder

interaction models can help identify different Stakeholder perspectives and their interactions, providing a comprehensive understanding of the Stakeholders involved (Singh et al., 2017) Additionally, the conceptual framework developed in the literature highlights the roles and tasks of Stakeholders across different phases of e-government implementation, from pre-implementation to post-implementation (Khan & Krishnan, 2019) This framework emphasizes the need for public organizations to strategize their relationships with Stakeholders to achieve successful e-government implementation (Greger et al., 2014).

Abdullah et al., (2016) Developed a two-step process model for developing e-Government training programs based on Stakeholder theory. (Gupta & Bansal, 2022) proposed a multi-criteria decision-making method to rank e-government websites based on Stakeholder evaluations. Emphasizes the need to evaluate overall government e-project outcomes from the service provider's perspective and proposes a comprehensive framework for Stakeholder evaluation (Singh et al., 2018). Stakeholder Analysis in the context of digital government, identifying relevant Stakeholder groups and technology interactions (Kalbaska et al., 2017).

E-government projects have not been well evaluated and managed, with evaluation governance instruments lacking stakeholder participation. The role of key stakeholders in driving the success of e-government implementation in public sector organizations in developing countries and local contexts has not been thoroughly studied. Research on the stakeholder salience model in the e-government context has primarily focused on stakeholder perspectives and has not yet analyzed in detail the power, legitimacy, and interests among stakeholders. In practice, many digital projects stagnate due to the absence of evaluation mechanisms that reflect informal power dynamics, institutional fragmentation, and misaligned bureaucratic incentives. Furthermore, citizens are often positioned as passive users, rather than as actors with moral urgency and social legitimacy in the design of digital public services. Overall, stakeholder evaluation plays a crucial role in the formulation, implementation, and evaluation of e-government projects, and considering the perspectives and interactions of various stakeholders is crucial for success. This article aims to provide valuable insights into stakeholder assessment in a digitalization innovation project to manage public complaints in Pekanbaru City, as well as stakeholder mapping using the salience model and enrich the conceptual model of salience-based stakeholder evaluation.

Research Methods

This research uses qualitative methods. Qualitative methods are used in e-government studies (Kumar et al., 2017) This method involves collecting and analyzing data through in-depth interviews, literature reviews, observations, and analysis of challenges and attitudes towards e-government services. The use of qualitative research enables a comprehensive understanding of the experiences, behaviors, and attitudes of decision makers and decision makers toward e-government. It also helps in identifying issues, factors, and recommendations for implementing effective e-government practices. Qualitative methods provide valuable insights into the socioeconomic, political, and legal context of e-government strategies, and help decision makers develop robust and sustainable solutions. (Nicolaou, 2021) (Kaya et al., 2020).

Data were collected through in-depth semi-structured interviews, direct observation, and document analysis. A total of 16 key informants were selected using purposive sampling, representing both stakeholder categories: (1) policy-level actors (e.g., Head of Dinas Kominfo) and (2) operational and community-level actors (e.g., application developers, task forces, and end users/community members). The inclusion criteria included: (a) direct involvement in *PEKA* application governance, (b) institutional affiliation with stakeholder roles as stipulated in Mayor's Decree No. 373/2022, and (c) active engagement or affectedness by the application implementation.

To enhance data validity, this research adopted triangulation by comparing interview findings with official documents (e.g., Mayor's Decree, internal memos) and field observations. Member checking was conducted with selected key informants to validate interpretations. Moreover, reflexive journaling and peer debriefing among researchers were utilized to maintain analytical transparency and reduce bias, following best practices in qualitative research (Creswell & Poth, 2016).

Field data findings were then analyzed using the Salience Model (Wood et al., 2021) helps identify the Level of each stakeholder by describing the three main dimensions used to evaluate stakeholders. All data from interviews, field observations, and policy documents were transcribed verbatim. Next, the researchers conducted data reduction by filtering information relevant to the research focus, particularly information describing the roles, interests, and power relations between actors in the implementation of the *PEKA* application. This process was followed by manual coding, where initial categories (open coding) such as "formal authority," "support for innovation," "personal or political interests," and "sectoral resistance" were formed based on recurring empirical data. These categories were then consolidated into three theoretical dimensions of salience (axial coding).

Researchers assessed the salience attributes for each stakeholder based on the data obtained, both from a structural perspective (e.g., formal position in the Mayor's Decree) and from narratives of participation and interests that emerged during the data collection process. The combination of these attributes allowed for the classification of each actor into a salience typology, such as definitive stakeholders (having all three attributes), dominant (high power and legitimacy), dependent (high urgency and legitimacy), and demanding (high urgency but low power and legitimacy). This process was not only categorical but also reflective, taking into account the local political and bureaucratic context, to explain how salience influences innovation effectiveness.

The findings were then interpreted contextually to examine the dynamics between actors and barriers to collaboration within the institutional framework of local government. This process resulted in a stakeholder mapping that was not only descriptive but also reflected the power relations, interests, and legitimacy that promoted or hindered the sustainability of digital innovation. As a final step, conclusions were drawn based on the most dominant and significant thematic patterns, and verified through source triangulation and member checking with several key informants to ensure the validity and reliability of data interpretation. With this approach, the research not only illustrated stakeholder positions but also provided a

conceptual contribution to the development of a salience model in the context of e-government implementation at the local level.
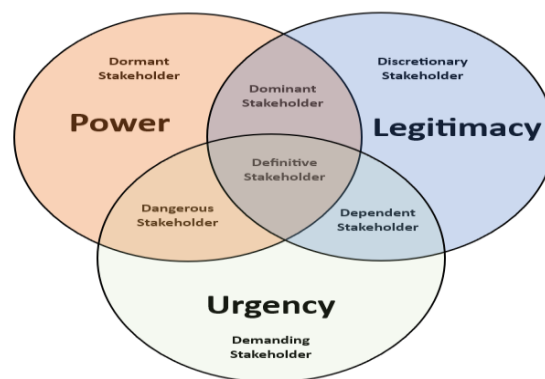
Figur 1. Salience Model
Source : (Wood et al., 2021)

The stakeholder salience framework is evaluated through three key dimensions. First, power refers to the extent to which a stakeholder can influence decisions or activities within an organization or project. Second, legitimacy measures the degree to which stakeholder claims or demands are perceived as reasonable and acceptable by other parties. Third, urgency considers the immediacy of stakeholder demands and the importance of addressing them in a timely manner. To operationalize this framework, several steps are followed. The process begins with stakeholder identification, where all parties with an interest in or potential impact on the organization or project are identified. This is followed by data collection, which focuses on gathering information about the power, legitimacy, and urgency of each stakeholder. Next, a salience dimension assessment is conducted to evaluate stakeholders across the three dimensions. Finally, the process concludes with stakeholder ranking, which organizes stakeholders according to their overall salience, allowing organizations or projects to prioritize attention to those with the greatest influence, legitimacy, and urgency.

Beyond its categorization tool, the Stakeholder Salience model is used reflectively to synthesize field data in relation to institutional dynamics and broader policy implications. Researchers not only mapped the attributes of power, legitimacy, and urgency descriptively, but also analyzed how imbalances or dominance of one dimension substantively influenced the direction of innovation policy. For example, the urgency felt by the community as end users was identified through narrative analysis as a form of informal pressure on the application's sustainability, while institutional legitimacy derived from formal regulations did not always guarantee actors' commitment to innovation.

This process involves integrating the thematic coding results into an analytical matrix that compares the actual and normative positions of each stakeholder, resulting in a deeper understanding of the dynamic salience of these positions. Thus, this approach not only produces a classification of actors but also builds a theoretical understanding of how unequal distribution of power and legitimacy can act as structural barriers to digital policy innovation at the local level. This emphasis on reflective synthesis makes stakeholder evaluation more than just a mapping exercise, but also serves as a basis for developing adaptive and contextual policy strategies.

Results and Discussion

Classification and Position of Stakeholders

Pekan Kita application or what is abbreviated as *PEKA* is an innovative digitalization development of the previous application, namely E-Respon. Initial findings show that this application was developed significantly without any policy changes, all the rules governing the *PEKA* application still refer to the previous policy. The rules regarding the stakeholders involved are regulated in Pekanbaru Mayor Decree Number 373 of 2022 concerning the Formation of the E-Respon Application Management Team. Regulation in the context of e-Government refers to optimizing the functions of regulatory institutions during the implementation of e-government initiatives. This involves creating an evaluation system to assess the efficiency of the consolidation of the activities of regulatory agencies (Sundberg, 2019a). Economic integration, e-government, information systems, e-government services (Lytras & Şerban, 2020).

Based on the results of field research, stakeholder data on innovations in digitizing public complaints via the *PEKA* application were obtained as follows: Directors: Mayor of Pekanbaru and Deputy Mayor of Pekanbaru; Responsible Person: Pekanbaru City Regional Secretary; Supervisor: Pekanbaru City Inspectorate; Application Coordinator: Head of the Pekanbaru City Communications, Informatics, Statistics and Coding Office; Super Admin: Head of Encoding, Applications and Management of Electronic-Based Government Systems at the Pekanbaru City Communications, Informatics, Statistics and Encoding Department; Application Developer Sub-Coordinator: General Functional for Encoding, Applications and Electronic-Based Government Systems Management at the Pekanbaru City Communication, Informatics, Statistics and Encryption Office; Reporting Sub-Coordinator: Functional Officer, Young Computer Expert; Executor: Head of Regional Apparatus Organization within the Pekanbaru City Government; Regional Apparatus Admin; General Functional; Task Force: Implementing Officer; End User: Community.

Stakeholders above are stakeholders who act as application developers and users. The current stakeholder condition is that the Pekanbaru City Transportation Department has collaborated with the Pekanbaru City Communications, Informatics, Statistics and Coding Department since the application was launched. It can be seen from the following data:

Table 1. Types of complaints

Type of Complaint	Local Government Agency
Parking	Transportation Agency
Traffic congestion	Transportation Agency
Public street lighting	Transportation Agency
Traffic light	Transportation Agency
Motor vehicle testing	Transportation Agency
Duku river port	Transportation Agency
Trans metro Pekanbaru	Transportation Agency
People's crossing bridge	Transportation Agency

Source: Pekanbaru City Information, Statistics and Coding Communication Office

Based on this data, it can be seen that the *PEKA* application was an application that was launched in an unprepared condition, of all existing regional apparatus organizations, only the integrated transportation service resulted in it not functioning effectively. The Pekanbaru City Information, Statistics and Coding Communication Office cannot force integration with all existing Local Government Agency, due to the ego of each department in innovating and it is still in the cooperation design stage.

As a form of regional innovation efforts it actually looks forced, the forced technology application can be seen in user data as follows:

Table 2. Recapitulation of the number of people who have registered for the *PEKA* application in 2022-2023

2022		2023	
Month	**Amount**	**Month**	**Amount**
July	3	January	1
August	8	February	-
September	2	March	-
October	13	April	-
November	6	May	13
December	3	June	24
		July	9
		August	5
Total	35	Total	52

Source: Pekanbaru City Information, Statistics and Coding Communication Office

The number of community users is very small compared to the population of Pekanbaru city, the application that has been launched and socialized does not trigger many users, this is due to the unpreparedness in fulfilling the aspirations of the community and specifically stakeholders who will handle community complaints.

Stakeholder Management: things that need to be considered. Stakeholders are the key to the success of e-government (Ashaye & Irani, 2019a) Stakeholders in this case are classified into two, namely stakeholders directly related to application development decision making and stakeholders who act as application users. Stakeholders who have all three attributes (power, legitimacy, and urgency) are considered more prominent and influential in setting the direction and results of e-Government initiatives. The absence or lack of influence of important Stakeholders can have a negative effect on the project. In an e-Government context, Stakeholder urgency may vary over time as initiatives develop and different Stakeholder groups with complementary or competing values become involved. Understanding Stakeholder urgency is essential for effective Stakeholder management and ensuring the success of e-Government projects. The results of stakeholder evaluation using the Salience model obtained the following results:

Stakeholder Power

Stakeholder Power plays an important role in the implementation and success of e-government initiatives. The involvement and support of stakeholders, both internal and external, is a key factor in influencing the value and acceptance of e-government technology (Rose et al., 2018b) (Ashaye & Irani, 2019a) The Mayor of Pekanbaru and

the Deputy Mayor of Pekanbaru have high power in directing the management team. The Mayor has the highest power among all stakeholders in the policy, so it is the key to success in developing a policy.

The Pekanbaru City Regional Secretary has high power by providing guidance, supervision, evaluation and monitoring of application implementation. Then the Pekanbaru City Inspectorate has the same power, namely supervising the implementation of applications in the Pekanbaru City Government. The Head of the Pekanbaru City Communication, Informatics, Statistics and Encryption Office has high power, the power that can be exercised is coordinating with all regional apparatus to ensure the use of the application. Apart from that, the Head of Encoding, Applications and Electronic-Based Government Systems Management at the Pekanbaru City Communications, Informatics, Statistics and Encoding Department also has low power, namely managing applications in coordination with all regional apparatus.

General functional in the field of coding, applications and governance of electronic-based government systems at the Communication, Informatics, Statistics and Encryption Department of Pekanbaru City also has low power and can only carry out application evaluation and development. Young Computer Expert Functional Officers with low power positions manage the reporting contained in the application in coordination with all regional apparatus.

The Head of Regional Apparatus Organizations within the Pekanbaru City Government has high power by supporting the realization of applications in their respective Regional Apparatus Organizations as well as using applications in their respective regional apparatus. The Head of the Organization has the power to determine the realization of Collaboration by considering the resources owned by his organization to meet the needs for implementing the *PEKA* application.

The General Functional has low power, manages field officer accounts, and reports the implementation of community complaints to the Head of regional apparatus or related officials. Implementing officers have low power through activities to respond to community complaints through applications based on the main duties and functions of each regional apparatus, as well as updating the status of follow-up reports from the community. And finally, the community in this context has the lowest power as users outside the system, the power they have is limited to users with no other power apart from providing criticism and suggestions for application development.

Stakeholder Legitimacy

Stakeholder legitimacy refers to the Decree of the Mayor of Pekanbaru as explained above, its legitimacy is strengthened because stakeholders act referring to the legal framework. Apart from that, legitimacy is assessed not only based on the position within the management team, but also looking at the legitimacy obtained from outside the position of the application management team. The Mayor of Pekanbaru and Deputy Mayor of Pekanbaru have the highest legitimacy, the mayor and deputy have legitimacy as directors, apart from that, apart from the composition of the management team, they also have legitimacy from the community by serving as mayor and deputy mayor of Pekanbaru.

The Pekanbaru City Regional Secretary has high legitimacy as the person in charge and also has strong legitimacy outside the management team. He has a role in managing city administration, conveying information and policies, coordinating, managing finances and human resources, supervising policy implementation and others. The Pekanbaru City Inspectorate has high legitimacy within the management team as a supervisor and it is important to know that outside the application management team the inspectorate also has legitimacy in maintaining the integrity, efficiency and effectiveness of government. This role includes a wide range of oversight, inspection, and evaluation functions to ensure that government organizations operate in accordance with rules, standards, and ethical principles.

The Head of the Pekanbaru City Communication, Informatics, Statistics and Coding Department in the management team has high legitimacy as Application Coordinator, while the Head of Encryption, Applications and Electronic-Based Government Systems Management has high legitimacy as Super Admin and General Functional in the Coding, Applications and Governance Division. Electronic-Based Government Systems also have high legitimacy as Sub-Coordinators for Application Developers, then Functional Officials as Young Computer Experts as Sub-Reporting Coordinators in the management team have high legitimacy as Application Coordinators. Outside of the entire management team, they do not have more legitimacy to strengthen their power in ensuring the success of the integrated application.

Heads of Regional Apparatus Organizations within the Pekanbaru City Government in the management team have high legitimacy as executors, apart from that, outside of the management team, each head of regional apparatus organizations has the legitimacy to manage their own agency. The Head of Office has legal authority to lead and make relevant decisions. The General Functional within the team has low legitimacy as admin at the level of their respective regional officials and the Implementing Officer has the legitimacy of the task force following up on Community reports. Apart from the management team, both have legitimacy from their respective departments to carry out their duties, so that legitimacy outside the team is stronger. The community in this case has a low legitimacy position, the community does not have legitimacy in terms of the development and success of the application, the community is only a user who entrusts everything to the government.

Stakeholder Urgency

Stakeholder urgency is a key factor in the implementation and success of e-government initiatives. The role of stakeholders is very important in encouraging the success of e-government implementation (Sulthani & Thoifah, 2022)(Ngonzi & Sewchurran, 2019) Understanding the roles and duties of Stakeholders during the implementation process, from initiation to monitoring and evaluation, is critical to achieving successful e-government implementation (Rose et al., 2018b) Stakeholder Urgency refers to the extent to which a Stakeholder's claim demands immediate attention. Urgency is one of the key elements in analyzing Stakeholder relationships, along with power and legitimacy (Rose et al., 2018a). Digitalization service innovation is a current trend, behind an innovation cannot be separated from interests.

The Mayor of Pekanbaru, Deputy Mayor of Pekanbaru and Regional Secretary of Pekanbaru City, in cases of high importance, aim to provide a complaint space to resolve complaints so that the application can become a transparent report card and barometer of government performance. However, behind this interest, innovation also has other interests, namely achievements and awards, which can be seen from several awards received by the Pekanbaru City Government in recent years, namely the Most Innovative City at the Innovative Government Award (IGA) event held by the Ministry of Home Affairs.

The Pekanbaru City Inspectorate as supervisor does not have a high interest in this matter, the inspectorate does not get any other benefits apart from adding work in supervision. The Head of Office, Head of General and Functional Divisions in the Encoding, Application and Governance of Electronic-Based Government Systems, Communication, Informatics, Statistics and Encryption Services of Pekanbaru City have a high interest in improving service innovation, another interest is the form of efforts to improve the management of public complaints that cannot be resolved. fully accessible provided by the central government. Apart from that, there is another element of interest in developing this application, namely the interest of the Head of Office, where this application was submitted to the leadership training activity for the Head of Office.

The Head of the Regional Apparatus Organization within the Pekanbaru City Government in this case does not have a high level of interest, there is a difference in interest between innovation and the individual and the organization. In this case, the interests of individuals and regional government organizations are more dominant than the interests of innovation, giving rise to sectoral egos. This interest is an interest in terms of the desire and interest to innovate in order to improve the performance of each organization. Apart from that, the only interests that exist are organizational interests, cooperation has not been carried out because there are organizational interests related to the availability of resources in fulfilling the application's functions, starting from the quantity of human resources in resolving public complaints. Funding also needs to be considered. However, behind everything there are organizational interests that are ego sectoral in terms of innovation. General Functional and Executive Officers in each regional apparatus organization have interests that are not high enough, where the most dominant interest is completing tasks according to orders.

The community as the end user is the stakeholder who has the most interest and hope in the application. There are many problems that the community wants to convey at this time, but the unsustainability of an application creates confusion in the community and the lack of clarity on what media and where to convey complaints and grievances creates confusion among the community. In the end, he ended up expressing his heart on social media, hoping for the power of social media to solve his problems. Based on the preceding data, the stakeholder types for the PEKA application project are mapped in Table 3.

Dormant Stakeholders These stakeholders have minimal influence on the organization or project, and their involvement is not considered significant. Then Discretionary stakeholders, even though their power is low, these stakeholders have high legitimacy, so they need to be considered and accommodated in decision making. Demanding Stakeholders, Even though their power and legitimacy are low, these

Stakeholders have high urgency, so they can be a source of problems or pressure if their needs are not met. Meanwhile, Dominant Stakeholders, these stakeholders have high influence and legitimacy, but do not always require a quick response because their urgency is low.

Table 3. Stakeholder Salience Model Criteria

Characteristics	Stakeholder	Power	Legitimacy	Urgency
Dormant Stakeholders	General Functional	Low	Low	Low
Discretionary stakeholders	Functional Officer Young Computer Expert	Low	Tinggi	Low
Demanding Stakeholders	Community	Low	Low	High
Dominant Stakeholders	Head of Regional Apparatus Organization within the Pekanbaru City Government	High	High	Low
	Pekanbaru City Inspectorate	High	High	Low
Dangerous Stakeholders	Executive officer	High	Low	High
Dependent Stakeholders	Head of the Encoding, Application and Governance Division of Electronic-Based Government Systems at the Pekanbaru City Communications, Informatics, Statistics and Encoding Department	Low	High	High
	General Functions in the Field of Encoding, Applications and Management of Electronic-Based Government Systems at the Pekanbaru City Communication, Informatics, Statistics and Encryption Department	Low	High	High
Definitive Stakeholders	Mayor and Deputy Mayor of Pekanbaru	High	High	High
	Pekanbaru City Regional Secretary	High	High	High
	Head of the Pekanbaru City Communication, Informatics, Statistics and Coding Office	High	High	High

Source: (Researcher, 2023)

Dangerous Stakeholders, these stakeholders have high power and high urgency, but low legitimacy. They can pose a serious threat if their interests are ignored. Then Dependent Stakeholders, even though their power is low, these stakeholders have high legitimacy and urgency, so they need special attention. Definitive Stakeholders, these stakeholders are the stakeholders with the highest influence, have high power, legitimacy and urgency, so they are very crucial in decision making and relationship management.

Institutional Dynamics and Barriers to Cross-OPD Coordination in *PEKA* Implementation

Field findings also indicate that stakeholder mapping using the salience model does not fully capture deeper institutional dynamics, particularly those related to the dominance of sectoral egos, absence of collaborative incentives and minimal inter-agency coordination. Although the *PEKA* application has been formally supported

through Pekanbaru Mayoral Decree Number 373 of 2022, in practice, many regional apparatus organizations (OPDs) have shown resistance to functional integration into the digital system. This resistance is not solely due to technical factors, but rather reflects structural institutional unpreparedness, where sectoral interests whether in terms of performance targets, budget allocation, or control over their respective task domains take precedence over cross-organizational collaborative interests (Marche & McNiven, 2003a; Sundberg, 2019b).

The dominance of sectoral egos in the context of regional governance can be explained by several key factors. First, the bureaucratic performance evaluation system at the local level is still heavily based on sectoral program achievements, rather than collaborative outcomes across agencies. This encourages each Regional Apparatus Organization (OPD) to maintain its autonomy and be reluctant to participate in shared platforms that do not provide direct incentives for their work units (Gupta & Bansal, 2022). Second, there is a fragmented budgeting pattern, where each OPD tends to focus on budget absorption and internal work programs as the basis for their accountability to regional leaders (Rose et al., 2018c). Third, within the bureaucratic culture, not all structural officials view digital innovation as part of their core responsibilities, especially without guaranteed funding or a strong mandate from their leadership (Kalbaska et al., 2017).

Weak horizontal coordination mechanisms reinforce these sectoral egos. There is no regular collaborative forum between regional government agencies (OPDs), and the Communication and Informatics Agency's role as application implementation coordinator is not yet accompanied by cross-sectoral execution authority (Ashaye & Irani, 2019b). Consequently, even though stakeholders such as OPD heads possess significant power and legitimacy, they still demonstrate a low level of urgency because institutional incentives for collaboration are lacking, both structurally and symbolically (Singh et al., 2017).

Furthermore, this study found that rigid and sectoral bureaucratic incentives are a major obstacle to building collective commitment between institutions. Digital innovations such as *PEKA* are not included in the key performance indicators (KPIs) of regional government agencies (OPD), thus providing no administrative incentive for technical or structural officials to actively engage (Do Manh et al., 2023b). The absence of a reward mechanism or recognition of cross-sectoral performance makes cross-organizational collaboration an additional burden that is bureaucratically worthless. In fact, several officials stated that responsibility for public complaints received through *PEKA* is not considered a "mandatory matter" unless explicitly budgeted for in the annual activity program. This situation demonstrates that the salience model needs to consider the internal incentive structure of the organization, not just the attributes of individual actors. This aligns with findings by (Santarius et al., 2023), who argue that sustainability in digital innovation requires embedded incentive frameworks, not merely top-down mandates.

In this context, local political leadership, particularly the Mayor and Regional Secretary, plays a strategic role in consolidating cross-departmental government agencies (OPDs). However, this study found that the political impetus for *PEKA* implementation was largely symbolic and temporary, limited to image-building efforts

and meeting administrative innovation targets. There was no continuity in the form of political directives compelling OPDs to undertake functional integration or provide a budget for rapid response to public complaints. The absence of a consistent and visionary political framework leaves *PEKA* in an ambiguous position: formally supported but neglected in inter-agency coordination practices (Dzunuwwanus Ghulam Manar & Alfirdaus, 2023).

The low level of public participation in using the *PEKA* app demonstrates that digital channels have not fully captured citizens' aspirations, particularly in a context where trust in government responses remains low. Although conceptually, the public is categorized as the stakeholder with the highest urgency, in practice, they remain institutionally marginalized, with very limited power and legitimacy. This is reflected in the lack of participatory channels that enable citizens to meaningfully engage in the app's design, development, and evaluation processes (Lindquist & Huse, 2017).

This situation indicates that digital innovation initiated by local governments still operates within a top-down logic, where technology is treated as a bureaucratic administrative tool, rather than a deliberative medium between the government and citizens. There are no mechanisms in place to systematically incorporate citizen aspirations, whether through online consultation forums, involvement in system trials, or through transparency and two-way feedback on submitted complaints. In fact, within a participatory digital governance framework, citizens are positioned not only as end users but also as co-creators of policies and service systems (Balogun et al., 2020). The absence of a citizen empowerment strategy in the *PEKA* project indicates that this innovation has not fully penetrated the deepest layers of democratization of digital public services, namely the active involvement of citizens in determining the direction, structure, and parameters of success of the system being built (Einwiller & Steilen, 2015). Inclusive and democratic digital transformation requires a shift from simply providing a complaint platform to building a participatory ecosystem, where citizens are given space to participate in the co-design, co-evaluation, and co-governance of digital systems. This approach not only strengthens the legitimacy of the system but also increases public trust and empowerment as actors in digital public governance (Agostino et al., 2022).

This finding aligns with the literature presented by (Saputra et al., 2025) which explains that many local government digital innovations are trapped in a "digital service bubble," a situation where technology is developed for administrative image purposes without the support of real institutional transformation. This phenomenon is highly relevant to the *PEKA* application, which, despite being claimed as an innovation, was built without data integration between regional government agencies (OPDs), without active citizen participation in design and evaluation, and without an institutional structure that supports its functional sustainability. Within this framework, the salience model needs to be reconstructed as an analytical tool that not only describes the position of actors but also assesses the interaction between actor attributes and the institutional structural context, including informal dynamics, incentive design, and the authority of political leadership that shape the field of digital innovation adoption at the local level.

Development Strategy

The development strategy for the *PEKA* application as a digital innovation within the public complaints system in Pekanbaru City is inextricably linked to the complexity of stakeholder relations and the accompanying institutional dynamics. Based on actor mapping through a modified Stakeholder Salience model and the identification of barriers to coordination between regional government agencies (OPDs), the development strategy is aimed at addressing the structural, cultural, and political challenges inherent in implementing digital innovation in the public sector.
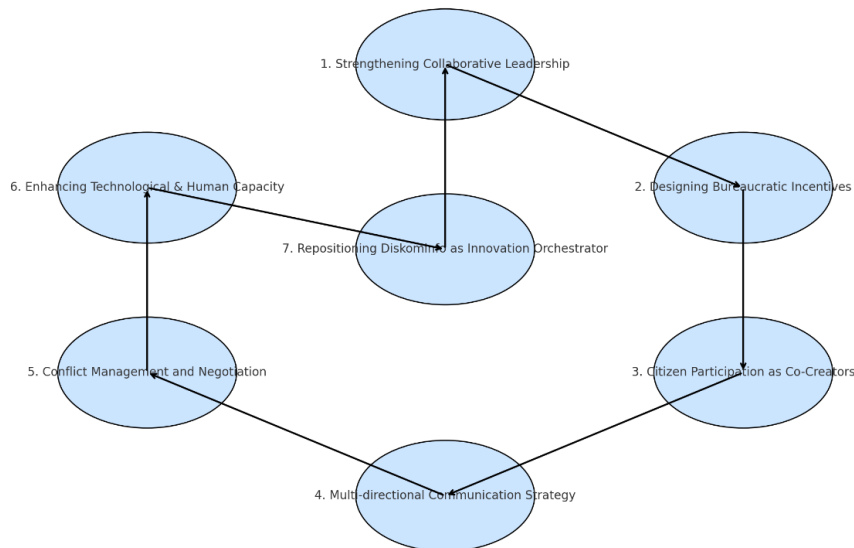
Figure 2. Strategic Development for *PEKA* Digital Innovation Based on Stakeholder Evaluation and Institutional Dynamics
Source: proceesed by authors

The strategy for developing the *PEKA* application as a digital innovation for public complaints requires an adaptive approach to the complexity of inter-stakeholder relations and institutional dynamics at the local level. Based on research findings, the first strategy that needs to be developed is strengthening collaborative leadership through cross-regional government agency (OPD) coordination. Dominant sectoral egos and weak horizontal coordination mechanisms are major obstacles to functional integration between regional agencies (Rose et al., 2018c). Therefore, the direct involvement of the Mayor and Regional Secretary as definitive stakeholders is crucial to establish regular coordination forums and establish technical regulations that require the integration of the *PEKA* application into the key performance indicators (KPI) of each OPD. This strategy aims to shift innovation practices from administrative symbolism to functional collaboration between institutions (Ashaye & Irani, 2019b; Santarius et al., 2023).

Second, it is crucial to design a bureaucratic incentive system capable of increasing the level of urgency of structural actors towards digital innovation. Findings indicate that the low involvement of Regional Apparatus Organization (OPD) heads in *PEKA* management is due to the absence of an incentive mechanism linking contributions to innovation with performance recognition. Therefore, a collaborative, achievement-based incentive policy is needed such as awarding additional points in performance assessments or prioritizing budgets for OPDs that actively follow up on public complaints through the app. This strategy aligns with a study by (Ashaye & Irani,

2019b), which emphasized the importance of synergy between incentive structures and implementation commitment for the success of e-government.

The third strategy is to increase public participation as co-creators in the development of digital innovation. Although the public has the highest urgency in using the application, they lack power or legitimacy within the policy structure. Therefore, it is necessary to provide participatory channels that enable citizens to be involved from the design, testing, and evaluation stages of the *PEKA* system. The establishment of a digital public consultation forum, an open beta-testing mechanism, and the involvement of civil society representatives in system evaluation are concrete steps to expand the role of citizens as deliberative actors, not simply end users. This approach will also strengthen the system's social legitimacy and increase public trust in digital complaint services. This approach will also strengthen the system's social legitimacy and increase public trust in digital complaint services (Bertot et al., 2010; Medaglia, 2012; Nam, 2012). As shown in prior studies, participatory digital governance contributes not only to better service design but also enhances democratic engagement and policy responsiveness.

Furthermore, adaptive and multidirectional communication strategies need to be developed to overcome coordination barriers and strengthen role clarity between actors. Current one-way communication needs to be transformed into two-way communication based on real-time feedback between regional government agencies (OPD) and the public. The development of an interactive monitoring dashboard for OPDs, a progress reporting feature for whistleblowers, and the regular publication of complaint performance reports are integral parts of an accountable public communication strategy. Responsive communication not only bridges the information gap between actors but also strengthens transparency in digital service governance (Pleger et al., 2020; Secundo et al., 2020).

In conflict management, development strategies emphasize establishing governance and negotiation mechanisms to reconcile the interests of multiple actors. However, misaligned priorities between innovation initiatives and existing organizational units often fuel resistance to application integration. Therefore, a policy mediation forum facilitated by the Regional Innovation Team or Innovation Work Unit is needed, allowing for the deliberative development of cross-OPD cooperation agreements. This approach adopts the principle of interest-based negotiation, where agreements are reached not solely on the basis of structural hierarchy but also on the alignment of collective interests (Fred & Mukhtar-Landgren, 2024).

The next strategy is to strengthen human resource capacity and supporting infrastructure. The lack of response to public reports is not solely due to individual negligence, but also to the limited technical capacity of field officers, OPD administrators, and the limited integration system between digital platforms. Therefore, regular technical training for implementing officers, the development of standard operating procedures (SOPs) for complaint resolution, and the integration of the *PEKA* system with other national and local platforms are crucial steps to improve system efficiency. Furthermore, the use of big data-based analytical technology can be used to identify complaint patterns and guide public policy more precisely (Chordiya et al., 2019; Zuiderwijk et al., 2021).

Finally, the role of the Communication and Informatics Agency (Diskominfo) needs to be reformulated from merely a technical manager to an innovation orchestrator with cross-sectoral coordinating authority. Although Diskominfo has formal coordinating powers, its weak execution capacity indicates the need to strengthen its institutional mandate through changes to the regulatory structure and the addition of oversight functions. In this role, Diskominfo is tasked not only with developing technology but also with ensuring the integration, accountability, and sustainability of innovation within a collaborative digital governance framework (Cordella & Paletti, 2019).

Conceptual Contributions to Salience Models and Digital Governance

The salience approach, which relies on the three formal attributes of power, legitimacy, and urgency, still has limitations in fully explaining the institutional dynamics that occur in the implementation of digital innovation in local government. One such limitation is the failure to accommodate informal power dynamics, which in the context of local bureaucracy play a crucial role. For example, some officials with low structural positions wield significant influence due to personal closeness to the regional head or patronage relationships with bureaucratic elites. Conversely, actors with high formal structures, such as heads of regional government agencies (OPD), may exhibit low urgency if they lack informal access to the decision-making center. This indicates that salience-based stakeholder mapping needs to be complemented by dimensions of social capital and informal power networks.

This study offers a significant conceptual contribution to the stakeholder evaluation literature in the context of e-government by adapting and extending the Stakeholder Salience Model (Mitchell et al., 1997) to address the institutional complexity of the public sector at the local level. Unlike previous studies that tend to use this model in a normative and static manner to map actor positions based on formal attributes, this study emphasizes that the salience dimension in the context of public digital innovation is dynamic, relational, and contextual. Through a reflective approach, this study demonstrates that formal power can be offset by informal power, that legitimacy does not always stem from regulation, and that urgency can arise not from structure, but from social pressure or political incentives (Broekhuis et al., 2021; Knox et al., 2025).

Moreover, this study introduces new dimensions in stakeholder salience analysis that have rarely been systematically articulated in e-government studies, namely: (1) bureaucratic incentive structures, which explain why many actors exhibit low urgency despite holding high formal positions; (2) sectoral egos and institutional fragmentation, which explain the failure of horizontal collaboration; and (3) the institutional role of citizens, not merely as passive users, but as actors with claims of moral urgency in the design and evaluation of digital public policies. Thus, this study not only applies existing models, but advances them as analytical tools for understanding the limits of power structures and legitimacy in local government digital ecosystems (de Magalhães Santos, 2023).

Based on the findings and interpretations above, this study revises the classic Stakeholder Salience Model by adding new, more contextual dimensions to digital innovation governance at the local level. The following figure presents the revised

conceptual model, demonstrating the relationship between the classic attributes and the local institutional context.
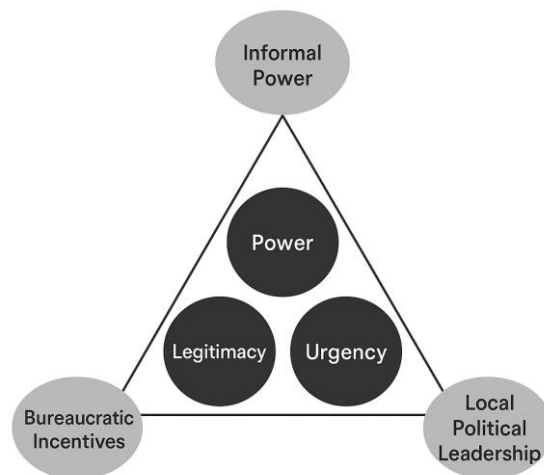
Figur 3. Revised Conceptual Model of Stakeholder Salience Based on Local Institutional Context
Source: proceesed by authors

This revised conceptual model expands on the classic Stakeholder Salience framework by integrating local institutional dynamics into the context of public sector digital innovation implementation. In the original model, actors' positions and influence are determined by three key attributes: power, legitimacy, and urgency. However, in local governance practices in Indonesia, these attributes are insufficient to fully explain stakeholders' behavior, influence, and positions. Therefore, this model adds three contextual dimensions that better reflect institutional complexity: informal power, bureaucratic incentives, and local political leadership.

Informal power illustrates how social networks, personal ties with elites, and patron-client structures can outweigh formal structural power in influencing an organization's direction and response to innovation. Meanwhile, bureaucratic incentives highlight the importance of institutional frameworks such as performance indicators and annual budgeting in determining actors' level of urgency regarding digital programs, including complaint applications like *PEKA*. Without structured incentives, actors tend to be passive even though they formally possess authority. The third dimension, local political leadership, serves as a key determinant in mobilizing cross-organizational collaboration. When leadership is symbolic and lacks vision, innovation tends to be ceremonial and unsustainable.

By integrating these elements, this revised model provides a more comprehensive analytical lens for assessing the actor configuration and challenges of digital innovation implementation in local government. The model not only depicts stakeholder positions based on personal attributes but also considers the institutional structures and relational dynamics that significantly influence salience. Therefore, this model contributes to theoretical development in the study of e-government and innovation governance, particularly in the context of developing countries characterized by institutional fragmentation, weak bureaucratic incentives, and the concentration of political power in a single figure.

Conclusion

This study concludes that the success and sustainability of digital innovation in public complaint services through the *PEKA* application in Pekanbaru City are largely determined by the dynamics of relationships between stakeholders and the institutional structures surrounding them. Using a modified Stakeholder Salience Model approach, it was found that the attributes of power, legitimacy, and urgency have not been optimally synergized to support collaborative and sustainable innovation implementation. Although there are actors with formal power and legitimacy, such as the Mayor, Regional Secretary, and Head of the Communication and Informatics Office, the low urgency and bureaucratic incentives at the technical level have led to resistance to application integration across regional government agencies.

Furthermore, this research shows that digital innovations like *PEKA* tend to become trapped in symbolic and administrative logic if they are not supported by a consistent political vision, adequate institutional incentives, and meaningful citizen participation. Unprepared bureaucratic structures, the dominance of sectoral egos, and the absence of an incentive framework for collaboration are major obstacles to the effective implementation of digital innovation. The public, as the ultimate stakeholder, is marginalized from the system design and evaluation process, thus weakening the social legitimacy of applications that should be oriented towards transparency and public accountability.

Therefore, the *PEKA* application development strategy needs to be directed at seven main pillars: strengthening cross-OPD coordination through collaborative leadership, redesigning bureaucratic incentives based on collaborative performance, increasing citizen participation as co-creators, developing adaptive and two-way communication strategies, managing conflict and negotiating interests between actors, strengthening human resource capacity and integrating technology systems, and reformulating the role of the Communications and Information Technology Office (Diskominfo) as an innovation orchestrator. These seven strategies not only address technical implementation issues but also address the structural and cultural roots of digital innovation challenges in local government.

By integrating the informal dimensions of power, bureaucratic incentives, and local political leadership into the Stakeholder Salience Model framework, this study makes a conceptual contribution to the development of stakeholder evaluation theory in the context of digital governance in developing countries. The resulting conceptual model not only maps actors' positions based on individual attributes but also assesses actor interactions within the context of complex local institutional structures. Through this approach, stakeholder evaluation in digital innovation can function not only as a classification tool but also as a strategic instrument for building participatory, accountable, and sustainable digital governance.

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