PUBLIC PERCEPTION ANALYSIS OF DIGITAL POPULATION IDENTITY POLICY IN PONTIANAK CITY USING TECHNOLOGY ACCEPTANCE MODEL (TAM) APPROACH

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Abstract

This study aims to analyze public awareness, perception, and acceptance of the implementation of the Digital Population Identity (DIC) policy in Pontianak City. Using a theoretical framework that integrates the technology acceptance model (TAM), the theory of risk and negative consequences, and the theory of organizational trust, this study explores factors such as usefulness, ease of use, user experience, social influence, facilitating conditions, awareness, perception, and public acceptance of DIC. A questionnaire-based survey was applied to the Pontianak City community selected through a stratified random sampling method. Data analysis was carried out using descriptive and inferential statistics to identify relationships between variables and evaluate factors that influence DIC adoption. The findings of this study are expected to provide relevant information for policymakers to develop strategies for implementing more adaptive and inclusive DIC policies. In addition, this study also identifies local challenges in implementing DIC, including data security and technology access, which can be a basis for developing digital policies in the future.

Keywords: Digital Population Identity, IKD, Public Awareness, Perception, Acceptance, Digital Policy, Pontianak City

INTRODUCTION

Along with the development of information technology, the digitalization of public services has become a top priority for many countries to improve efficiency, security, and accessibility. One of the initiatives that has been widely adopted is the concept of National Digital Identity (NDI), which in various literature is also known as Electronic Identification (E-ID), Digital Identity (DI), or Citizenship Digital Identity (C-ID). This initiative aims to improve data security, reduce the risk of fraud, and simplify administrative processes.

In Indonesia, the Ministry of Home Affairs began implementing Digital Population Identity (IKD) in late October 2022 in the form of a Digital application with the concept of integrating population data in one application, IKD. Designed to be a digital identity, the goal is to make it easier for people to access public services without the need for a physical identity card. In addition, this program also supports digital inclusion and efficiency in population administration. However, as an initiative that is still in the first stage of implementation, understanding public awareness, perception, and acceptance is critical to the success of this policy. Research in various countries shows that public acceptance of the digital identity system is greatly influenced by the level of trust in the government, perceived benefits, and perceived risks.(Chen & Aklikokou, 2020; Mir et al., 2020).

The basis for the IKD implementation policy is regulated through the Regulation of the Minister of Home Affairs Number 72 of 2022 concerning the Implementation of Digital Population Identity. This regulation regulates the use of digital technology in population services, which is the basis for the implementation of IKD in various regions, including Pontianak City. This system allows the public to access various public services efficiently, reduce bureaucracy, and increase the security of personal data to minimize the risk of identity fraud.

As the capital city of West Kalimantan Province, Pontianak City has unique demographic characteristics, with a population of 682,896 people based on the 2024 Semester I Population Census. This city shows significant ethnic and religious diversity, reflecting complex social dynamics and demanding an inclusive policy approach, including in the implementation of IKD. Until 2023, the number of IKD users was recorded at 26,526 people, or around 5.47% of the number of recordings made. This figure shows a significant

gap between potential users and actual usage realization. This low adoption rate highlights the importance of analyzing factors that influence public acceptance of IKD, such as level of awareness, perception of benefits, and trust in digital data security.(Ayodele, 2024). Pontianak City was chosen as a representative location for the study of IKD policy implementation due to its low adoption rate, ethnic and social diversity of its people, and its role as an administrative center connecting the central and regional governments. Understanding how people perceive IKD and sharing personal information online is critical to developing a secure and user-friendly system. However, research on public attitudes or perceptions towards IKD in Indonesia, especially at the local level such as Pontianak City, is still very limited.

This study aims to comprehensively examine public awareness, perception, and acceptance of the implementation of IKD policies in Pontianak City. Analysis of these factors is intended to provide insights that support more effective policy implementation. Specifically, this study will measure public awareness, perception of benefits, acceptance, user experience, external factors such as social influence, and conditions that support IKD implementation. With the results of this study, it is expected that strategic recommendations can be produced to increase the adoption of IKD in Pontianak City.

REVIEW OF LITERATURE

The universal concept of National Digital Identity (NDI) has been widely implemented in various countries for almost the same purpose, namely, improving security, reducing the risk of misuse of personal data, and increasing the efficiency of government and private sector services. However, the level of public awareness, perception, and acceptance of this initiative often varies, influenced by factors such as trust in the government, perceived benefits and risks, and demographic characteristics also influence(Andersen, 2021; Arunwatanamongkol et al., 2021). Trust in government is an important element in digital identity adoption. Studies in the Netherlands and South Korea show that people with higher levels of trust in the government tend to accept NDI systems better (Rim, 2023; Udwan et al., 2020). Conversely, bad experiences such as identity theft have resulted in the public becoming more skeptical of government-managed digital identity solutions (Beduschi,

2019). In the context of Indonesia, the largest population data leak incident occurred in July 2023, where 337 million population data were spread on the internet, worsening the situation. Sensitive data such as NIK, KK numbers, and other personal information became victims of the leak, raising significant concerns about the security of the Digital Population Identity (IKD) system. Regulations such as Permendagri Number 72 of 2022 do not fully cover aspects of personal data protection, thus strengthening the vulnerability in the implementation of IKD in Pontianak City.

Perceived benefits and risks also play a significant role in public acceptance of NDI systems. A Canadian study identified that convenience and efficiency were factors driving adoption, while risks such as data breaches were the public's top concerns.(Boysen, 2021). Similar findings in Estonia emphasize the importance of benefits such as reduced bureaucracy and increased security in driving public acceptance.(Tampuu & Masso, 2019). In the context of Pontianak City, the benefits of IKD design from the application system for easy access to public services can be an attraction for the community, especially for the productive age population that dominates the city's population. However, national data leak incidents and the lack of guarantees of personal data protection create barriers that affect the perception of risk towards the use of IKD.

Demographic characteristics also influence the adoption of digital identity. Research in Norway shows that younger generations are more receptive to digital technology than older age groups (Brandtzaeg & Chaparro-Domínguez, 2019). In the UK, higher levels of education are associated with more positive attitudes towards digital identity systems (Harbinja, 2017). Pontianak City has a population that is mostly in the productive age group, which is theoretically more adaptive to digital technology. However, the existence of the elderly group, although small, requires a more inclusive approach in order to be involved in the adoption of digital technology (Masiero & Bailur, 2021). In addition, ethnic and religious diversity in Pontianak is an element that must be considered in developing a communication strategy for IKD policies, because differences in social background can influence how society responds to government initiatives (Royakkers et al., 2018; Zahara, 2024).

Public awareness of data security and privacy is an equally important issue. Research in Malaysia shows that despite high concerns about data privacy, many people do not take

active steps to protect their personal information (Normalini et al., 2019; Zulkifli et al., 2019). In the context of Pontianak, the National data leak incident involving important credential information raised public concerns about data management in the IKD system. The success of the IKD implementation is highly dependent on the government's ability to build public trust through improving data security and system transparency (Anand & Brass, 2021; Beduschi, 2021).

All of these factors indicate that the implementation of IKD in Pontianak City requires a comprehensive approach. Trust in the government, perception of benefits, risk mitigation, and management of demographics and community diversity are key elements in creating wider public acceptance of the IKD system. This study provides an analytical framework to evaluate these factors in the context of Pontianak, highlighting the importance of strengthening data protection regulations and communication strategies that are responsive to the social dynamics of the community.

RESEARCH METHOD

This study uses a descriptive quantitative approach to analyze public perceptions of the implementation of the Digital Population Identity (IKD) policy in Pontianak City. The design of this study was designed to measure the level of public awareness, perception, and acceptance of the IKD policy, as well as to identify factors that influence the adoption of the policy. Data collection was carried out through a structured questionnaire distributed online using a digital platform, with a Likert scale as a measuring tool to facilitate the analysis of public perceptions. Secondary data was also used to complete the analysis, including official government reports and publications related to the implementation of IKD in Pontianak City.

The research population includes all residents of Pontianak City who are eligible to use the IKD application, while sampling was carried out using the stratified random sampling method (Thompson, 2012). This method was chosen to ensure the diversity of respondents based on age, gender, and education level. The sample size was determined using the Yamane formula (Chaokromthong & Sintao, 2021) with a 5% error rate, resulting in approximately 400 respondents. Data analysis was conducted using a statistical approach to map the

distribution of public perceptions, as well as linear regression analysis to identify relationships between relevant variables.

This study aims to measure the level of public awareness of the IKD policy at the local level, specifically in Pontianak City, which is considered representative as explained in the previous section, analyze perceptions of the benefits, convenience, and risks of the policy, and identify factors that influence public acceptance. In addition, the output of this researcher's methodology also seeks to provide strategic recommendations and alternatives that can be used to increase the adoption and effectiveness of implementing the IKD policy in Pontianak City.

Theoretical Framework

The theoretical framework in this study is based on three theories, namely the main theory of the Technology Acceptance Model (TAM), the theory of risk perception and negative consequences, and the theory of organizational trust. These three theories have been widely used in various studies that discuss the adoption and acceptance of technology, so they become the basis for understanding the factors that influence public acceptance of implementing the Digital Population Identity (IKD) policy in Pontianak City.

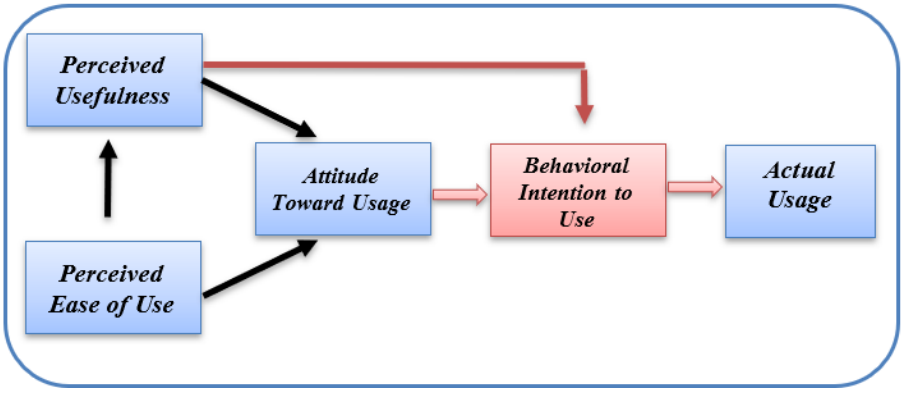

Figure 1.
Technology Acceptance Model by Davis (1989)

The Technology Acceptance Model (TAM), introduced by Davis in 1989, is one of the most frequently used theoretical frameworks to analyze user attitudes and behavior in technology adoption. This model shows that a person's behavioral intention to adopt technology is greatly influenced by two main variables, namely perceived usefulness and perceived ease of use.(Davis et al., 1989; Silva & Silva, 1 CE). In the context of IKD, TAM

is used to analyze the extent to which the people of Pontianak City believe that IKD provides benefits, such as increasing efficiency in accessing public services, and how easy this technology is to use by various community groups.

The theory of individual risk perception and negative consequences, this theory states that an individual's perception of risk and potential negative consequences, such as privacy violations, data misuse, or information leaks, have a significant influence on an individual's intention to adopt a particular technology (Friedhoff et al., 2023; Hu et al., 2019). In the context of IKD, this theory is used to evaluate the level of concern of the Pontianak City community regarding the risks associated with the use of IKD applications. This risk perception is an inhibiting factor that needs to be understood to increase public acceptance.

Organizational trust theory explains that an individual's level of trust in an organization providing a technology service greatly influences their preference to adopt that technology (Beldad & Hegner, 2018; Hegner et al., 2019; Wang et al., 2020). In this study, the theory of organizational trust is used to assess the extent to which the Pontianak community trusts the government in implementing and providing IKD services. Trust in the security, transparency, and ability of the government to manage digital systems are important elements in encouraging the adoption of IKD technology.

By integrating TAM, risk perception theory, and organizational trust theory, this study provides a comprehensive understanding of the factors that influence public acceptance of IKD policies in Pontianak City. TAM is used to measure the benefits and convenience of technology, risk theory evaluates the main barriers in the form of negative public perceptions, and organizational trust theory highlights the role of trust in the government as the policy implementer. This theoretical approach is expected to be a basis for understanding the dynamics of IKD acceptance and offering strategies to increase technology adoption in the local context.

Conceptual Framework

The theoretical framework that has been described previously is the basis for compiling the conceptual framework in this study. This conceptual framework is designed to analyze the factors that influence public perception and acceptance of the implementation of

the Digital Population Identity (IKD) policy in Pontianak City. The proposed variables include:

1. **Perceived Usefulness:** Perceived usefulness refers to the extent to which the Pontianak City community considers Digital Population Identity (IKD) to provide real benefits, especially in terms of efficiency, security, convenience, and accessibility of public services. This variable is measured through several questions aimed at exploring public perceptions regarding the advantages of IKD. Questions include the extent to which IKD simplifies the population administration process compared to physical KTP, and how much IKD is considered to be able to increase accessibility to population services or public services related to population administration. In addition, questions also highlight whether the use of IKD is able to reduce the time required to process population documents and how IKD plays a role in reducing the risk of losing physical documents such as cards. Not only that, respondents were also asked to assess whether IKD provides a more practical and efficient solution in accessing population administration services online. All of these aspects are designed to evaluate how much the benefits of IKD are felt by the community.
2. **Perceived Ease of Use:** Perceived ease of use refers to the extent to which the people of Pontianak City consider the Digital Population Identity (IKD) easy to use without facing significant technical obstacles. This variable is evaluated through a number of questions designed to measure the community's experience in using the IKD application. Questions include the level of ease for the community in understanding how the application works, comfort in operating the application without the help of other parties, and an assessment of the application interface (user interface) and whether it is intuitive enough and easy to understand. In addition, respondents were also asked to assess how quickly they could complete the administrative process using IKD and whether they faced technical obstacles during use. All of these questions are intended to obtain an overview of the extent to which the community feels that IKD is easy to access and use in everyday life.
3. **Social Influence:** Social influence refers to the extent to which social factors, such as the influence of friends, family, or government, influence the attitudes of the Pontianak City community towards the use of Digital Population Identity (DIC). This variable is measured by assessing various aspects related to social pressure and recommendations

from the surrounding environment. The questions asked include the extent to which people feel encouraged by friends or family to use DIC, and whether government agencies have ever encouraged - forced through the legitimacy of its use. In addition, respondents were also asked to evaluate how much influence their friends had in deciding to adopt DIC, and how collective opinion could influence their views. No less importantly, the questions also raised the role of recommendations from community leaders in influencing the decision to use DIC. All of these aspects help identify the extent to which social influence contributes to public acceptance of DIC policies.

4. **Facilitating Conditions:** Facilitating conditions refer to the extent to which the Pontianak City community has access to the resources needed to support the use of Digital Population Identity (IKD) services. This variable is evaluated through several aspects related to the availability of technology and infrastructure support. Questions asked include whether the community has access to technological devices, such as smartphones, to use the IKD application, as well as the quality of the internet connection that supports the smooth use of the service. In addition, respondents were also asked to assess the extent to which they understand the technology needed to operate the IKD and whether information on usage guidelines is readily available. Finally, questions include the existence of adequate technical assistance services if the community faces technical difficulties during use as well as the features offered in the application. All of these aspects aim to identify supporting factors that enable the community to adopt and utilize IKD optimally.
5. **User Experience:** User experience refers to the previous interactions of Pontianak City residents with similar digital services, as well as their perceptions of data security and privacy in using Digital Population Identity (IKD). This variable is evaluated with questions that explore the public's experience using other similar digital applications, and how these experiences affect their attitudes towards IKD. Respondents are also asked to evaluate their direct experience in using the IKD application, if they have tried it, including the extent to which they feel their data is safe when using this service. In addition, questions also include whether respondents have experienced privacy issues or data leaks in previous digital services and whether they feel that IKD offers better privacy

guarantees compared to other services. This variable is designed to understand how previous experiences and security perceptions affect public acceptance of IKD.

6. **Awareness:** Awareness refers to the extent to which the people of Pontianak City are aware of the existence, objectives, and benefits of the Digital Population Identity (IKD) policy. This variable is measured by assessing the level of public knowledge regarding the main aspects of the policy. Questions asked include whether the public has heard of the IKD policy and the extent to which they understand the benefits offered by this policy. In addition, respondents were also asked to evaluate their knowledge regarding how to register and use the IKD application, as well as to assess the effectiveness of the socialization of the IKD policy in their environment. The last question focuses on the sources of information used by the public to find out about IKD, such as social media, government, or friends. This variable is designed to explore the extent to which the level of public awareness of the IKD policy influences its acceptance and adoption.
7. **Public Perception:** Public perception refers to the views of the Pontianak City community regarding the benefits and risks associated with the Digital Population Identity (DIP) policy as a whole. This variable is measured through questions designed to explore public opinion on key aspects of the DIP policy. Questions include whether the public believes that the DIP policy can improve the efficiency of public services, and whether they feel that this policy provides more benefits than disadvantages. In addition, respondents were asked to evaluate their level of concern about the risk of data leakage in the implementation of the DIP policy, as well as to assess the extent to which they believe that this policy can create more transparent services. Finally, this variable also explores public views on the contribution of DIP in supporting the progress of digitalization in Pontianak City. Data obtained from this variable will provide in-depth insights into public perception of the DIP policy, including its potential challenges and opportunities.
8. **Public Acceptance:** Public acceptance refers to the willingness of the Pontianak City community to adopt and use the Digital Population Identity (IKD) service. This variable is measured by assessing the extent to which the community is willing to use the IKD application for their population administration needs. Questions also cover the possibility of the community recommending the use of IKD to others, as well as their views on the

feasibility of IKD for widespread adoption by the community. In addition, this variable explores the motivation and intention of the community to continue using IKD if this service is fully implemented, as well as their level of belief in the long-term benefits that the IKD policy can provide. The data collected from this variable aims to identify the level of public acceptance of the IKD policy, which is an important indicator of the success of the implementation of this policy in Pontianak City.

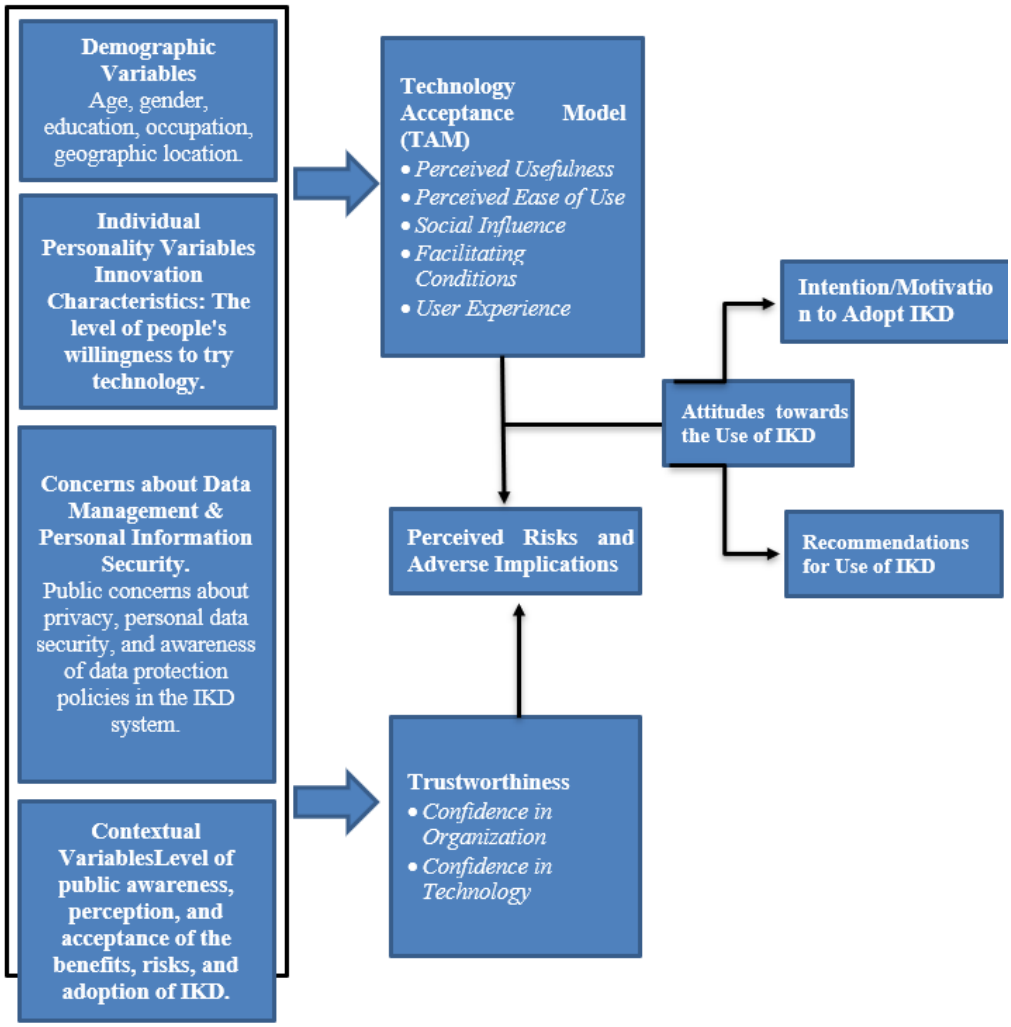

Figure 2.
Conceptual Framework

Each variable in this conceptual framework is designed to evaluate various aspects of public perception of the IKD policy, with the data obtained being used to analyze the relationship between these variables to understand the factors that influence public awareness, perception, and acceptance of the IKD policy in Pontianak City and provide

strategic recommendations for policy implementation in Pontianak City as presented in Figure 1.

Research Instrument Design

This research instrument was designed based on a previously developed theoretical and conceptual framework. This instrument was designed to analyze public awareness, perception, and acceptance of the Digital Population Identity (IKD) system in Pontianak City. The questionnaire used consisted of four main parts, namely innovation, data management, personal information security, and public awareness, perception, and acceptance of IKD.

The Innovation section aims to measure the level of openness of individuals to new technologies, such as the IKD system. This section explores people's willingness to adapt to digital innovations.

The Data Management section assesses the public's concerns regarding the storage and management of their personal data in the IKD system. This section explores the public's perceptions of the management of their data, and identifies potential barriers to identity digitization.

The Personal Information Security section is divided into three main themes:

1. Enhancing Data Security: Explores the steps individuals take to protect their personal information in IKD systems.
2. Legal Protection: Assessing public opinion on existing policies and regulations to protect their personal data.
3. Trust in Government/Implementers: Measures the level of public trust in the parties responsible for keeping their data secure, such as the government or service providers.

The Awareness, Perception, and Acceptance section is the core of this questionnaire because it is directly related to the IKD. This section aims to measure:

- The level of public awareness of IKD and its implementation.
- Public perception of the benefits and challenges that may be faced in using IKD.
- Community willingness to adopt IKD services, including motivations and barriers to adoption.
- Effective strategies to encourage adoption of IKD in local communities.

This instrument combines closed-ended questions for quantitative analysis and open-ended questions to explore deeper qualitative insights. Thus, this instrument is designed to capture a comprehensive understanding of public opinion.

Although the first three sections do not directly address IKD, they provide important insights into public trust in the digitization of their personal data. These insights are relevant to help policymakers improve public trust in the IKD system. The last section is key in determining the level of acceptance and factors influencing the adoption of IKD, thus providing a strategic basis for optimal implementation of IKD policies in Pontianak City.

Sampling and Participants

The target population in this study is the population of Pontianak City aged 17 years and above and meets the requirements as users of the Digital Population Identity (IKD) service. Residents with this age range were selected because they are considered to have sufficient administrative capabilities to be involved in the population process, as well as having the potential to understand digital technology as the main media for IKD.

The probability sampling method will be used to ensure that the sample taken can represent the population as a whole.(Acharya et al., 2013), both in terms of demographic characteristics, education level, and access to technology. The sampling technique used was stratified random sampling, with stratification based on factors such as age, gender, employment background, and education level. This approach was used to capture diversity in the population and ensure proportional representation of each relevant subgroup of society.(Thompson, 2012).

The sample size will be calculated using the Yamane formula, which takes into account a margin of error of 5%. With a total population of Pontianak City recorded at 682,896 people in 2024, the minimum sample size generated is around 400 respondents. This number is considered adequate to provide results that can be generalized to a wider population. The following is an explanation of the sample determination formula.

$$n = \frac{N}{1 + N(e)^2}$$

Information:

- n: Required sample size.

- N: Total population (population of Pontianak City = 682,896).
- e: The error margin is 5% or 0.05.

Calculation:

If Population N = 6,679,818 and the error tolerance level (e) is 5%: n = $\frac{682.896}{1+682.896\ (0.05)^2}$n = n = n = n = 399.72$\frac{682.896}{1+682.896\ X\ 0.0025}$ $\frac{682.896}{1+1.707.24}$ $\frac{682.896}{1.707.24}$

Therefore, the required sample size is 400 respondents (rounded up).

Participants will be selected from various backgrounds, including formal and informal sector workers, students, and housewives, to ensure a diversity of perspectives. The participant selection process will involve distributing an online questionnaire through official channels, such as social media, local communities, and relevant government agencies. Participants will be provided with information about the purpose of the study and asked to provide informed consent before participating. This approach is designed to ensure that the data obtained reflects the perception and acceptance of the community as a whole towards the implementation of the IKD policy in Pontianak City using a systematic and representative method.

RESULTS AND DISCUSSION

Data Collection and Analysis

Data collection in this study will be conducted through an online survey specifically designed to collect information from selected samples. The questionnaire used will include questions related to demographic characteristics, awareness, perception, and public acceptance of the Digital Population Identity (IKD) policy in Pontianak City. Before being distributed, the questionnaire will be tested on a small sample to ensure its validity and reliability, so that the instrument used is able to measure the relevant constructs accurately.

Data Collection

The questionnaire will be distributed through various platforms, including social media, local communities, and official government communication channels, to ensure that the target population can be widely reached. Data collected will include demographic information, such as age, gender, and education level, as well as responses to research variables such as awareness, risk perception, ease of use, and acceptance of IKD.

Data Analysis

The collected data will be analyzed using a combination of descriptive and inferential statistics:

- **Descriptive Statistics** used to summarize data through calculations of average, mode, median, and frequency distribution, so that basic patterns in the data can be identified.
- **Inferential Statistics** used to test the relationship between demographic variables and the main variables of the study, such as awareness, perception, and acceptance of IKD. Hypothesis testing, such as correlation and regression analysis, will be applied to explore the relationship between variables.

Psychometric Testing

The validity and reliability of the questionnaire will be assessed using the Rasch Measurement Analysis approach. This analysis will provide insight into how each item in the questionnaire performs across different subgroups of respondents, helping to identify questions that may require correction to improve measurement accuracy.(Tennant & Conaghan, 2007).

The results of this data processing will be used for:

1. Evaluate the level of public awareness and acceptance of IKD policies.
2. Identify factors that influence public perception of this policy.
3. Providing input for the improvement of research instruments and IKD policies.

Research Stages and Flow:

This study follows a systematic flow, presented in a table format to provide a structured explanation and focus on the substance of the research process. Each stage is designed to ensure the validity of the data and the relevance of the results to the research objectives. With this approach, the study is expected to produce quality data to support the implementation of more effective IKD policies in Pontianak City.

Table 1.
Research Stages and Flow

Research Stages	Steps	Outcome
PREPARATION	Establishing the main objective: analyzing public awareness, perception, and acceptance of IKD.	Clear research framework and objectives.

STEP 1: Development of Research Instruments	1. Developing a theory-based questionnaire and conceptual framework. 2. Validation through initial trials using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). 3. Instrument refinement based on trial results.	Valid and reliable questionnaire for primary data collection.
STEP 2: Data Collection and Analysis	1. Collecting primary data through online surveys using the stratified random sampling method. 2. Data analysis used descriptive statistics (mean, median, frequency) and inferential (correlation and regression).	Insight into the level of public awareness, perception, and acceptance of IKD.
STEP 3: Interpretation and Recommendations	1. Interpreting the results of data analysis. 2. Identifying factors that influence IKD acceptance. 3. Develop policy recommendations to increase the adoption of IKD.	Strategic recommendations for successful implementation of IKD policies.
END	Preparation of a final report containing the results of the analysis and policy recommendations.	The final report can provide recommendations for optimal implementation of IKD policies.

Ethical Considerations

This study was conducted in accordance with ethical research standards to ensure that the rights and privacy of participants are protected. Before participation, informed consent will be obtained from all participants. They will be given clear information about the purpose of the study, the expected benefits, the nature of the questions in the survey, and their right to stop participating at any time without any consequences.

Data collected through the survey will be kept confidential. Any personal data that can identify participants will be anonymized before being analyzed. The data will only be

used for research purposes and will not be shared with third parties without the consent of the participants. In addition, access to research data will be limited to the principal investigator and the team involved in the study (if any).

In the context of Digital Population Identity (DIC) in Pontianak City, this study uses a framework based on policy implementation that has been implemented. Therefore, no hypothetical scenarios are used. Instead, participation is based on the community's real experience of the DIC services that are already available. This approach ensures that the public's perceptions, awareness, and acceptance measured represent their actual experiences.

To comply with the principle of anonymity, the online survey is designed not to collect sensitive personal data, such as Population Identity Number (NIK), or detailed residential address, unless necessary and with the explicit permission of the participant. In addition, the results of the study will be reported in aggregate, so that no individual can be identified.

CONCLUSION

This study presents a methodological approach and conceptual framework relevant to analyzing public awareness, perception, and acceptance of the implementation of the Digital Population Identity (IKD) policy in Pontianak City. With a framework that integrates various key factors such as perceived usefulness, ease of use, user experience, social influence, facilitating conditions, awareness, perception, and public acceptance.

Through a quantitative approach, a questionnaire-based survey designed based on theory and conceptual framework can collect data from the Pontianak City community selected by stratified random sampling. Descriptive and inferential statistical analysis reveals the relationship between variables that influence IKD adoption while evaluating the main challenges faced by the community, such as access to technology and concerns about personal data security.

Factors such as public trust in data security, social influence, and ease of use of technology are important elements that must be considered by policy makers. This study also explores the variation in perception and acceptance among certain demographic groups, which is necessary to design more effective and inclusive communication and socialization

strategies. In addition, the validity and reliability of the survey instruments used ensure that the data collected can be relied upon as a basis for formulating evidence-based policies.

In conclusion, the framework and methodology formulated in this study are not only relevant to the context of Pontianak City, but also have the potential to be applied in other districts and cities facing similar challenges in increasing the adoption of IKD. With a structured and evidence-oriented approach, this study provides a real picture of the challenges and opportunities in implementing digital policies in Indonesia. The findings are expected to be the basis for directing the development of more inclusive, adaptive, and sustainable digital population policies in the future.

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