CHAPTER I

INTRODUCTION

1.1 **Background**

The digitalization of public services is a critical element of modern governance, aimed at providing accessible, efficient, and transparent services to the community. With the growing use of technology, governments around the world are transitioning to electronic-based service delivery systems to enhance public service accessibility. The shift towards digitalization in public services is driven by the need to improve accessibility, efficiency, and transparency in service delivery. As technology becomes more integrated into everyday life, governments are increasingly adopting electronic systems to streamline processes and make public services more accessible to citizens. This transition enables faster, more reliable, and user-friendly interactions between the government and the public, fostering a more responsive and accountable governance system (Heeks, 2006). By embracing digital platforms, governments aim to meet the evolving needs of their communities and provide services that are both efficient and convenient.

The transition to digital public services in Indonesia, as outlined by Presidential Regulation (Perpres) No. 95 of 2018, represents a comprehensive shift in the way the government interacts with its citizens and manages its operations. The regulation focuses on the Electronic-Based Government System (Sistem Pemerintahan Berbasis

Elektronik or SPBE), aiming to enhance the efficiency, effectiveness, and transparency of government services by fully integrating digital technology into various levels of public administration (Purbo & Wahid, 2020). The SPBE framework encourages the integration of cross-agency systems, enabling different government departments and institutions to communicate and collaborate more effectively. This integration minimizes redundant processes, eliminates data silos, and enables seamless information flow between different sectors of the government. For citizens, this translates into real-time access to essential services such as healthcare, legal services, education, and administrative procedures, significantly reducing waiting times and bureaucratic hurdles.

Furthermore, SPBE is designed to improve public sector transparency by ensuring that government services and processes are not only more visible to the public but also easier to monitor and evaluate. The use of digital platforms increases the government's accountability, as all processes are recorded electronically, reducing opportunities for corruption, delays, and inefficiency. By automating administrative tasks and digitizing paperwork, SPBE also contributes to reducing operational costs, optimizing the use of government resources. The regulation's emphasis on digital transformation aligns Indonesia with global trends in e-governance, where many countries have transitioned to digital public services to meet the demands of modern citizens.

The goal is to create a government that is citizen-centric, agile, and capable of delivering services that meet the expectations of an increasingly digital society. However, the success of SPBE depends on the government's ability to address challenges such as uneven infrastructure development, particularly in rural areas, as well as the need for digital literacy programs to ensure that all citizens can benefit from these advancements (Wahid & Sein, 2013). Ultimately, the implementation of SPBE marks a significant step forward in modernizing governance in Indonesia, promoting a more efficient, transparent, and accountable public service system that fosters greater trust between the government and its citizens.

Figure 1.1 Rank of Indonesia in United Nations E-Government Development Index (EGDI) 2022

Türkiye	VHEGDI	V1	48	0.7983	Yes*
Oman	VHEGDI	V1	50	0.7834	
Malaysia	VHEGDI	V1	53	0.7740	
Bahrain	VHEGDI	V1	54	0.7707	No*
Thailand	VHEGDI	V1	55	0.7660	Yes*
Georgia (Country)	VHEGDI	V1	60	0.7501	
Kuwait	HEGDI	HV	61	0.7484	No*
Armenia	HEGDI	HV	64	0.7364	
Brunei Darussalam	HEGDI	HV	68	0.7270	
Uzbekistan	HEGDI	HV	69	0.7265	Yes*
Mongolia	HEGDI	HV	74	0.7209	
Indonesia	HEGDI	HV	77	0.7160	
Qatar	HEGDI	HV	78	0.7149	
Kyrgyzstan	HEGDI	H3	81	0.6977	
Azerbaijan	HEGDI	H3	83	0.6937	
Viet Nam	HEGDI	H3	86	0.6787	Yes*
Philippines	HEGDI	H3	89	0.6523	
Iran (Islamic Republic of)	HEGDI	H3	91	0.6433	
Sri Lanka	HEGDI	H3	95	0.6285	Yes*
Jordan	HEGDI	H2	100	0.6081	

Sources: UN E-Government Development Index

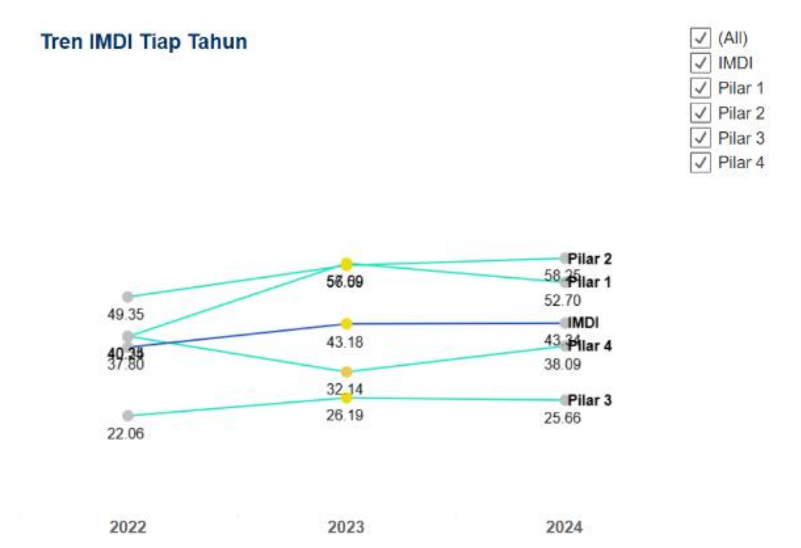
Figure 1.2 United Nations E-Government Development Index (EGDI) in Asia 2022

Sources: UN E-Government Development Index

While Indonesia has made strides in implementing the Electronic-Based Government System (SPBE) across its regions, significant challenges persist in achieving widespread and uniform access to digital services. According to the 2022 United Nations E-Government Development Index (EGDI), Indonesia ranks 77th out of 193 countries, reflecting that its digital public service framework has room for improvement. This ranking places Indonesia behind several neighboring countries, such as Singapore, which is ranked 11th, and Malaysia, ranked 53rd. The disparity in these rankings highlights gaps in infrastructure development, digital literacy, and technology adoption within Indonesia, particularly in rural and remote areas where access to reliable internet and digital services is still limited.

In contrast, countries like Singapore, which consistently leads the region in EGDI rankings, have heavily invested in cutting-edge technology infrastructure, extensive digital inclusion programs, and seamless integration of government services. These factors enable Singapore to offer highly efficient and accessible e-government services to its citizens. On the other hand, Indonesia's vast geographical landscape and diverse population present unique challenges in achieving uniform digital transformation. Addressing these issues requires increased investment in technological infrastructure, especially in underdeveloped areas, as well as programs to boost digital literacy and ensure equitable access to public services across the country. Overcoming these obstacles will be critical for Indonesia to strengthen its position in global e-government rankings and fully realize the potential of its SPBE initiative.

Figure 1.3 Indonesian Digital Society Index 2022-2024



Sources: IMDI SDM Digital

IMDI (Indonesian Digital Society Index) data shows developments from 2022 to 2024 with various trends at the national level and the underlying pillars. Overall, the National IMDI increased from 37.80 in 2022 to 43.18 in 2023, an increase of 5.38 points. 2024 recorded a slight increase to 43.34. In 2023, Pillar 1 (Infrastructure and Ecosystem) recorded a significant increase from 49.35 in 2022 to 57.09, but decreased to 52.70 in 2024. In contrast, Pillar 2 (Digital Skills) continued to show an increase from 49.83 in 2022 to 56.59 in 2023, and reached 58.25 in 2024, reflecting consistent progress in the field of digital skills.

Pillar 3 (Empowerment) also increased from 22.06 in 2022 to 26.19 in 2023, although it decreased slightly to 25.66 in 2024. Meanwhile, Pillar 4 (Employment) showed a different trend with a sharp decline from 40.35 in 2022 to 32.14 in 2023, but then recovered slightly to 38.09 in 2024. Overall, these data reflect that although there has been progress in some digital aspects, such as digital skills and infrastructure, there are challenges to be faced in the areas of employment and digital empowerment. The fluctuation in performance between pillars from year to year shows that digital development in Indonesia still needs to focus on several areas that require further attention.

The fluctuation in performance between the IMDI pillars from year to year indicates that Indonesia's digital development is progressing unevenly, and there are several areas requiring further attention. While significant improvements have been made in Pillar 2 (Digital Skills), which consistently showed progress, and Pillar 1

(Infrastructure and Ecosystem), which saw a notable increase in 2023 before declining in 2024, other pillars are facing challenges. Pillar 3 (Empowerment), despite an initial increase, experienced a slight drop in 2024, suggesting that although access to digital tools is improving, their effective utilization to empower individuals and communities still requires focus. Pillar 4 (Employment), which saw a sharp decline in 2023 before partially recovering in 2024, highlights the difficulties in adapting the workforce to the digital economy. This suggests that improvements in digital skills are not fully translating into employment opportunities or economic benefits for the broader population. Additionally, the decline in Pillar 1 after 2023 points to the need for sustained investments in infrastructure to maintain progress. Overall, these trends show that while there are areas of success, targeted efforts are needed to address gaps in digital empowerment, employment, and infrastructure to ensure Indonesia’s digital transformation is inclusive and sustainable.

Indonesia's adoption of digital technology, particularly in public services, has been relatively slow due to a preference for traditional methods of service delivery and lower levels of digital literacy, which are often linked to gaps in education (Afrilia et al, 2024). Many citizens, especially in rural areas, are more accustomed to face-to-face interactions and may be hesitant to transition to online platforms without adequate training or support. This presents a challenge in fully realizing the benefits of digitalization initiatives across the country.

To address these challenges, in 2016, the Tangerang City Government introduced the "Tangerang Live" application, which aims to bridge the gap between traditional service delivery and modern digital solutions. By offering a user-friendly platform that simplifies public access to government services, "Tangerang Live" demonstrates how digital tools can enhance convenience while maintaining the reliability that citizens expect from traditional services. This initiative serves as an example of how local governments can ease the transition by making digital services more accessible and integrating features that encourage citizens to embrace new technologies, even in areas where traditional methods have long been the norm (Janssen, Charalabidis, & Zuiderwijk, 2012). This application aims to provide government services directly to individuals via digital devices, overcoming traditional barriers that often arise in administrative processes. By using digital technology, Tangerang Live allows residents to access various government services without needing to physically visit government offices. Apart from making access easier, Tangerang Live also aims to increase the level of transparency and accountability in the delivery of public services.

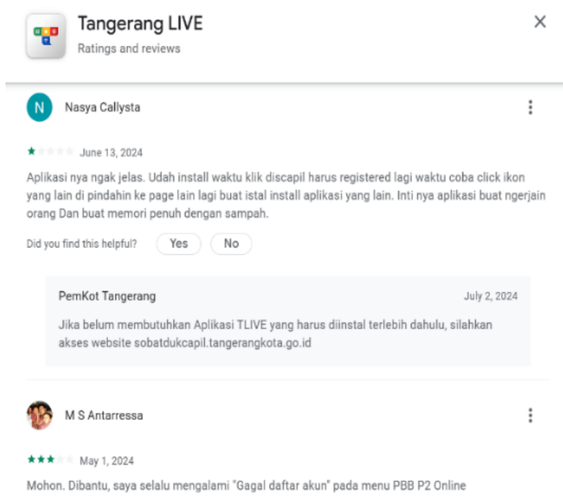
With this platform, information about various government services, procedures and policies becomes expected to be more open and easily accessible to the public. This creates a more transparent environment, where government decisions and measures can be held more efficiently accountable by citizens. Not only that, Tangerang Live also aims to improve the quality of services provided by the government. By providing easier and faster access to the public, this application encourages the government to continue to improve efficiency and effectiveness in providing quality services. In addition, user feedback and experience obtained through this application can become a basis for the government to make further improvements and innovations.

Lastly, through Tangerang Live, the Tangerang City Government also hopes to increase active community participation in the development and decision-making process. By giving citizens easier access to interact with the government, this application encourages closer relationships between the government and society. It is hoped that greater participation from the community can strengthen the legitimacy of policies and programs implemented by the government, as well as increase the sense of ownership and shared responsibility in building a better Tangerang City.

Figure 1.4 Tangerang Live Application Rating and Reviews in App Store 2024

Sources: IOS App Store

Figure 1.5 Tangerang Live Application Rating and Reviews in Play Store 2024



Sources: Play Store

However, the digitalization of a service into an application-based public service does not ensure seamless operation, as success hinges significantly on the acceptance and adoption of the technology by its intended users. As shown in the picture above, ratings and reviews from Tangerang Live application users who use iOS devices give an average score of 1.5 out of 5 from 13 users. Although the "Tangerang Live" application has certainly tried to make their services easy to use, and in 2024, according to the Tangerang City Communication and Informatics Office, the Tangerang LIVE application has been downloaded by more than 1.1 million users and has around 455 thousand verified accounts. this is not free from errors experienced by users. The image above shows user complaints regarding the ease of use of the Tangerang Live application, such as difficulty in accessing the application and frequent errors.

These things influence the user's perception of the ease of use of the Tangerang Live application. The difficulties experienced by these users will certainly cause users to not be able to experience the convenience offered by Tangerang Live in carrying out activities. Furthermore, recent reviews on the Google Play Store also reflect a similar trend, where users have rated the app poorly due to its complexity and frequent technical issues. These low ratings indicate that the app is not as user-friendly as intended, leading to frustration among users and further hindering the platform’s success.

Based on the problems described above, the appropriate approach to use in identifying the use of Tangerang Live is to use the Technology Acceptance Model (TAM) approach. The Technology Acceptance Model (TAM) is an approach model that can explain the acceptance of a technology or system by individuals (Davis, 1989). In this model, there are factors that influence user acceptance of a new system or technology. The main variables that are often used in analyzing user acceptance of TAM are perceived usefulness and perceived ease of use. Perceived usefulness can be interpreted as the extent to which the user believes that using a technology or system can improve job performance. Perceived ease of use can be interpreted as the extent to which the user's perception believes that using a technology or system will free him from effort, in other words using this system is easy.

The Technology Acceptance Model (TAM) provides a useful framework for analyzing the factors that contribute to the success or failure of technology-based systems like Tangerang Live. In this research, the TAM framework will be used to assess the critical success factors of the Tangerang Live application by focusing on variables such as perceived usefulness, perceived ease of use, and behavioral intention to use. Understanding these factors is essential for identifying areas of improvement and ensuring that digital platforms can meet the needs and expectations of their users, such as in the area of usefulness and easiness to use, ultimately supporting the successful implementation of SPBE in Indonesia.

The explanation above encourages researchers to conduct research entitled **“Analysis of Intentions to Use the Public Service Program Based on the "Tangerang Live" Application among Citizens in Tangerang City Using the Technology Acceptance Model”**

1.2 Problem Formulation

Increasingly advanced technology should be able to be utilized by an individual or organization to help and make it easier to carry out work or activities that use technology. One technological development that can be utilized is the development of the internet, where all individuals can access it if they have a mobile phone that supports it. Technological developments in the internet sector are widely used by several agencies to make work easier and more efficient. This research aims to investigate the level of public acceptance of the behavioral intention of use of the "Tangerang Live" application-based public service program in Tangerang City, as well as the factors that influence it.

Referring to the Technology Acceptance Model (TAM) theory, the factors that influence users to use or not use a system are perceived usefulness and perceived ease of use. So the problem in this research is how perceived usefulness and perceived ease of use can influence the actual system use of the Tangerang Live application. So the problem formulation includes:

1. Is there an influence between perceived usefulness and behavioral intention of use the Tangerang Live application?
2. Is there an influence between perceived ease of use and behavioral intention of use of the Tangerang Live application?

1.3 Purpose of Research

This research was conducted to identify the factors that correlate to the intention of the people of Tangerang City to use the "Tangerang Live" application based on the Technology Acceptance Model (TAM) method.

1.4 Benefits of Research

1. Theoretical benefits

It is hoped that the results of this research will provide information for readers to gain insight into theories related to the level of acceptance of the use of the Tangerang Live application based on the Technology Acceptance Model (TAM) method.

2. Practical benefits

a. For the researcher

It is hoped that this research will deepen researchers' knowledge about the Technology Acceptance Model and its application in analyzing the intention to use application-based public services. In addition, researchers will gain a better understanding of the local context (Tangerang City) and how technology can be utilized to improve the quality of public services.

b. For the reader

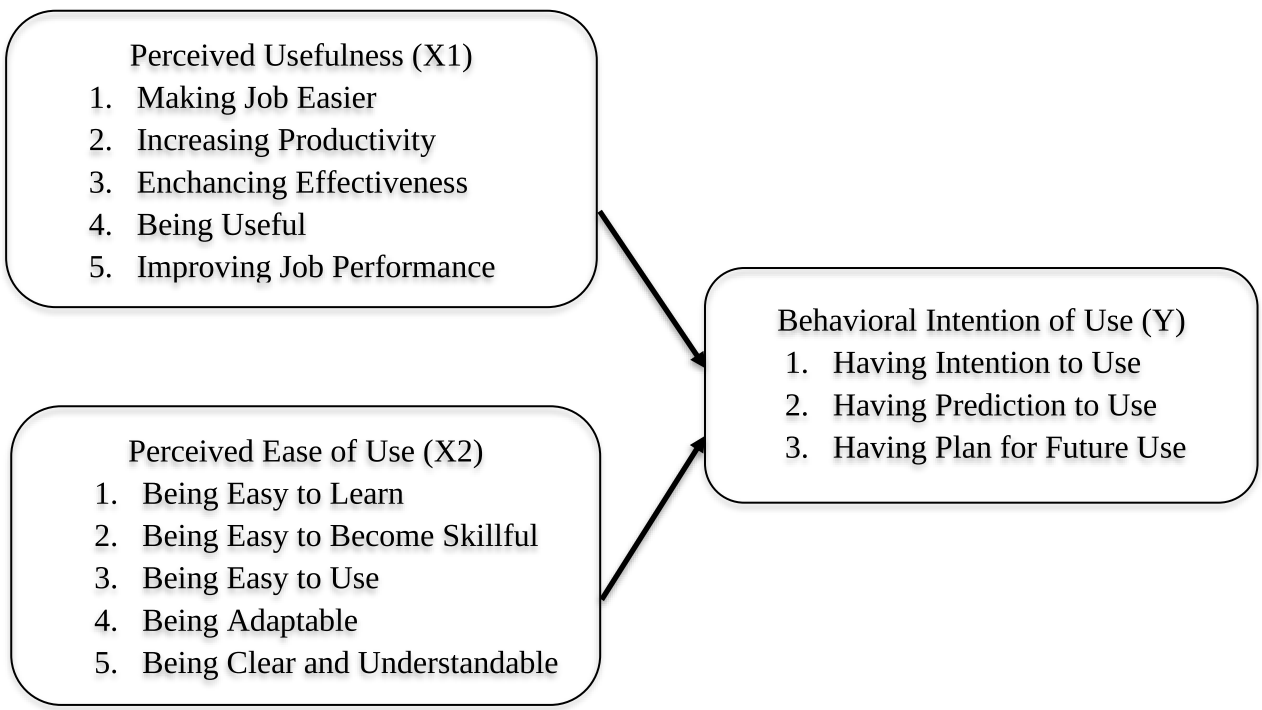
It is hoped that this research can provide an understanding regarding the topic being researched in relation to the topic in this research and as a reference for further research.

c. For the local government

It is hoped that this research can provide insight to the Tangerang City government about the factors that influence the intention to use the "Tangerang Live" application. By understanding the perceived usefulness and perceived ease of use of this application, the government can identify areas that need to be improved to increase the effectiveness of public services provided through the application. In addition, this research provides empirical data that can be used by the government in making decisions regarding the development and improvement of the "Tangerang Live" application.

1.5 Theoretical Framework

Figure 1.6 Theoretical Framework



1.5.1 Previous Research

Table 1.1 Previous Research

No.	Author/Year	Title	Methods	Variable	Theory	Result

1	Faturohman et al., 2021	Factors influencing COVID-19 vaccine acceptance in Indonesia: an adoption of Technology Acceptance Model	Quantitative	Perceived usefulness Perceived ease of use Perceived religiosity Amount of information on COVID-19 COVID-19 vaccine acceptance	Technology Acceptance Model (TAM)	Perceived Usefulness: Belief in the vaccine's ability to prevent infection boosts acceptance. Perceived Ease of Use: Easier access and understanding increase perceived usefulness.
2	Kumajas et al., 2021	Evaluation of Acceptance Model in E-Commerce Using TAM	Quantitative	Perceived Ease of Use Perceived Usefulness Attitude Towards Using Technology Behavioral Intention to Use Technology Actual Technology Usage	Technology Acceptance Model (TAM)	The study highlights that perceived usefulness and perceived ease of use are significant factors influencing user acceptance of these systems.
3	Dhea Arvie & Andeka Rocky Tanaamah, 2019	Technology acceptance model for evaluating IT of online based transportation acceptance: a case of GO-JEK in Salatiga	Qualitative	External Variables Perceived Usefulness (PU) Perceived Ease of Use (PEOU) Attitude Towards Using Behavioral Intention to Use Actual Use	Technology Acceptance Model (TAM)	Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) were two major factors contributing to the attitude of application users (Attitude Towards Using
4	Herlina et al., 2023	Tipologi Financial	Quantitative	Perceived Usefulness	Technology Acceptance	There is a significant influence from both perceived usefulness

		Technology Paylater: Technology Acceptance Model (TAM)		Perceived Ease of Use Attitude Toward Using Behavioral Intention to Use Actual Use	Model (TAM)	and perceived ease of use on actual use.
5	Zou & Huang, 2023	To use or not to use? Understanding doctoral students' acceptance of ChatGPT in writing through technology acceptance model	Quantitative	Attitude Towards Using Perceived usefulness Perceived ease of use Behavioral intention to use ChatGPT	Technology Acceptance Model	Perceived Usefulness: Students' perceptions of how useful ChatGPT is for writing play a crucial role in their acceptance. Perceived Ease of Use: The ease with which students can use ChatGPT also significantly affects their attitudes and intentions.
6	(Chan et al., 2022)	Using the technology acceptance model to examine acceptance of telemedicine by cancer patients in an ambulatory care setting	Quantitative	Perceived usefulness Perceived ease of use Trust Social influence Facilitating conditions Technology anxiety Resistance to use Perceived risk Technology confidence Past telemedicine use	Technology Acceptance Model	The study does not find a significant positive influence between perceived ease of use and perceived usefulness.
7	Kadek Wira Arya Dharma, 2021	The Teachers' Acceptance of Technology in a Remote	Quantitative	Perceived Usefulness Perceived Ease of Use	Technology Acceptance Model (TAM)	There is a significant influence of both perceived ease of use and perceived usefulness on teachers' acceptance of e-

		English Teaching at SMA Negeri 4 Singaraja				learning technology
8	Alsyouf et al., 2023	The Use of a Technology Acceptance Model (TAM) to Predict Patients' Usage of a Personal Health Record System: The Role of Security, Privacy, and Usability	Quantitative	Perceived Ease of Use (PEOU) Perceived Usefulness (PU) Security Privacy Usability Intention to Use PHR	Technology Acceptance Model (TAM)	There is a significant positive influence between perceived ease of use and perceived usefulness towards the intention to use the PHR.
9	Wahidin et al., 2021	Research SAP Acceptance Rate Analysis At PT. Pindodeli Uses The Technology Acceptance Model (TAM) Approach	Quantitative	Perceived Usefulness Perceived Ease of Use Acceptance of the SAP system	Technology Acceptance Model (TAM)	There is a significant positive influence between perceived ease of use and perceived usefulness towards the acceptance of the SAP system.
10	Zhou et al., 2024	A study on smart home use intention of elderly consumers based on technology acceptance models	Quantitative	Characteristics of older adults, cost of product services, technological factors, privacy risks, ease of interaction process, and psychological perception of	Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT)	Perceived Usefulness (PU) significantly influences Usage Intention (UI) Perceived Ease of Use (PEOU) has a positive effect on UI

				usefulness		
11	Nusandari et al., 2022	*Analisis Kesuksesan Pengguna Tangerang Live menggunakan Information System Success Model (ISSM)*	Quantitative	System quality, information quality, service quality, user satisfaction, use, and net benefits	Information System Success Model (ISSM)	The study found that system quality, information quality, and service quality have a positive and significant impact on user satisfaction and use
12	Rizqi et al., 2022	*Implementasi Layanan Pendidikan pada Aplikasi Tangerang Live dalam Menunjang Pelayanan Pendidikan di Kota Tangerang*	Qualitative			Most of the people strongly agree and support the educational services on the Tangerang Live Application.
13	Wahyu Dwi Hidayat, 2022	*Analisis inovasi pelayanan publik berbasis aplikasi tangerang live di kota tangerang*	Qualitative	Relative Advantage, Compatibility, Complexity, Triability, and Observability	Roger's Theory	The findings of the research indicate that the implementation of the Tangerang City Public Service Innovation has been successful.
14	Fauzi et al., 2023	Strategi *Komunikasi Pemerintah Kota Tangerang Untuk*	Qualitative			The results of this study show that the Tangerang City Government has issued an application called Tangerang Live, as a means of communication between the

		Memberikan Informasi Kepada Masyarakat Melalui Aplikasi Tangerang Live				Tangerang City Government and the community.
15	Isbandi et al., 2022	*Implementasi Fitur Laksa Pada Aplikasi Tangerang Live Sebagai Layanan Aspirasi Masyarakat Tangerang*	Qualitative			The results of the study show that the LAKSA feature in its management works quickly and measurably, this is a good performance of the Tangerang City Government to always build the credibility of the Government and can directly build the image of Tangerang City in implementing E-Government in the Tangerang City Government.

While several studies explore technology acceptance and user experience, this research offers a distinct perspective by focusing on the behavioral intention to use the Tangerang Live application within the Technology Acceptance Model (TAM) framework. This study investigates user intention to utilize the entire Tangerang Live program, employing TAM to understand the factors influencing this intention. This is in contrast to other studies that apply TAM to different technologies. For example, Faturohman et al. (2021) explored TAM in the context of COVID-19 vaccine acceptance, Kumajas et al. (2021) examined TAM in e-commerce acceptance, and Wahidin et al. (2021) analyzed TAM in the adoption of enterprise software. None of these studies specifically addressed the acceptance of a municipal public service application like Tangerang Live. Moreover, previous analyzes of Tangerang Live, such as those by Nusandari et al. (2022), focused on user satisfaction and the impact of specific functionalities within the application using different models such as the Information System Success Model (ISSM). Qualitative studies by Hidayat (2021), Rizqi et al. (2022), and Fauzi et al. (2023), delved into public perception, communication strategies, and service innovation related to Tangerang Live, rather than examining user intention through TAM.

This study likely employs a quantitative approach, using questionnaires to gather data on perceived usefulness, perceived ease of use, and behavioral intention to use Tangerang Live. This methodological choice sets this research apart from previous studies, which utilized a variety of methodologies. For example, Kumajas et al. (2021), Wahidin et al. (2021), and Zhou et al. (2024) conducted quantitative surveys, while Arvie & Tanaamah (2019), Hidayat (2021), and Rizqi et al. (2022) relied on qualitative observations, interviews, and document analysis. Additionally, Fauzi et al. (2023) performed literature reviews to explore communication strategies and service innovation.

This study also significantly contributes to the understanding of user adoption of Tangerang Live by directly investigating the factors influencing behavioral intention through the TAM framework. This approach provides a comprehensive look at user behavior and acceptance, offering insights that are directly applicable to improving the application and enhancing user engagement. In contrast, previous studies provided valuable insights into user experience, satisfaction with specific functionalities, communication strategies, and the role of Tangerang Live in public service innovation. However, they did not focus specifically on understanding behavioral intention through TAM, which is the unique aspect of your research.

1.5.2 Definition of Analysis

According to Sugiyono (2019), analysis is the process of systematically searching for and compiling facts or information obtained through observation or experimentation into logical conclusions. This perspective emphasizes the systematic and methodical nature of analysis, where facts are gathered and organized to form coherent conclusions. Meanwhile, according to Miles et al. (2014), analysis is the process of organizing data, recognizing patterns, and finding meaning in it. This view focuses on the organization and interpretation of data to uncover patterns and derive meaning. It highlights the importance of data organization and pattern recognition in the analysis process. Moreover, Moleong (2005) said that analysis is the process of breaking down a research object into smaller elements which are then interpreted. This perspective emphasizes the breaking down of complex research objects into smaller, more manageable components, which are then analyzed and interpreted to gain a deeper understanding. Another opinion says that analysis is a process for solving problems into interconnected parts (Keraf, 1984). This perspective highlights the problem-solving nature of analysis, where complex problems are broken down into smaller, interconnected parts to facilitate understanding and solution.

From the definitions of these experts, we can conclude that analysis is a systematic process, where analysis involves structured and planned steps to achieve certain goals. And also analysis is the process of parsing information, namely the data or information obtained is broken down into smaller components to be understood in depth. In addition, it involves looking for patterns and meaning, we try to find relationships between components and the meaning contained therein. Lastly, analysis also draws conclusions, where the results of the analysis are used to draw logical and meaningful conclusions

1.5.3 Definition of Public Service

Public services are an integral aspect of the government system which aims to meet people's needs effectively and efficiently. This concept involves providing a wide range of quality services to citizens without discrimination, as well as ensuring accountability and transparency in their implementation (Hood, 1991). The quality of public services can be assessed from several dimensions, including responsiveness, reliability, assurance, empathy, and tangibility (Parasuraman et al., 1985). Responsiveness refers to the ability of government agencies to provide services quickly and responsively to community needs, while reliability includes the ability to provide services as promised. Assurance refers to the public's trust in the consistency and reliability of services provided by the government. Empathy is the ability to understand and respond to individual needs personally, while tangibility indicates the availability of adequate physical facilities and equipment to provide services.

There are various models used in providing public services, including the traditional model, the New Public Management (NPM) model, and the Good Governance model (Osborne & Gaebler, 1992). The traditional model emphasizes bureaucracy and hierarchy in the delivery of public services, while NPM emphasizes efficiency, accountability and market orientation. The Good Governance Model emphasizes principles such as community participation, transparency and good accountability in managing public services. The development of information and communication technology has had a significant impact on the provision of public services (Norris, 2001). The use of this technology allows governments to increase the efficiency, accessibility and responsiveness of public services, as well as facilitate public participation in decision-making processes (Chadwick, 2006).

Public service user satisfaction is an important indicator in evaluating the quality of services provided by the government (Westbrook, 1980). This satisfaction is influenced by the individual's perception of the quality of service received and the extent to which their expectations are met (Parasuraman et al., 1988). Measuring public service performance is an important step in evaluating the effectiveness and efficiency of service provision (Harry, 1999). Some commonly used measurement methods include the Balanced Scorecard, Government Performance and Results Act (GPRA), and Key Performance Indicators (KPIs).

Based on definitions from experts, public services can be understood as a systematic government effort to provide various services to the community fairly, effectively and efficiently. The concepts of service quality, delivery models and performance measurement are key points in understanding the dynamics of public services. In the digital era, information and communication technology plays an important role in increasing the accessibility and responsiveness of services, while human values such as empathy and social responsibility also need to be considered. In facing the challenges and opportunities in the digital era, a balanced approach between technology and human values is needed to ensure the relevance and optimal benefits of public services for society.

1.5.4 Technology Acceptance Model (TAM)

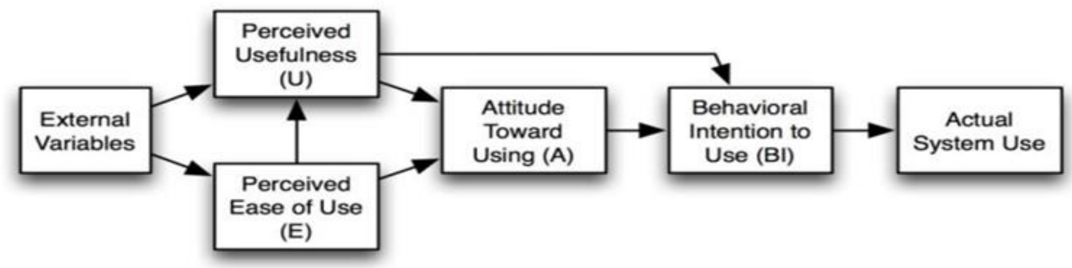
The Technology Acceptance Model (TAM) was developed by Davis in 1989 and has become a widely trusted framework for understanding user acceptance of information technology. The TAM posits that perceived usefulness (PU) and perceived ease of use (PEOU) are critical determinants of an individual's intention to use and actual usage behavior of a technology. PU refers to the extent to which an individual believes that using a particular technology will enhance their performance, while PEOU refers to the degree to which an individual perceives that using the technology will be free of effort. These perceptions influence an individual's attitude towards the technology, which in turn shapes their behavioral intentions and actual usage.

According to Gefen et al. (2003), to date TAM is the most widely used model in predicting information technology acceptance. The aim of this model is to explain the main factors of information technology user behavior towards acceptance of the use of information technology itself. The TAM model explains in more detail the acceptance of information technology with certain dimensions that can influence the ease with which information technology is accepted by users. The Technology Acceptance Model (TAM) defines two perceptions of technology users that have an impact on their acceptance.

TAM has two sides, namely the first side which consists of perceived usefulness and ease of use and the second side which consists of attitude toward using, behavioral intention to use (interest in use) and actual use. TAM is used to explain the factors that influence user acceptance of new technology (Firdaus et al., 2022). In accordance with the term TAM, "A" is acceptance, so it can be said that TAM is an analytical model to determine user behavior regarding technology acceptance (Fatmawati, 2015).

The TAM concept is based on the theory (TRA) developed by Fishbein & Ajzen (1975). In TAM, user acceptance of an information system is determined by two main factors, namely perceived usefulness and ease of use. Fishbein & Ajzen (1975) stated that TRA assumes that behavior is based on the individual's intention to engage in certain actions. The TAM concept was developed by Davis et al. (1989), who proposed the theory as a basis for studying and understanding user behavior in receiving and using information systems. There are 5 variables used in TAM research, namely Perceived Ease to Use, Perceived Usefulness, Attitude Toward Using, Behavioral Intention to Use and Actual Use (Iqbal & Arisman, 2019). The following is a form of the Technology Acceptance Model (TAM) model which can be seen in the image below:

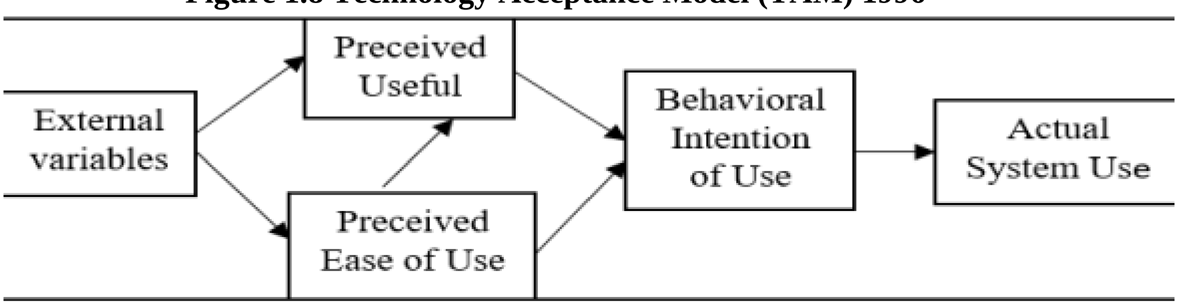
Figure 1.7 Technology Acceptance Model (TAM) 1989



Sources: Davis et al (1989)

Then Venkatesh and Davis in 1996 made modifications to TAM to adapt to technological developments. The modification made by them was to eliminate one variable, namely attitude towards using, which can be seen in the image below:

Figure 1.8 Technology Acceptance Model (TAM) 1996



Sources: Venkatesh & Davis (1996)

1.5.5 Perceived Usefulness (PU)

In the Indonesian Dictionary, the word “perception” is defined as a direct response or reception of something or the process of someone knowing several things through the five senses. Individuals act based on their perceptions without paying attention to whether these perceptions are accurate or inaccurate in describing reality. Explanations of reality may be very different from one individual to another. The presence of technology will be perceived differently by someone. There are people who think this technology will provide convenience and benefits, but there are also those who think otherwise. User acceptance of technology is determined by two types of motivation, namely intrinsic motivation and extrinsic motivation (Permana et al., 2021). Intrinsic motivation arises because of the expectations felt by the individual himself from the results of interacting with an information technology system application. Meanwhile, extrinsic motivation arises because of expectations regarding the use of certain information technology system applications received from outside, namely rewards for improving performance.

Apart from that, Venkatesh et al. (2003) agreed In the Unified Theory of Acceptance and Use of Technology (UTAUT), perceived usefulness is closely related to the "performance expectancy" construct, defined as the degree to which an individual believes that using the system will help him or her attain gains in job performance. Meanwhile, Gefen & Straub (2000) stated that perceived usefulness is described as the degree to which a person believes that using a particular system would improve the performance of his or her tasks. This construct is critical for understanding the adoption of e-commerce and other online systems.

Davis et al. (1989) defines perceived benefits as the degree to which a person believes that using a particular system would enhance his or her job performance.

Perceived usefulness is defined as a measure of the user of a technology. It is believed to bring benefits to people who use it (Davis in Wibowo, 2007). Based on this definition, it can be interpreted that the benefits of using information technology can improve the performance and work performance of people who use it. This structure influences the usability, attitudes, intentions, and structure of actual technical users. However, the most significant impact is on the usability of the structure, while the impact on other structures is not significant (Jogiyanto, 2008). According to Thompson et al. (1991), the benefits of information technology are the benefits expected by information technology users in carrying out their duties. The measurement of these benefits is based on the frequency of use and diversity of applications being run. Thompson et al. (1991) also stated that individuals will use information technology if they know the positive benefits of using it.

In this case, this measures the extent to which individuals believe that using the "Tangerang Live" application will improve their performance in completing tasks or activities related to public services in Tangerang City. For example, do they believe that this application will make it easier for them to get the information or services they need.

1.5.6 Perceived Ease of Use (PE)

Perceived Ease of Use is the level of user confidence that the system can be easily used and understood (Davis et al., 1989). Ease of use depends on people's trust in computers that are easy to understand and computer systems that are easy to understand, operate, and use (Lee & Wan, 2010). Indicators of perceived ease of use include:

1. Information technology that is easy to learn
2. Easily skilled in the use of information technology
3. Information technology is very easy to operate.

According to Venkatesh & Davis (2000), perceived ease of use refers to the extent to which a person believes that using a system will be free of effort. It influences user acceptance by affecting perceived usefulness and attitudes toward using the system. It means that it is a person's belief that using information technology is easy and the user does not need to make much effort to use it. The perception of ease provides an indication that a system is designed not to make things difficult for the user but instead to make it easier for someone to complete their work. Apart from that, Moore & Benbasat (1991) agreed that perceived ease of use as the degree to which a person believes that using a particular system would enhance his or her job performance by making the system easy to use. It highlights the user’s perception of the simplicity and effortlessness associated with the system.

This means that someone who uses the system works more easily than someone who doesn't use the system, so the system here helps make the user's work easier. From the explanation of the definition above, it can be concluded that convenience is someone who believes using a system can make their work easier. According to Davis, dividing ease of use indicators into four indicators, namely easy to learn, flexible, controllable, easy to use.

Other opinions include Rigopoulos & Askounis (2007) and Yahyapour (2008) have also found that perceived ease of use can be measured through clear indicators, such as easy to learn, flexible, clear and easy to master, and easy to use. Clear means that users do not experience confusion when using application services because the appearance is clear. Meanwhile, easy to understand means that users can easily learn the application services and not make mistakes when using them. And easy to master means that users can quickly master the application by themselves without needing help from other people.

The four indicators put forward by Davis represent what can be measured in terms of the ease of use of a technology. Someone uses a technology not only because of its conveniences, such as being easy to learn, understand, and use, but also because of how the technology can help the user's activities/work and is flexible or adapts to the user's needs in using the technology. It can be concluded that perceived ease of use will reduce a person's effort (both time and energy) in studying information technology. This comparison of ease provides an indication that people who use the new system work more easily compared to people who work with the old system. Users believe that information technology is more flexible, easy to understand and easy to operate (compartible) as characteristics of ease of use.

In this case, this measures the extent to which individuals believe that using the "Tangerang Live" application will be relatively easy and will not require excessive effort. For example, do they feel that the app has an intuitive and easy to understand interface.

1.5.7 Behavioral Intention of Use (BU)

Behavioral intention to use is a person's tendency or desire to use an information system (Davis et al., 1989). The behavioral intention of use has an influence on the actual use of technology and is influenced by attitudes and usability. There are two indicators to measure the intention construct, namely the use of the system to complete work (carrying out the task) and the use of planned utilization in the future (Gardner & Amoroso, 2004). Moreover, behavioral Intention to Use (BIU) is defined as a person's desire or interest in carrying out a behavior (Iqbal & Arisman, 2019). Moreover, in his Theory of Planned Behavior, Ajzen (1991) defines behavioral intention as an individual's readiness to perform a given behavior. It is considered an immediate antecedent of behavior and is influenced by attitudes toward the behavior, subjective norms, and perceived behavioral control.

While according to Fishbein & Ajzen (1975), in their Theory of Reasoned Action, Fishbein and Ajzen describe behavioral intention as the motivational factors that influence a given behavior. They propose that intention is a function of the individual's attitude toward the behavior and subjective norms. In addition, Triandis

(1980) in his theory of interpersonal behavior, defines behavioral intention as a function of attitudes, social factors, and habits. He emphasizes that intentions are influenced by the anticipated consequences of the behavior, the affect associated with the behavior, and the perceived social pressure.

The factors that influence the behavioral intention includes an individual's attitude towards technology is the positive or negative evaluation of using that technology. Fishbein & Ajzen (1975) assert that this attitude is shaped by beliefs and knowledge about the technology, as well as past experiences with it. Moreover, subjective norms also play a vital role as a factor of behavioral intention, which refers to an individual's perception of the views of important people around them regarding whether they should use the technology. Fishbein & Ajzen (1975) note that the influence of friends, family, and colleagues can affect an individual's intention to use technology. Lastly, perceived behavioral control encompasses an individual's belief in their ability to use technology and overcome potential obstacles. According to Ajzen (1991), this factor includes technical skills, access to resources, and support from the surrounding environment.

Behavioral intention is a key concept in understanding and predicting human behavior, defined as an individual's motivational readiness to perform a specific behavior. It serves as an immediate antecedent to action, reflecting a combination of personal attitudes toward the behavior, perceived social pressures (subjective norms), and perceived control or feasibility of performing the behavior. Various experts highlight different aspects: Ajzen emphasizes the role of attitudes, subjective norms, and perceived control; Fishbein and Ajzen focus on motivational factors arising from attitudes and social influences; Triandis considers the interplay of attitudes, social factors, and habits; Bagozzi and colleagues integrate desire and feasibility as self-instructions to act; and Schwarzer positions it as a precursor to planning and action in health behavior change. Collectively, these perspectives underscore that behavioral intention encapsulates the motivational basis from which actual behavior emanates, influenced by a complex interplay of cognitive, social, and emotional factors.

1.5.8 Actual System Use (AU)

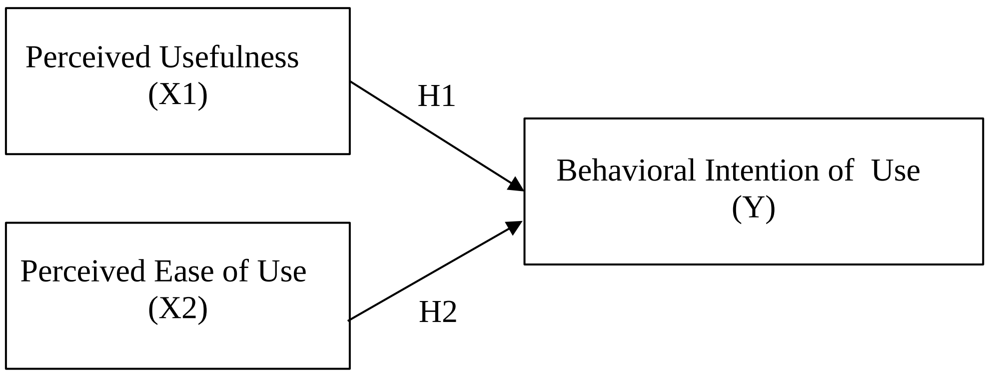
Actual system use is defined as a person's actions, in the context of information technology use, actual user behavior is usually measured by the amount of time used and frequency of use. Actual use is measured based on the influence of other constructs, and from the measurement results, it can be seen whether the application of technology can be accepted or rejected. According to Davis et al. (1989), in his work on TAM, actual system use is defined as a form of external psychomotor response that is measured by a person with actual use. Simply put, actual system use is seen as the user's real behavior in using the system. Meanwhile, Wibowo (2006) conceptualizes actual system use as a measurement of the frequency and duration of technology use. The focus is on how often and for how long the user interacts with the system.

According to Delone & McLean (2003), in their information systems success model, DeLone and McLean define actual system use as a direct measurement of the interaction between users and the information system. They consider system use as a key component in determining the success of an information system. Meanwhile, according to Venkatesh et al. (2003), in the UTAUT (Unified Theory of Acceptance and Use of Technology) model, Venkatesh and his colleagues define actual system use as the user's actual actions in using information technology. They emphasize that actual use is the result of intentions to use technology that are influenced by various factors such as performance expectations, effort expectations, and social influences. Moreover, Straub et al. (1995) define actual system use as behavior that shows the frequency, duration, and intensity of information system use. They suggest that actual usage should be measured objectively to understand the extent to which the system is used by users.

Based on the definitions from the experts mentioned, actual system use can generally be defined as the user's real actions in interacting with an information system, which includes the frequency, duration, and intensity of use of the system. This actual use reflects the extent to which information systems are used in the context of daily tasks and work, and is a key indicator of the success and effectiveness of implementing information technology in organizations or by individuals. Measuring actual system use is important to understand the impact of information systems on performance and productivity, as well as the match between the technology used and the user's task requirements.

1.6 Hypothesis

Figure 1.9 Research Hypothesis



H1: There is a significant positive influence between perceived usefulness towards intention to use the Tangerang Live application among the people of Tangerang City.

H2: There is a significant positive influence between perceived ease of use towards the intention to use the Tangerang Live application among the people of Tangerang City.

1.6.1 The Influence of Perceived Usefulness (X1) towards Behavioral Intention of Use (Y1)

Davis et al. (1989) found that perceived usefulness has a significant direct influence on intention to use technology. Individuals who feel that a technology is useful will be more likely to intend to use it on an ongoing basis. Venkatesh & Davis (2000) in developing the TAM2 model also confirmed that PU remains a strong predictor of usage intentions even after considering other social and cognitive factors.

The relationship between Perceived Usefulness (PU) and Behavioral Intention to Use (BI) is very significant and is often discussed in the context of technology acceptance models, especially in the Technology Acceptance Model (TAM) developed by Davis et al. (1989). Perceived Usefulness is defined as the extent to which a person believes that using a particular system will improve his or her job performance Davis et al. (1989). PU includes the perception that certain technologies will make their tasks easier, increase efficiency, and make work more effective. Meanwhile, Behavioral Intention to Use is a person's intention to use a system or technology in the future (Davis et al., 1989). BI includes the user's intention and willingness to actually use the technology or system in daily activities.

In TAM, PU is one of the main determinants of BI. Davis et al. (1989) suggested that the higher the PU for a technology, the greater the likelihood that individuals will have the intention to use it. This influence mechanism is based on the belief that if users believe that the technology will help them work better or more efficiently, they will be more likely to intend to use it. PU can influence BI directly, where perceived benefits directly increase the intention to use, and also indirectly by influencing attitudes towards using technology (Attitude Toward Using, ATU) which in turn influences BI. Many empirical studies have supported a positive relationship between PU and BI. For example, a study by Venkatesh & Davis (2000) shows that PU is a significant and positive predictor of BI in various technological contexts, such as e-learning, management information systems, and mobile applications. A better understanding of the PU and BI relationship helps technology developers and marketers design and promote systems that are more effective and meet user needs. Moreover,

As a practical example, in the implementation of a new system in a company, if employees feel that the new system will make their work easier and increase productivity, they are more likely to accept and use the system. Likewise, mobile app users who feel that the app will make it easier for them to complete daily tasks, such as online banking or time management, are more likely to download and use the app. Thus, the relationship between Perceived Usefulness (PU) and Behavioral Intention to Use (BI) is a significant relationship where positive perceptions of the usefulness of a technology or system increase the user's intention to use it, becoming the basis for many technology development and adoption strategies in various fields (Davis et al., 1989; Venkatesh & Davis, 2000).

1.6.2 The Influence of Ease of Use (X2) towards Behavioral Intention of Use (Y)

The relationship between Ease of Use and Behavioral Intention to Use is also an important aspect in technology acceptance models, especially in the Technology Acceptance Model (TAM) developed by Davis et al. (1989). Ease of Use is defined as the extent to which a person believes that using a particular system will be free of effort (Davis et al., 1989). Ease of use includes the user's perception that the technology is easy to learn and use, and does not require excessive effort to operate. Behavioral Intention of Use is a person's intention to use a system or technology in the future

(Davis et al., 1989). BI includes the user's intention and willingness to actually use the technology or system in daily activities. In TAM, ease of use is one of the main determinants of BI, both directly and indirectly through its influence on perceived usefulness (PU).

(Davis et al., 1989) suggested that the higher the ease of use of a technology, the greater the likelihood that individuals will have the intention to use it. This influence mechanism can occur directly, where perceived ease of use increases the intention to use the technology. In addition, perceived ease of use can also influence behavioral intention of use indirectly by increasing perceived usefulness. If users find technology easy to use, they are more likely to view it as useful, which in turn improves BI (Venkatesh & Davis, 2000). Many empirical studies have supported a positive relationship between ease of use and behavioral intention of use. For example, (Venkatesh & Davis, 2000) showed that ease of use is a significant predictor of BI in various technological contexts, such as e-learning, management information systems, and mobile applications. This study shows that users tend to be more accepting and intentional about using technology that they perceive as easy to use, because this perceived ease reduces barriers to technology adoption.

As a practical example, in the implementation of new software in a company, if employees feel that the software is easy to learn and use, they are more likely to have the intention to use the software. This also applies to the use of mobile applications, where users who find the application easy to use will be more likely to download and use the application regularly. Thus, the relationship between Ease of Use and Behavioral Intention of Use is a significant relationship where positive perceptions of the ease of use of a technology or system increase the user's intention to use it. Understanding these relationships helps technology developers and marketers design and promote systems that are not only useful but also easy to use, thereby increasing the adoption and use of technology in various fields (Davis et al., 1989; Venkatesh & Davis, 2000).

1.7 Concept Definition

1.7.1 Perceived Usefulness

Perceived usefulness is the extent to which someone believes that using a system can improve their performance (Venkatesh & Davis, 2000).

1.7.2 Perceived Ease of Use

Perceived ease of use refers to the user's perception where the user feels that the application is easy to use (Venkatesh & Davis, 2000).

1.7.3 Behavioral Intention of Use

Behavioral intention of use is a person's tendency or desire to use an information system (Davis et al., 1989).

1.8 Operational Definition

Table 1.2 Operational Definition

Variable	**Indicators**	**Questionnaire Items**	**Measurement Scale**	**References**
Perceived Usefulness (X1)	Making Job Easier (PU1)	The "Tangerang Live" application makes it easier for me to access and complete public service tasks.	Scale 1-4: 1 = Strongly disagree 4 = Strongly agree	D. Kurniasih, P. I. Setyoko, and M. N. Huda, “Insights into Mobile Government Adoption Factors: A Comprehensive Analysis of Peduli Lindungi Application in Indonesia”, CommIT Journal 18(1), 53–65, 2024.
	Increasing Productivity (PU2)	I can process more public service requests and applications in a shorter time using the application.	Scale 1-4: 1 = Strongly disagree 4 = Strongly agree	D. Kurniasih, P. I. Setyoko, and M. N. Huda, “Insights into Mobile Government Adoption Factors: A Comprehensive Analysis of Peduli Lindungi Application in Indonesia”, CommIT Journal 18(1), 53–65, 2024.
	Enhancing Effectiveness (PU3)	Using the "Tangerang Live" application makes me more effective in utilizing existing public services.	Scale 1-4: 1 = Strongly disagree 4 = Strongly agree	D. Kurniasih, P. I. Setyoko, and M. N. Huda, “Insights into Mobile Government Adoption Factors: A Comprehensive Analysis of Peduli Lindungi Application in Indonesia”, CommIT Journal 18(1), 53–65, 2024.
	Being Useful (PU4)	I feel that the "Tangerang Live" application provides significant benefits in my daily life, especially regarding the public services they provide	Scale 1-4: 1 = Strongly disagree 4 = Strongly agree	D. Kurniasih, P. I. Setyoko, and M. N. Huda, “Insights into Mobile Government Adoption Factors: A Comprehensive Analysis of Peduli Lindungi Application in Indonesia”, CommIT Journal 18(1), 53–65, 2024.

	Improving Job Performance (PU5)	The "Tangerang Live" application contributes positively to my performance in meeting my needs, without having to go back and forth to the public service provider's office	Scale 1-4: 1 = Strongly disagree 4 = Strongly agree	D. Kurniasih, P. I. Setyoko, and M. N. Huda, "Insights into Mobile Government Adoption Factors: A Comprehensive Analysis of Peduli Lindungi Application in Indonesia", CommIT Journal 18(1), 53–65, 2024.
Perceived Ease of Use (X2)	Being easy to learn (PE1)	I don't find it difficult to understand how to use the "Tangerang Live" application	Scale 1-4: 1 = Strongly disagree 4 = Strongly agree	D. Kurniasih, P. I. Setyoko, and M. N. Huda, "Insights into Mobile Government Adoption Factors: A Comprehensive Analysis of Peduli Lindungi Application in Indonesia", CommIT Journal 18(1), 53–65, 2024.
	Being easy to become skilful (PE2)	I quickly mastered the use of the "Tangerang Live" application	Scale 1-4: 1 = Strongly disagree 4 = Strongly agree	D. Kurniasih, P. I. Setyoko, and M. N. Huda, "Insights into Mobile Government Adoption Factors: A Comprehensive Analysis of Peduli Lindungi Application in Indonesia", CommIT Journal 18(1), 53–65, 2024.
	Being easy to use (PE3)	I feel comfortable using the "Tangerang Live" application	Scale 1-4: 1 = Strongly disagree 4 = Strongly agree	D. Kurniasih, P. I. Setyoko, and M. N. Huda, "Insights into Mobile Government Adoption Factors: A Comprehensive Analysis of Peduli Lindungi Application in Indonesia", CommIT Journal 18(1), 53–65, 2024.
	Being adaptable (PE4)	The "Tangerang Live" application can be tailored to my needs	Scale 1-4: 1 = Strongly disagree 4 = Strongly agree	D. Kurniasih, P. I. Setyoko, and M. N. Huda, "Insights into Mobile Government Adoption Factors: A Comprehensive Analysis of Peduli Lindungi Application

				in Indonesia", CommIT Journal 18(1), 53–65, 2024.
	Being clear and understandable (PE5)	The instructions and information provided by the "Tangerang Live" application are very clear and easy to understand	Scale 1-4: 1 = Strongly disagree 4 = Strongly agree	D. Kurniasih, P. I. Setyoko, and M. N. Huda, "Insights into Mobile Government Adoption Factors: A Comprehensive Analysis of Peduli Lindungi Application in Indonesia", CommIT Journal 18(1), 53–65, 2024.
Behavioral Intention of Use (Y)	Having intention to use (BIU1)	I have a strong intention to use the "Tangerang Live" application	Scale 1-4: 1 = Strongly disagree 4 = Strongly agree	D. Kurniasih, P. I. Setyoko, and M. N. Huda, "Insights into Mobile Government Adoption Factors: A Comprehensive Analysis of Peduli Lindungi Application in Indonesia", CommIT Journal 18(1), 53–65, 2024.
	Having prediction to use (BIU2)	I am sure that I will consistently use the "Tangerang Live" application in the future	Scale 1-4: 1 = Strongly disagree 4 = Strongly agree	D. Kurniasih, P. I. Setyoko, and M. N. Huda, "Insights into Mobile Government Adoption Factors: A Comprehensive Analysis of Peduli Lindungi Application in Indonesia", CommIT Journal 18(1), 53–65, 2024.
	Having plan for future use (BIU3)	I have set a clear goal to use the "Tangerang Live" application in my future activities	Scale 1-4: 1 = Strongly disagree 4 = Strongly agree	D. Kurniasih, P. I. Setyoko, and M. N. Huda, "Insights into Mobile Government Adoption Factors: A Comprehensive Analysis of Peduli Lindungi Application in Indonesia", CommIT Journal 18(1), 53–65, 2024.

1.9 Research Methods

1.9.1 Research Types

The research used in this thesis is quantitative approach. Sugiyono (2015) revealed that quantitative research is a research that uses data in the form of numbers with statistical analysis. Then this research approach uses explanatory research methods, namely research that explains the relationship between the variables studied through hypothesis testing (Singarimbun & Effendi, 2011). This research aimed at testing a theory or hypothesis in order to strengthen or even reject a theory or hypothesis resulting from previously existing research. This research focuses on the influence between the perceived usefulness (X1) and perceived ease of use (X2) variables as independent variables and the behavioral intention of use (Y) variable as the dependent variable.

1.9.2 Population and Sample

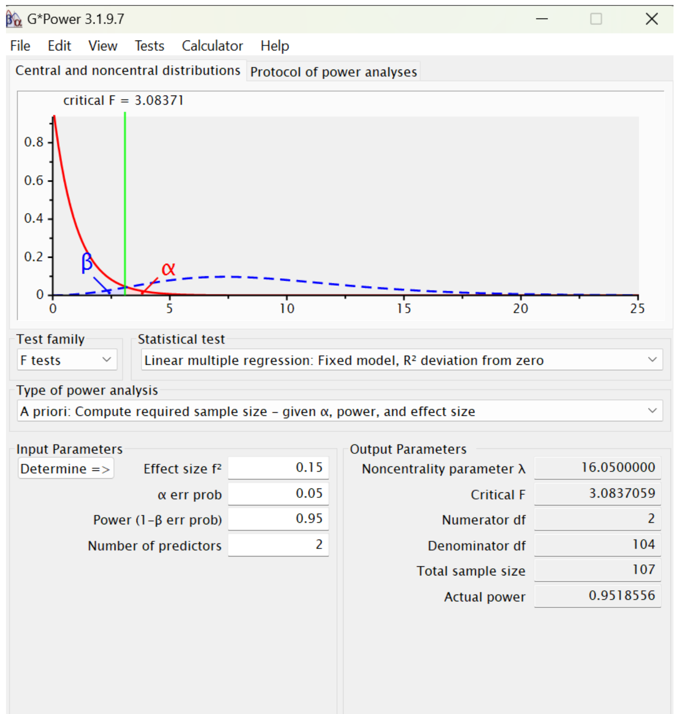
1.9.2.1 Population

According to Kuncoro (2003), population is a complete group of elements, which are usually people, objects, transactions or events that we are interested in studying or becoming research objects. Apart from that, according to Sugiyono (1997), population is a generalized area consisting of objects or subjects which constitute certain quantities and characteristics determined by researchers to be studied and then conclusions drawn. The population in this research is all residents of Tangerang City who have internet access and smartphones, and use the "Tangerang Live" public service application

1.9.2.2 Sample

According to Hair et al. (2013), the sample size plays a crucial role in Partial Least Squares Structural Equation Modeling (PLS-SEM), where the size is often determined by applying the "10 times rule." This rule states that the sample size should be 10 times the largest number of formative indicators or the largest number of structural paths directed at a particular construct in the model. Alternatively, a more rigorous approach would be conducting a power analysis using tools like G*Power to ensure sufficient statistical power for detecting significant effects. In this research, the exact population size of Tangerang Live application users is not known. Therefore, G*Power is used to calculate the sample size.

Figure 1.10 G Power Application Number of Sample



Sources: G Power Application

Based on the G Power application as a tool for determining the number of samples for this research, the number of samples used for this research was set at 107 respondents.

1.9.3 Sampling Techniques

For the thesis entitled "Analysis of Intentions to Use the Public Service Program Based on the 'Tangerang Live' Application among Communities in Tangerang City Using the Technology Acceptance Model", researcher uses a non-probability sampling technique, where in this technique each member of the population is not given the same opportunity to be selected as a sample (Sugiyono, 2007). Meanwhile, the sampling method used is the purposive and convenience sampling, where sample determination is carried out with certain considerations. According to Sugiyono (2019), this technique is used with certain considerations, meaning that sampling is based on certain considerations or criteria that have been formulated in advance by the researcher. The researcher will determine the criteria first before taking the sample that will be used. The criteria for respondents who can be used as samples in this research are as follows:

1. Respondents must be a Tangerang City Citizen.
2. Respondents must have used the "Tangerang Live" application.
3. Respondents must be at least 17 years old

Sampling will be carried out by giving questionnaires to users of the "Tangerang Live" application in Tangerang City.

1.9.4 Data Types and Sources

1.9.4.1 Data Types

Sugiyono (2015) differentiates data into two types, namely qualitative data and quantitative data. This research uses quantitative data, namely data in the form of numbers, or data derived from qualitative data that is calculated. The quantitative data obtained from this research comes from answers to questionnaires distributed to respondents

1.9.4.2 Data Sources

1. Primary Data

According to Hair et al. (2013), these are data collected firsthand by the researcher for the specific purpose of the study. Typically, primary data is obtained through surveys, questionnaires, interviews, or direct observations tailored to address the research questions at hand. The researchers obtained primary data by distributing questionnaires to people who used the "Tangerang Live" application in Tangerang City.

The researchers will collect primary data by distributing structured questionnaires to residents of Tangerang City who have used the "Tangerang Live" application. The questionnaire will be designed to capture respondents' perceptions, experiences, and intentions related to the application. It will be distributed both online, through digital platforms like email or social media, and in-person, targeting public areas where users are likely to be found. Respondents will be asked to participate by answering questions related to their frequency of use, satisfaction, and perceived usefulness of the app. The questionnaire will include closed-ended questions with Likert scale responses, ensuring the data is quantifiable for further analysis.

2. Secondary Data

According to Hair er al. (2013), secondary data refers to data that has been previously collected and is readily available, often from databases, previous research, or governmental records. This data is repurposed by the researcher to provide context or support for the research but was not originally collected for the study being conducted. In this research, secondary data collection will involve a thorough review of various reputable sources such as books, theses, scientific articles, research journals, and credible internet resources. The researchers will systematically search academic databases, libraries, and online platforms for literature and studies relevant to the "Tangerang Live" application and the Technology Acceptance Model (TAM). These secondary sources will provide theoretical insights, support the primary data findings, and help in understanding the broader context of digital public services. The collected secondary data will complement the primary data by offering existing research perspectives and enhancing the overall depth of the study.

1.9.5 Measurement Scale

Determining the scale of the research needs to be determined first before conducting the research. This research will use a Likert scale as a measurement scale. The Likert scale is used in self-report type research, which will measure the respondent's level of agreement or disagreement with the issue being studied. According to Sugiyono (2015), the use of the Likert scale in research is to measure attitudes, opinions, and perceptions of the social phenomenon being studied. This social phenomenon had previously been specifically defined by researchers and was referred to as a research variable. The research variables are then measured and described in variable indicators, which are then measured using a Likert scale as a starting point for compiling questionnaire items.

By using a Likert scale, answers will be given a value as in the table below with adjustments to the answer options according to the question or statement asked:

Table 1.3 Likert Scale

Information	Score
Strongly Disagree	1
Disagree	2
Agree	4
Strongly Agree	5

1.9.6 Data Collection Techniques

Data collection techniques are processes used as an effort to obtain information for further processing. In quantitative research, data collection techniques can be carried out in several ways, namely questionnaires, interviews, observation, and a combination of the three (Sugiyono, 2013). This research used primary data collected from questionnaires and secondary data collected from sources such as articles, books, the internet, and other related sources. The data collection techniques used include:

1. Questionnaires

   According to Sugiyono (2013), a questionnaire is a set of written questions given to respondents for them to answer. The questionnaire method is the most efficient method, especially if the researcher knows exactly the variables being studied, and the number of respondents is quite large and spread over a wide area. This method is a survey by asking several questions or statements to a predetermined sample. Questionnaires were conducted to find data regarding respondents and data related to research variables. The questions presented are designed to capture information related to the research issue, with the aim that the data collected can make a significant contribution to this research. In this research, data was obtained from a questionnaire that was distributed to a number of people in Tangerang City who used the "Tangerang Live" application.

The researchers will gather primary data by distributing structured questionnaires to residents of Tangerang City who use the "Tangerang Live" application. The questionnaire aims to capture respondents' perceptions, experiences, and intentions regarding the app. It will be shared both online via email and social media, as well as in-person in public spaces where users are likely to be present. Participants will be invited to answer questions about their usage frequency, satisfaction, and perceived benefits of the application. The survey will consist of closed-ended questions using a Likert scale to ensure the data can be quantitatively analyzed.

2. Literature Review

Literature review is information that researchers use to obtain information relevant to research. This literature study is obtained through internet, books, thesis, scientific articles, and research journals that are relevant to this research.

In this research, a literature study was conducted regarding the Technology Acceptance Model, especially on the variables perceived usefulness, perceived ease of use, and user intention.

The literature review for this research will be conducted by systematically searching for and reviewing relevant sources, including books, theses, scientific articles, research journals, and credible online resources. The focus will be on gathering existing studies and theories related to the Technology Acceptance Model (TAM), specifically targeting the key variables: perceived usefulness, perceived ease of use, and user intention. Researchers will use academic databases and libraries to find materials that support the conceptual framework and help explain the relationship between these variables. This literature will serve as the theoretical foundation to guide the analysis and interpretation of the research findings.

1.9.7 Analysis Techniques

Data analysis techniques are methods or processes used to collect, process, and analyze data with the aim of finding patterns, identifying relationships, or concluding information that is useful for decision making. Data analysis includes various techniques that can be used depending on the purpose and type of data being analyzed, such as statistical analysis, descriptive, inferential, predictive, and so on. According to Gareth et al. (2013), data analysis is the process of evaluating data using analytical and logical reasoning to examine each component of the data provided. This is very important in research because it allows researchers to identify patterns, correlations, and trends in the data obtained (Gareth et al., 2013:10). In addition, Bryman (2016) emphasized that data analysis is an integral component of any quantitative and qualitative research, which involves collecting, presenting, and interpreting data to produce findings that can be used as a basis for decision making (Bryman, 2016:345).

1.9.7.1 Partial Least Square Test

The data analysis technique in this study utilized Structural Equation Modeling (SEM), supported by the statistical data processing software Smart PLS. According to Hair et al. (2014), this data analysis technique is employed to develop exploratory theories, identifying patterns and hypotheses from the collected data. It is frequently used to examine the influence of independent variables on dependent variables, such as Behavioral Intention to Use (Y) in this study, and to explore deeper relationships between variables. Moreover, according to Muniarti et al. (2013), PLS-SEM can be used to evaluate models involving latent variables that reflect behavioral constructs.

PLS does not require a specific distribution for parameter estimation, so parametric techniques for parameter significance testing are not needed. The measurement model using reflective indicators is evaluated through convergent and discriminant validity of the indicators and composite reliability for the indicator block. This ensures that the measuring instrument used is valid and reliable.

1.9.7.2 Outer Model Analysis (Measurement Model)

1.9.7.2.1 Validity Test

` According to Ghozali and Latan (2015), validity testing is a method used to assess the validity of a questionnaire. An instrument can be said to be valid if it is able to measure the variables studied. The definition of the variable must be clear so that the assessment of construct validity is easy to do. Usually, the definition is derived from a theory. If the definition is based on the right theory, and the questions of the test items are appropriate, then the instrument is said to be valid. A questionnaire is said to be valid if the questions on the questionnaire are able to reveal a variable being studied.

a. Convergent Validity

Convergent validity is a tool used to measure reflective validity as a variable measure, which can be seen through the outer loadings value of each variable indicator (Sugiyono, 2016). The measurement model with reflective indicators is assessed based on the correlation between item/component scores and construct scores calculated using PLS. According to Ghozali and Latan (2015), this individual reflection measure is considered valid if its loading factor is more than 0.70 with the construct to be measured. In addition, Hair et al. (2019) stated that factor loading greater than 0.5 indicates a significant contribution to the construct being measured. Factor loading above 0.5 is considered good for construct validity, while values below 0.5 may indicate that the indicator does not contribute sufficiently to the construct. Ghozali (2014) also supports this view by stating that factor loading higher than 0.5 indicates that the variable has a strong influence on the construct, and therefore, can be considered to be used in the model.

b. Discriminant Validity

This test is evaluated based on the cross loading of measurements with constructs, or in other words, assessing the level of prediction of latent constructs against their indicator blocks. To determine whether the prediction of latent variables against their indicator blocks is good or not, it can be seen from the square root value of the Average Variance Extracted (AVE). Predictions are considered to have a good AVE value if the square root value of AVE for each latent variable is greater than the correlation between latent variables. According to Henseler et al. (2015), this is an effective way to test discriminant validity.

c. Average Variance Extracted (AVE)

This test aims to assess the average communality of each latent variable in the reflexive model. The AVE value must be more than 0.50, which indicates that the latent factor is able to explain at least half of the variance of each indicator. According to Fornell and Larcker (1981), and reinforced by research by Hair et al. (2019), this ensures that the latent variable has adequate predictive power against its indicators.

1.9.7.2.2 Reliability Test

According to Ghozali and Latan (2015), Reliability testing is an analysis method used to measure a questionnaire that shows variables or constructs. A questionnaire is considered reliable if a person's response to the statement is consistent or stable over time. The reliability test that can be carried out in this study is Composite Reliability. This test aims to measure the internal consistency or reliability of the measurement model, with a value that must exceed 0.70. Composite reliability is an alternative method that is more accurate than Cronbach's alpha in testing reliability. According to Hair et al. (2016), composite reliability provides a more precise estimate than Cronbach's alpha.

1.9.7.3 Inner Model Analysis (Structural Model)

Inner Model analysis aims to understand the causal relationship between latent variables tested in a model. One way to assess the strength of the inner model is to use R-square. (Ghozali & Latan, 2015). R square is a value that shows how much the independent variable (exogenous) influences the dependent variable (endogenous). R squared is a number ranging from 0 to 1 which indicates the magnitude of the combination of independent variables together influencing the value of the dependent variable.

The R-squared value (R2) is used to assess how much influence a particular independent latent variable has on the dependent latent variable. There are three categories of grouping in the R square value, namely the strong category, the moderate category, and the weak category (Hair et al., 2011). Hair et al stated that an R square value of 0.75 is included in the strong category, an R square value of 0.50 is included in the moderate category and an R square value of 0.25 is included in the weak category (Hair et al., 2011).

The next step is to determine the significance of the relationship between variables using the bootstrapping method to analyze the parameter coefficient values and T-statistic values (Ghozali & Latan, 2015). The path coefficient is between -1 and 1, so the closer to the value +1 indicates a positive variable relationship, while the closer to the value 0, the negative variable relationship.

1.9.7.4 Hypothesis Testing

The explanatory research approach is generally used to describe and understand the causal relationship between variables in a phenomenon or event. Partial Least Square (PLS) is one of the statistical methods often applied in explanatory research to analyze the relationship between variables and test hypotheses (Muniarti et al., 2013). In PLS, hypothesis testing usually involves t-statistics and probability (p-value). In general, a t-statistic value greater than 1.96 (with a significance level of 0.05) indicates a significant relationship. Moreover, according to Hair et al. (2014), in hypothesis testing using PLS-SEM, a p-value of less than the specified level of significance (usually 0.05) indicates that the result is statistically significant. This means the researcher rejects the null hypothesis (H0) and accepts the alternative hypothesis (Ha). However, different thresholds (such as 0.10) may be used depending on the research design and the desired level of confidence.