

Digital Transformation of Local Government: Design and Development of the Pakuhaji District Community Service Information System Website



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Abstract

In the era of digital transformation, local governments are increasingly pursuing innovation to improve the quality of public services. This research aims to carry out digital transformation in the government of Pakuhaji District, Tangerang Regency, by designing and building an efficient and responsive public service information system website. Through a systems development approach, this research identifies community needs, evaluates existing service processes, and designs information technology-based solutions. The designed information system covers various aspects of community services, such as submitting correspondence, public service information, and managing population data. The use of web technology enables better accessibility for the public, increases administrative efficiency, and speeds up the handling of service requests. The application of responsive design principles and intuitive interfaces is also a focus in website development to ensure optimal user experience. The research methodology includes a community needs survey, analysis of existing service processes, and development of a website prototype. It is hoped that the results of this research can make a positive contribution to the effectiveness and efficiency of community services in Pakuhaji District, creating a local government that is more responsive and connected to the needs of its citizens. It is hoped that this digital transformation can become the basis for further development in realizing a technology-oriented government for the welfare of society.

Keywords: Digital Transformation, Information Systems, Web Technology, Public Services, Regional Government

1. Introduction

In an era dominated by advances in information technology, digital transformation has become an urgent imperative for government entities, including local governments throughout the world[1]. Understanding of the role of technology as the main catalyst in changing the public service paradigm has become increasingly widespread among local governments[2]. This change has raised awareness of the importance of utilizing information technology to improve efficiency, transparency and the quality of public services provided by government institutions[3]. This article examines the journey towards digital transformation carried out by the Pakuhaji District Government with the main aim of improving public services to its community[4].



The main focus of this transformation lies in designing and developing a public service information system website that is designed intuitively and adopts the latest technology[5]. Through the use of information technology, the Pakuhaji District Government hopes to provide easier and faster access for the community to obtain information and access the services they need[6].

The steps for designing and developing the website will be explained in depth in this article, accompanied by an analysis of the expected potential positive impact on the effectiveness and efficiency of public services at the local level[7]. It is hoped that a deeper understanding of this process can provide valuable guidance for other local governments considering similar digital transformations. Furthermore, this article will also discuss the implementation and challenges faced in the process of designing and developing a public service information system website[8]. Efforts made to ensure widespread public adoption of these digital platforms will also be detailed[9]. Not just developing a website, the Pakuhaji District Government must also consider aspects of data security and integration with existing systems to ensure smooth operations and compliance with applicable regulations[10]. The steps taken to maintain the security and privacy of user data as well as efforts to ensure interoperability with other systems will be discussed in detail in this article[11].

The impact of this digital transformation on the quality of public services, society's response to these changes, as well as the potential for expanding the scope of services that can be achieved through the use of information technology will also be analyzed[12]. This article will explore several practical examples of the benefits obtained by local communities through the use of public service information system websites, as well as education and training strategies implemented to increase community digital literacy[13].

Thus, through an in-depth exploration of the digital transformation of the Pakuhaji District Government in this article, it is hoped that it can provide guidance and inspiration for other regional governments in initiating and developing similar initiatives[14]. Digital transformation does not only talk about technology adoption, but also about cultural and system changes that encourage the creation of better and more inclusive public services for all levels of society[15].

2. Research Method

A qualitative approach with a case study design was chosen because it allows researchers to explore the complex and in-depth context of digital transformation in the Pakuhaji District Government[16]. Case studies provide flexibility in exploring various variables relevant to the phenomenon being studied, allowing researchers to gain a comprehensive understanding of the factors that influence the process of designing and developing public service information system websites[17]. Through a qualitative approach, this research can pay more attention to qualitative aspects such as attitudes, perceptions and individual experiences regarding digital transformation, which may be difficult to measure quantitatively[18]. It is important to understand the social and cultural dynamics that influence the adoption and use of information technology in the context of local government[19].

In addition, case studies allow researchers to conduct in-depth analyzes of the interactions between various stakeholders and the organizational dynamics involved in digital transformation[20]. Thus, this research can provide richer and deeper insight into the complexity of digital transformation in the Pakuhaji District Government and its implications for community services and operational efficiency of regional government[21].

A. Participants

Participants in this research are various parties directly involved in the digital transformation process in the Pakuhaji District Government. This includes government officials, website developers, technical staff, as well as the public who use the services provided through the website[22].

B. Data collection technique

The data in this research was collected through in-depth interviews, participant observation, and document analysis[23]. Interviews were conducted with key stakeholders to

understand the website design and development process, the challenges faced, and the impact of digital transformation on community services[24]. Participatory observation was carried out to gain direct understanding of website implementation and interactions between the government and the community via digital platforms.[25] Document analysis is carried out on related documents, such as project proposals, progress reports, and website usage data[26].

C. Research procedure

In the initial stage, researchers identified and selected participants based on certain criteria, such as their roles and responsibilities in the digital transformation process[27]. Then, in-depth interviews were conducted with selected participants to obtain the required information[28]. Participatory observation was carried out over a certain period of time to directly understand the interactions and dynamics that occur in website use. Document analysis was carried out systematically to collect data related to project progress and the achievements that have been achieved.

D. Data analysis

The collected data was analyzed using a qualitative approach, with techniques such as thematic analysis. Data from interviews, observations, and document analysis were compiled, coded, and categorized to identify patterns, themes, and main findings related to digital transformation and development of public service information system websites[29]. The analysis was carried out iteratively to ensure the precision and accuracy of the results.

E. Validity and Reliability

To ensure the validity and reliability of the data, various steps have been taken, including triangulation of data from various sources, use of proven research techniques, and reflection on the researcher's position and bias in collecting and analyzing data.

F. Research Ethics

This research was conducted by paying attention to relevant research ethics, such as obtaining permission from the authorities, maintaining the confidentiality of sensitive information, and respecting participants by providing clear information regarding research objectives and procedures as well as their rights as research subjects.

2.1 Literature Review

Digital transformation in the realm of local government has become an increasingly interesting research subject in both academic and practical literature[30]. Various research and studies have been conducted to explore the impacts, challenges and benefits of implementing information technology in improving the efficiency and effectiveness of public services at the local level[31].

One of the crucial aspects in the digital transformation of local government is the development of a public service information system that can be accessed online[32]. The study by Rahman and Hasan highlights the importance of utilizing information technology in increasing the accessibility and transparency of public services at the local level. They emphasized the need to design and develop information systems that are intuitive and easy to use by the public. In addition, research by Gupta and Sharma highlights the key role of information technology in increasing public participation in government decision-making processes. Their findings show that the adoption of information technology can strengthen community involvement in various local government initiatives, while increasing transparency and accountability in the delivery of public services.

In the context of developing a public service information system website, research by Al-Azawei et al. emphasizes the importance of design and user experience in ensuring successful implementation. They found that intuitive and user-friendly design has a significant impact on the level of adoption and user satisfaction with public service digital platforms. However, implementing digital transformation at the local government level is also faced with a number of challenges. The study by Ibrahim et al. (year) identified several factors that could

hinder the success of digital transformation, including limited human resources, inadequate technological infrastructure, and resistance to cultural change.

Research by Ali and Aziz highlights the importance of security aspects in the development of public service information systems. They stressed the need for effective measures to protect people's sensitive data and keep digital platforms safe from potential cyber threats. Moreover, in the context of Indonesian local government, the study by Setyawan et al. emphasizes the importance of adaptation to the local context in developing public service information systems. They found that successful implementation of information technology in local government often depends on a deep understanding of local needs, organizational structures, and infrastructure and cultural conditions.

Through a detailed understanding of this relevant literature, this research aims to make a new contribution to the understanding of the implementation of digital transformation at the local government level, with a special focus on the design and development of a public service information system website in Pakuhaji District. By analyzing the challenges, benefits, and factors that influence the success of this implementation, it is hoped that this research can provide valuable insights for practitioners and researchers in the fields of local government and information technology.

3. Findings

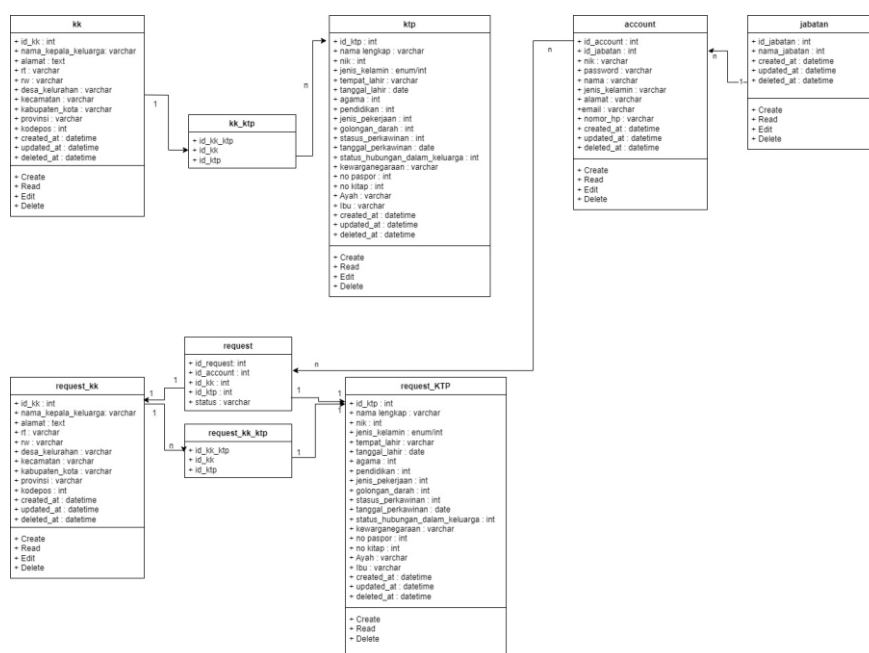


Figure 1. Framework for the Pakuhaji District Community Service Information System

Based on the framework contained in Figure 1, it reveals a number of relevant findings related to digital transformation and development of public service information system websites in the Pakuhaji Regency Government. Following are the main findings:

- **Impact of Digital Transformation:** Research participants acknowledged that digital transformation brings significant positive impacts, such as increasing the accessibility of public services, transparency and operational efficiency. The adoption of information technology, especially through digital platforms, has made it easier for the public to access information and services provided by the government. For example, with a public service information system website, people can access information about

government services easily and quickly from home or their mobile devices, without having to come directly to a government office.

- **Challenges in Implementation:** Despite its benefits, digital transformation is also faced with a number of challenges that need to be overcome during its implementation. These challenges include limited human resources, inadequate technological infrastructure, and resistance to cultural change within local government. Involvement and cooperation between various stakeholders, or stakeholders, is the key to success in overcoming these challenges.
- **Role of Stakeholders:** Key stakeholders, including government officials, website developers, technical staff, and the user community, have a crucial role in digital transformation. Active involvement and cooperation between stakeholders is the key to success in developing a public service information system website. For example, website developers need to understand the needs and expectations of end users in using digital platforms, while governments need to provide sufficient support and resources for website development and maintenance.
- **Data Security:** Data security is a major concern in developing public service information system websites. Since the website will contain sensitive information about the public, steps must be taken to protect the public's sensitive data and maintain the security of the digital platform from cyber threats that may arise. For example, encryption systems and firewalls need to be implemented to protect data stored on government servers.
- **Adaptation to Local Context:** Adaptation to local context is critical to the success of digital transformation. Each region has unique needs, organizational structures and cultures, so digital transformation must be adapted to these local characteristics. For example, in areas that have low levels of digital literacy, outreach and training campaigns need to be carried out to increase public understanding about the use of digital platforms.
- **Community Participation:** Active community participation is also considered a key success factor in digital transformation. Through the public service information system website, the public can contribute actively in providing input, feedback and service requests, thereby increasing the responsiveness and relevance of government services. For example, the government can provide an online form for submitting complaints or suggestions from the public, which can be directly accessed via the website.
- **Optimal Use of Technology:** Optimal use of technology is an important factor in the success of digital transformation. A good understanding of website functionality, user technical capabilities, and availability of internet access plays a role in increasing the adoption and use of digital platforms. For example, a website must be designed with an intuitive and user-friendly interface so that it is easy to use by all levels of society.
- **Suitability to Community Needs:** Compliance with community needs is the main focus in website development. Local governments need to continually update and improve website features based on community feedback to ensure the relevance and usefulness of the services provided. For example, websites must provide accurate and up-to-date information about health services, education and public administration according to the needs of local communities.
- **Education and Training:** Public education and training on the use of digital platforms is needed to increase people's digital literacy. Providing clear and easy to understand training and education helps increase public understanding of how to use websites and services provided by the government. For example, the government can organize workshops or seminars on the use of the internet and information technology for local communities.
- **Implementation of Policies and Regulations:** Implementation of policies and regulations related to data privacy and information security is important to ensure security and public trust in the use of digital platforms. Local government efforts to ensure compliance with data security and privacy standards are a crucial step in building public trust in the use of digital platforms. For example, the government can

issue regulations governing the use and protection of people's personal data in developing public service information system websites.

Thus, the findings from this research provide a comprehensive picture of the factors that influence digital transformation at the local government level and how the development of a public service information system website can be an effective means of improving public services and community involvement.

4. Conclusion

In this research, the findings show that digital transformation in the Pakuhaji Regency Government has a significant impact in increasing public service accessibility, transparency and operational efficiency. The adoption of information technology, especially through digital platforms such as public service information system websites, has made it easier for the public to access government information and services more easily and quickly. However, challenges in implementation were also identified, including limited human resources, inadequate technological infrastructure, and resistance to cultural change within local government.

The role of stakeholders, such as government officials, website developers, technical staff, and the user community, is recognized as crucial to the success of digital transformation. Active involvement and cooperation between stakeholders is the key to success in developing a public service information system website. Apart from that, data security, adaptation to local contexts, community participation, optimal use of technology, suitability to community needs, education and training, as well as implementation of policies and regulations related to data privacy and information security are also important things that must be considered in designing and implementing digital transformation at the local government level.

Thus, the findings from this research provide a comprehensive picture of the factors influencing digital transformation at the local government level, and confirm that the development of a public service information system website can be an effective means of improving public services and community involvement. Therefore, local governments need to pay close attention to all the aspects identified in this research to ensure that digital transformation can be implemented successfully and provide maximum benefits for local communities.

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