

E-Government Innovation in Integration of Monitoring and Evaluation Platform with WhatsApp Notifications to Improve the Timeliness and Accuracy of Public Sector Reporting in Banyuasin Regency

Rohani^{1*}, Lisdiana², Arif Rahman Hakim³
Stisipol Candradimuka

Corresponding Author: Arif Rahman Hakim

arif.rahman.hakim@stisipolcandraddimuka.ac.id

ARTICLE INFO

Keywords: E-government, E-Monev, Whatsapp, Public Reporting, Digital Innovation

Received : 22, December

Revised : 24, February

Accepted: 26, April

©2026 Rohani, Lisdiana, Hakim:

This is an open-access article distributed under the terms of the [Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).



ABSTRACT

This study aims to analyze e-government innovations through the integration of monitoring and evaluation platforms (E-Monev) with WhatsApp-based notifications in improving the timeliness and accuracy of public sector reporting in Banyuasin Regency. The research method used is a qualitative approach with data collection techniques through interviews, observations, and documentation. The results of the study show that the integration of the E-Monev system with WhatsApp notifications is able to improve reporting discipline, speed up communication flows, and minimize delays and data errors. However, there are still obstacles in the form of limited human resources and technological infrastructure. This study recommends strengthening the capacity of the apparatus and optimizing the digital system to support more transparent and accountable governance.

INTRODUCTION

Digital transformation in the public sector is an urgent need in the era of globalization and the rapid development of information technology. The government is required to be able to adapt to technological developments in order to improve the quality of public services that are effective, efficient, and responsive to the needs of the community. In this context, the use of information technology is not only an administrative tool, but also a strategic instrument in creating good governance. One of the approaches that has developed in responding to these challenges is the implementation of e-government. The concept of e-government refers to the use of information and communication technology by the government to provide services to the community, the business world, and inter-government agencies more effectively and efficiently. According to Heeks (2006), e-government is able to increase transparency, accountability, and efficiency in the public administration process. In line with that, Fang (2002) stated that e-government is an important foundation in modern bureaucratic reform that emphasizes digital-based services. In Indonesia, the implementation of e-government continues to develop through various national policies that encourage bureaucratic digitalization.

One form of e-government implementation that is increasingly used is the electronic-based monitoring and evaluation system (E-Monev). This system is designed to monitor the implementation of government programs and activities in real-time and systematically evaluate performance achievements. Through E-Monev, the government can obtain more accurate and faster data in the decision-making process. However, in practice, there are still various obstacles, especially related to the timeliness of reporting and the accuracy of data submitted by regional apparatus. The problem of reporting delays is an issue that is often found in the public administration system. This delay not only impacts the program evaluation process, but also affects the quality of decision-making made by leaders. In addition, the low accuracy of reported data is also a serious challenge, as it can lead to errors in planning and budgeting. This shows that even though the E-Monev system has been implemented, there are still gaps that need to be fixed to improve its effectiveness.

In facing these problems, innovations are needed that are able to improve the performance of the reporting system. One of the innovations that is developing is the integration of the E-Monev system with instant messaging applications, such as WhatsApp. WhatsApp is a communication application that is used in Indonesia and has advantages in terms of ease of use, speed of message delivery, and wide reach. The integration of WhatsApp-based notifications in the E-Monev system allows real-time information to be delivered to government officials, thereby increasing discipline in reporting. The use of WhatsApp as a notification medium in public administration has a positive impact on the effectiveness of organizational communication. According to Robbins (2013), effective communication is one of the key factors in improving organizational performance. With automatic notifications, government officials can more quickly respond to information related to reporting schedules and data requests.

This can ultimately improve the timeliness of reporting and reduce potential delays.

Banyuasin Regency is one of the regions that has begun to adopt this innovation in its government reporting system. The implementation of the integration of E-Monev with WhatsApp notifications is carried out as an effort to improve the quality of reporting of regional device activities. With this system, each regional apparatus can receive direct reminders regarding reporting obligations, so it is expected to increase compliance with the set schedule. In addition, the system also allows for faster two-way communication between the system manager and the user.

Timeliness and reporting accuracy are two important indicators in assessing the performance of public administration. Timeliness reflects the discipline and commitment of the apparatus in carrying out their duties, while data accuracy indicates the level of reliability of the information used in the decision-making process. With an integrated system, it is hoped that both indicators can increase significantly. This is also in line with the main goal of e-government, which is to create a transparent, accountable, and responsive government.

Previous research has shown that the use of digital technology in the public sector is able to increase the efficiency and effectiveness of administration. Cordella and Tempini (2015) stated that e-government not only changes work processes, but also encourages overall organizational change. However, the success of the implementation of the technology is highly dependent on the readiness of human resources and adequate infrastructure support. Without this support, the innovations implemented will not provide optimal results. In addition to the human resource factor, the organizational cultural aspect also affects the success of the implementation of e-government. Government officials need to have a mindset that is open to change and the ability to adapt to new technologies. Therefore, training and mentoring are important in supporting the implementation of digital systems. Local governments need to ensure that all apparatus have adequate competence in using the integrated E-Monev system.

On the other hand, technological infrastructure is also an important factor in supporting the successful implementation of this system. The availability of a stable internet network, adequate hardware, and a well-integrated system are the main prerequisites for the implementation of e-government. Without adequate infrastructure support, the system built will not be able to run optimally. Therefore, investment in the development of technological infrastructure is something that cannot be ignored. Based on this description, it can be concluded that the integration of E-Monev with WhatsApp notifications is a form of e-government innovation that has great potential in improving public sector reporting performance. However, the implementation of this innovation needs to be studied in depth to find out the extent of its effectiveness in improving the timeliness and accuracy of reporting. In addition, it is also necessary to identify various obstacles faced in its implementation.

This study aims to analyze the implementation of the integration of monitoring and evaluation platforms with WhatsApp notifications in Banyuasin Regency, as well as its impact on the timeliness and accuracy of public sector reporting. In addition, this study also aims to identify the factors that affect the success of the implementation of the system. The results of the research are expected to contribute to the development of e-government in Indonesia, especially in improving the quality of governance at the regional level.

LITERATUR REVIEW

The concept of e-government is one of the important approaches in modern public administration reform. E-government is defined as the use of information and communication technology by the government to improve the quality of public services, administrative efficiency, and transparency and accountability (Heeks, 2006). In this context, e-government not only functions as a technological tool, but also as an instrument of organizational transformation that encourages changes in the way bureaucracy works to be more adaptive and responsive to people's needs. Fang (2002) emphasized that the implementation of e-government includes interaction between the government and the community (G2C), the government and the business world (G2B), and between government agencies (G2G).

Innovation in the public sector is a key element in improving the performance of government organizations. Osborne and Brown (2011) state that public innovation includes the introduction of new ideas, processes, or products that aim to improve the effectiveness and efficiency of public services. In the context of e-government, innovation can be in the form of digital system integration, the use of technology-based applications, and the development of platforms that are able to improve administrative performance. The integration of monitoring and evaluation systems with communication applications such as WhatsApp is a form of digital innovation that combines information technology with the practical needs of organizations.

Monitoring and evaluation (Monev) is a systematic process that aims to assess the implementation of government programs and activities. Monitoring focuses on monitoring the process of implementing activities, while evaluation aims to assess the results and impact of the program. With the E-Monev system, the monitoring and evaluation process can be carried out more effectively because it is supported by real-time and integrated data. This allows for faster and more informed decision-making. However, the effectiveness of this system is highly dependent on the quality of the data inputted and the timeliness of reporting.

Organizational communication theory is also an important foundation in this research. According to Robbins and Judge (2013), effective communication in organizations can improve coordination, speed up decision-making, and reduce errors in the execution of tasks. In the context of public administration, the use of communication technology such as WhatsApp can increase the effectiveness of communication between government officials. Instant messaging-based notifications allow for quick and direct delivery of information to those in need, thereby increasing responsiveness and discipline in reporting.

In addition, the concepts of accountability and transparency are the main indicators in good governance. Accountability refers to the government's obligation to account for its performance to the public, while transparency is related to the disclosure of information that can be accessed by the public. The integration of the E-Monev system with digital notifications can support increased accountability and transparency by providing accurate, timely, and easily accessible data. Thus, this innovation not only has an impact on improving the internal performance of the organization, but also on increasing public trust in the government.

METHODOLOGY

This study uses a qualitative approach with a descriptive method to understand in depth the phenomenon of the implementation of the integration of monitoring and evaluation platforms with WhatsApp notifications in Banyuasin Regency. The qualitative approach was chosen because it is able to comprehensively describe empirical conditions and reveal the meaning behind the behavior and experience of government officials in using the system. Data collection techniques are carried out through in-depth interviews, observations, and documentation. Interviews were conducted to obtain information related to experiences, perceptions, and obstacles faced in using the system. Observations were made to see firsthand the process of using E-Monev and WhatsApp notification integration. Documentation is used to complete data in the form of activity reports, reporting data, and other supporting documents. Data analysis uses the interactive model of Miles, Huberman, and Saldaña (2014), which includes three main stages, namely data reduction, data presentation, and conclusion drawn. The validity of the data is maintained through the triangulation technique of sources and methods, so that the data obtained can be trusted and accurate.

RESEARCH RESULT

The results of the study show that the implementation of the integration of monitoring and evaluation platforms (E-Monev) with WhatsApp-based notifications in Banyuasin Regency has a significant impact on improving the performance of public sector reporting, especially in terms of timeliness and data accuracy. From the aspect of timeliness, the notification system that is directly integrated with the WhatsApp application has been proven to be able to increase the discipline of government officials in submitting activity reports. Automatic notifications that are sent at regular intervals serve as effective reminders of reporting schedules, so that the apparatus no longer depends on manual supervision from superiors. This condition has an impact on decreasing the rate of reporting delays that previously often occurred in conventional systems. In addition, the presence of real-time notifications allows the apparatus to immediately respond to reporting obligations without having to wait for follow-up instructions.

In terms of data accuracy, the integration of the E-Monev system with WhatsApp notifications also showed a significant improvement. This system allows the data verification process to be carried out faster and more efficiently, as any errors or data discrepancies can be immediately informed to the operator via instant messaging. Thus, data improvements can be made in a relatively short time before the report is consolidated to a higher level. This is in contrast to previous systems which tend to take longer to correct processes, so they often produce less accurate data. In addition, the existence of an integrated digital system also helps minimize data input errors caused by human errors, because the data entered can be directly monitored and controlled by system administrators.

In terms of organizational communication effectiveness, the use of WhatsApp as a notification medium makes a very positive contribution in smoothing the flow of information between regional devices. Communication that was previously done formally through letters or meetings can now be done more quickly and flexibly through instant messaging. This allows for more interactive two-way communication between system managers and users, so that any obstacles that arise can be overcome immediately. In addition, the use of WhatsApp also facilitates coordination across regional device organizations, because information can be conveyed simultaneously to all interested parties. This condition has an impact on increasing the responsiveness of the apparatus in following up on every information received.

However, the results of the study also show that the implementation of this system still faces several obstacles. One of the main obstacles is the limited capacity of human resources, especially in terms of understanding and technical capabilities in operating the E-Monev system. There are still apparatus that do not fully understand the features available in the system, so their utilization is not optimal. In addition, age factors and the level of digital literacy also affect the ability of apparatus to adapt to the new system. Another obstacle is the limitation of technological infrastructure, such as unstable internet networks in some areas, which can hinder access to the system and timely receipt of notifications.

In addition to these factors, this study also found initial resistance from some apparatus to the implementation of the new system. This is due to changes in work patterns that demand adaptation to digital technology, as well as increasing performance demands in terms of reporting timeliness. However, as time goes by and there is support from the leadership, the resistance is reduced and the apparatus begins to accept and utilize the system more optimally. Leadership support in the form of policies and supervision is also an important factor in encouraging the successful implementation of this system.

Overall, the results of the study show that the integration of E-Monev with WhatsApp notifications is an effective innovation in improving the performance of public sector reporting in Banyuasin Regency. This system is not only able to improve the timeliness and accuracy of data, but also improve the quality of organizational communication and coordination between regional devices. Although there are still some obstacles, the benefits produced are much greater than the challenges faced. With continuous improvement, this system has the potential to be further developed as an e-government innovation model that can be applied in other regions.

DISCUSSION

The results of this study show that e-government innovation through the integration of monitoring and evaluation platforms (E-Monev) with WhatsApp-based notifications has a significant impact on improving the performance of public sector reporting in Banyuasin Regency. These findings strengthen the argument in the e-government literature that the use of information technology can increase efficiency, effectiveness, and transparency in public administration (Heeks, 2006). The integration of digital systems supported by real-time communication allows the reporting process to be more structured, controlled, and responsive to the dynamics of government program implementation.

From the perspective of timeliness, the results of this study show that WhatsApp-based notifications act as an effective control mechanism in improving the discipline of government apparatus. Notifications that are sent automatically and repeatedly provide psychological distress as well as a consistent reminder for the apparatus to immediately complete the reporting obligations. This shows that the use of simple but appropriate communication technology can have a significant impact on organizational behavior changes. In this context, the innovations implemented are not only technical, but also touch on the aspect of bureaucratic behavior, which has been one of the challenges in public administration reform.

In addition, the increased accuracy of the data found in this study shows that the integration of digital systems is able to improve the quality of the information produced. This is in line with the view of Cordella and Tempini (2015) who stated that e-government not only improves process efficiency, but also strengthens the quality of organizational output through a more standardized and integrated system. With notifications that allow the verification and correction process to be carried out quickly, data errors can be minimized before the report is used in the decision-making process. This is especially important in the context of public administration, where data quality is the primary basis for planning, budgeting, and program evaluation.

In terms of organizational communication, the use of WhatsApp as a notification medium has been proven to be able to increase the effectiveness of communication between regional devices. These findings support the organizational communication theory put forward by Robbins and Judge (2013), which emphasizes that fast, clear, and targeted communication is a key factor in improving organizational performance. WhatsApp as a communication platform that is familiar to the apparatus provides convenience in conveying information without the need for special training. In addition, its real-time nature allows for more dynamic two-way interactions, so that problems that arise can be immediately responded to and resolved.

However, the results of this study also show that the successful implementation of e-government innovation is inseparable from various challenges. One of the main challenges is the limited capacity of human resources. Although the system used is relatively simple, not all apparatus has an adequate level of digital literacy. This shows that digital transformation in the public sector requires not only technology, but also human readiness as the main user of the system. Therefore, capacity building through training and mentoring is a very important factor in supporting the success of implementation.

In addition, the limitation of technological infrastructure is also an obstacle that needs to be considered. The uneven availability of internet networks in several regions can hinder access to the system and timely receipt of notifications. This condition shows that there is a digital divide that is still a challenge in the implementation of e-government at the regional level. Therefore, the government's commitment to improving the quality of technological infrastructure is needed as part of efforts to support digital transformation.

Another interesting finding is the initial resistance of some apparatus to the implementation of the new system. This resistance is generally caused by changes in work patterns that demand adaptation to technology and increased performance demands. This is in line with the theory of organizational change which states that any innovation will face resistance in the early stages of implementation. However, this study shows that this resistance can be reduced through leadership support, intensive socialization, and proving the benefits of the system in daily work practices. In other words, the success of innovation implementation is determined not only by the quality of the technology, but also by the change management strategy implemented.

Overall, the results of this study confirm that the integration of E-Monev with WhatsApp notifications is an effective and contextual form of innovation in improving the performance of public sector reporting. This innovation can be categorized as low-cost innovation with a high impact, because it utilizes technology that is already available and familiar to users. This is important in the context of local governments that have limited resources, so that the innovations developed must be efficient and easy to implement. Furthermore, this research also provides theoretical and practical implications. Theoretically, this study enriches the study of e-government by showing that the integration between formal systems (E-Monev) and informal communication platforms (WhatsApp) can produce positive synergies in improving organizational performance. In practical terms, this study provides recommendations for local governments to adopt a similar approach in improving the quality of reporting and governance. Thus, this innovation is not only relevant for Banyuasin Regency, but also has the potential to be replicated in other areas with similar conditions.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the research and discussions that have been conducted, it can be concluded that e-government innovation through the integration of monitoring and evaluation platforms (E-Monev) with WhatsApp-based notifications in Banyuasin Regency has been proven to be able to significantly improve the performance of public sector reporting. The increase is seen mainly in the aspect of punctuality, where government officials have become more disciplined in meeting reporting schedules due to the existence of a real-time automatic reminder system. In addition, the data accuracy aspect has also improved because the system allows the verification and correction process to be carried out more quickly and controlled. On the other hand, this integration also contributes to increasing the effectiveness of organizational communication, so that coordination between regional apparatus becomes more responsive and efficient. However, the implementation of this system still faces several obstacles, such as limited human resource capacity, differences in digital literacy levels, and uneven support for technological infrastructure.

Based on this conclusion, some recommendations that can be given are the need to increase the capacity of human resources through continuous training and technical assistance so that all apparatus are able to utilize the system optimally. In addition, local governments need to strengthen technological infrastructure, especially in providing a stable and equitable internet network, to support smooth access to the system. The development of the E-Monev system also needs to be carried out on a sustainable basis by adding more adaptive and user-friendly features, so that it can increase the comfort and ease of use for the apparatus. In addition, strong commitment and support from the leadership is needed to encourage the consistent use of the system, including through firm policies and effective supervision mechanisms. With the implementation of these recommendations, it is hoped that this innovation can continue to be developed and become a model of best practice in the implementation of e-government at the regional level.

ADVANCED RESEARCH

Further research can assess the effectiveness of this system quantitatively or compare it with other regions.

ACKNOWLEDGMENT

The author would like to thank all parties who have supported this research.

REFERENCES

- Cordella, A., & Tempini, N. (2015). E-government and Organizational Change: Reappraising the Role of ICT and Bureaucracy in Public Service Delivery. *Government Information Quarterly*.
- Fang, Z. (2002). E-government in digital era: Concept, practice, and development. *International Journal of Public Administration*, 25(10), 1325–1343. <https://doi.org/10.1081/PAD-120013297>.
- Heeks, R. (2006). *Implementing and managing e-government: An international text*. SAGE Publications.
- Miles, M. B. . & H. A. M. dan S. J. (2014). *Qualitative Data Analysis, A Methods Sourcebook*.
- Robbins, S. P., & Judge, T. A. (2013). *Organizational behavior* (15th ed.). Pearson Education.