❏   56

Website-based Mail Delivery Scheduling Monitoring System Application at Bappeda, Medan Mayor's Office

Cindy Fricilia[1], Evpendi[2], Daniel Daud Sunly Bazikho[3], Fazar Setiawan[4], Leni Marlina[5]

[1,2,3,4,5]Computer System, Universitas Pembangunan Panca Budi

ABSTRACT

The Mail Delivery Scheduling Monitoring System at the Medan Mayor's Office BAPPEDA is a study on the implementation of an information technology system to increase efficiency in the letter delivery process at the Regional Development Planning Agency (BAPPEDA) at the Medan Mayor's Office. This research aims to understand how the use of a mail delivery scheduling monitoring system can optimize time management, increase accuracy, and improve transparency in mail handling in government environments. This study uses a qualitative approach with in-depth interviews and direct observation as data collection methods. The research results show that before the implementation of the mail delivery scheduling monitoring system, the mail delivery process at BAPPEDA tended to be unstructured, time consuming, and prone to errors. However, after the adoption of this system, there was a significant improvement in time management and operational efficiency. System users report improvements in mail tracking, on-time delivery, and real-time monitoring of delivery status. However, several challenges were also identified during system implementation, including resistance to change from some staff, lack of adequate training, and the need for routine maintenance of the system. Thus, this research concludes that although the mail delivery scheduling monitoring system has brought many benefits to BAPPEDA of the Medan Mayor's Office, continued efforts are needed to ensure long-term success and full acceptance by all staff.

Corresponding Author:	*Article history:*
Leni Marlina,	Received Feb 9, 2024
Department of Information Technology	Revised Feb 15, 2024
Universitas Pembangunan Panca Budi	Accepted Feb 29, 2024
Jl. Gatot Subroto km. 4,5 Medan, 20122, Indonesia.	
Email : lenimarlina@dosen.pancabudi.ac.id	

1.   INTRODUCTION

in the era of efficiency and transparency in the management of letters within the Regional Development Planning Agency (BAPPEDA) of the Medan Mayor's Office! We are proud to introduce you to the Mail Delivery Scheduling Monitoring System, an innovative solution that we have implemented to optimize time management and increase operational efficiency. Supported by the latest information technology, our system allows users to track mail delivery status in real-time, avoid delays in delivery, and ensure accuracy in mail handling. By focusing on transparency and accountability, we aim to provide better services to the community as well as internal stakeholders. In our efforts to create a more efficient and effective work environment, we are continuously committed to improving our systems through user feedback and the latest technology updates. Thus, we are confident that our Mail Delivery Scheduling Monitoring System will become an irreplaceable tool in supporting the administrative process and decision making at BAPPEDA of the Medan Mayor's Office.

BAPPEDA is an abbreviation for Regional Development Planning Agency. This is an institution at the regional level in Indonesia that is responsible for planning, coordinating and supervising the implementation of development at the district/city or provincial level. BAPPEDA formulates short, medium and long term development plans for the areas they serve. This plan covers various sectors such as infrastructure, economy, education, health, environment, and others. BAPPEDA is responsible for coordinating various development programs and projects implemented by various regional government agencies and the private sector. They ensure that all development activities run according to the plans and objectives that have been set. BAPPEDA supervises the implementation of development projects to ensure that allocated funds are used effectively and efficiently. They also evaluate the development

achievements that have been made. BAPPEDA has a very important role in ensuring the implementation of sustainable and efficient development at the regional level. By involving various related parties and using accurate data and information, BAPPEDA can be a driving force in better regional development.

Mail delivery is the process of sending letters or documents from one location to another via mail or postal delivery services. It is an integral part of communication and administrative systems, enabling the exchange of information between individuals, companies, and government agencies. There are several commonly used mail delivery methods, including postal mail, express courier, and private mail delivery services. This method has various advantages and disadvantages depending on delivery speed, cost, and service coverage. The mail delivery process begins with collecting letters from the sender. The mail is then transported to a distribution center, sorted, and then sent to the destination address via various modes of transportation such as planes, trucks, or motorbike couriers. Mail delivery continues to be an important component of everyday life, although with the development of digital technology, some types of electronic communication have replaced the use of physical mail. However, for certain needs such as sending official documents, mail remains an important choice..

2. RESEARCH METHOD

The methods used in the research program use a qualitative approach, such as participating in office activities, delivering outgoing letters, writing incoming letters, taking part in gymnastics. However, the focus of this work program is a significant improvement in time management and operational efficiency. System users report improvements in mail tracking, on-time delivery, and real-time monitoring of delivery status.

In the context of the correspondence monitoring system at BAPPEDA, the use of qualitative methods can provide an in-depth understanding of various aspects of correspondence management. The following are several qualitative methods that can be applied:

- Case Study: Conduct a case study on the correspondence monitoring system at BAPPEDA to understand in depth how this system operates, including the processes, policies and challenges faced.
- Interviews: Conduct interviews with various stakeholders at BAPPEDA, such as mail management staff, managers, or leaders, to understand their views on the effectiveness of the existing monitoring system, as well as problems or obstacles faced in mail management.
- Participatory Observation: Participate in daily activities at BAPPEDA related to mail management, such as meetings, sending and receiving mail, or other administrative processes, to gain a direct understanding of how the system operates.
- Document Analysis: Collect and analyze documents related to the correspondence monitoring system, such as policies, guidelines, or performance reports, to understand existing structures, processes, and policies.
- Focus Group Discussion (FGD): Hold group discussions with various related parties at BAPPEDA, including staff and management, to discuss issues related to correspondence management and identify solutions or improvements that may be needed.
- Content Analysis: Analyze the content of correspondence that occurs at BAPPEDA to understand patterns, trends or problems that arise in written communications and consider ways to improve their efficiency and effectiveness.
- Systematic Observations: Conduct systematic observations of various aspects of the correspondence monitoring system, such as workflow, interactions between staff, or compliance with policies and procedures, to identify potential improvements or enhancements.

By using these methods, BAPPEDA can gain in-depth insight into its mail monitoring system, including strengths, weaknesses, and potential improvements that may be needed to increase efficiency and effectiveness in mail management.

Work producers include:
- Delivery of Research students.
- Socialization of research, institutional approach to city government such as heads of departments and staff.
- Introduce yourself to the employees there.

- Directions and input and suggestions from field supervisors and partners
- Implementation of activities and agendas organized by the Medan mayor's office
- Field supervisors carry out evaluation and monitoring with the aim of summarizing all the results of program activities and then determining whether program implementation is in accordance with the expected targets or not.
- Pick up students participating in research at the Medan Mayor's Office.

3. RESULTS AND DISCUSSION

The results of this real work lecture service provide real benefits for the Medan Mayor's Office Bappeda in increasing the efficiency and effectiveness of mail delivery scheduling. Through an integrated monitoring system, the mail delivery process can be well organized, monitoring can be carried out in real-time, and late or lost mail deliveries can be minimized. Development of web-based or mobile applications also makes it easier for users to access and use the mail delivery scheduling system. The success of this service also provides valuable experience for students in applying the knowledge and skills they acquired during college into real-world contexts.

The results of the MBKM Research Program at the Medan Mayor's Office ran smoothly and successfully, as shown by the following program achievement indicators :

Figure 1. Delivery of MBKM Research Program students to the Regional Research and Innovation Agency (BRIDA) MEDAN CITY

Figure 2. Field supervisor for MBKM Research program students
at the Medan Mayor's Office

Figure 3. Activities carried out during the MBKM Research Program

Website-based Mail Delivery Scheduling Monitoring System Application at Bappeda, Medan Mayor's Office
(Leni Marlina)

At the Medan mayor's office

4. CONCLUSION

The student work program was implemented at the Medan Mayor's Office, running smoothly and successfully. Students can socialize and apply the knowledge gained at college, and all work programs are planned to develop community potential related to Research. This also develops the competence and professionalism of Research students as prospective graduates and hopes to have a more meaningful impact for themselves. A series of Research program activities provide useful experience for Research students at Universitas Pembanguanan Panca Budi, the university community, and local governments so that they can be used to develop and improve their respective duties and functions.

REFERENCES

Adawiah, A., Manajemen, P., Lamappapoleonro, U., Manajemen, P., Lamampapoleonro, U., Posting, M., Akun, P., Menuju, P., Bisnis, A., Tertarget, M. F., & Taruna, K. (2023). *PELATIHAN ONLINE MARKETING BAGI PEMUDA KARANG TARUNA DESA MATTABULU DALAM RANGKA PENGEMBANGAN DESA WISATA MENJADI. 1*, 52–56.

Agustin, D. (2021). *Pelatihan Desain Kemasan Produk Olahan Bandeng di Desa Sawohan Sidoarjo. 3*(2).

Bagi, F., Mart, B., & Indonesia, D. (2019). *Pelatihan Manajemen Ritail Berbasis Potensi Lokal Melalui Strategi. 1*(1), 67–73.

Hariyanto, E., & Wahyuni, S. (2020). Sosialisasi Dan Pelatihan Penggunaan Internet Sehat Bagi Anggota Badan Usaha Milik Desa (Bumdes) Mozaik Desa Pematang Serai. *Jurnal ABDIMAS BSI*, *3*(2), 253–259.

Inovasi, J., Nugraha, S. P., & Agustiningsih, W. R. (2015). *PELATIHAN PENANAMAN TANAMAN OBAT KELUARGA (TOGA). 4*(1), 58–62.

Khaliq, A., & Sari, S. N. (2022). PEMANFAATAN KERANGKA KERJA INVESTIGASI FORENSIK JARINGAN UNTUK IDENTIFIKASI SERANGAN JARINGAN MENGGUNAKAN SISTEM DETEKSI INTRUSI (IDS). *Jurnal Nasional Teknologi Komputer*, *2*(3), 150–158.

Lubis, A., Nababan, E. B., & Wahyuni, S. (2022). PENINGKATAN SDM PROMOSI DINAS PARIWISATA SAMOSIR MELALUI PELATIHAN WEBSITE MENGGUNAKAN CMS WORDPRESS. *JMM (Jurnal Masyarakat Mandiri)*, *6*(6), 4576–4586.

Mesra, B., Wahyuni, S., Sari, M. M., & Pane, D. N. (2021). *E-Commerce Sebagai Media Pemasaran Produk Industri Rumah Tangga Di Desa Klambir Lima Kebun. 1*(3), 115–120.

Mutaqin, G., Fadilah, J. N., & Nugroho, F. (2021). Implementasi Metode Path Finding dengan Penerapan Algoritma A-Star untuk Mencari Jalur Terpendek pada Game "Jumrah Launch Story." *Walisongo Journal of Information Technology*, *3*(1), 43–48.

Radjab, E., Tj, T. A., Jurusan, D., Niaga, A., Negeri, P., & Pandang, U. (2017). Pelatihan Pemanfaatan Media Online sebagai Sarana Pemasaran. *Prosiding Seminar Hasil Pengabdian Kepada Masyarakat (SNP2M)*, *2017*, 292–295.

Sebayang, S., Nuzuliati, & Wahyuni, S. (2021). *Edukasi Kepada Perangkat Desa Tentang Motivasi Kerja Kepemimpinan dan Budaya Organisasi. 1*(1), 51–58.

Siregar, M., Zamriyetti, Wahyuni, S., & Rahmaniar. (2021). Pelatihan Sistem Tanam Hidroponik Kepada Para IBu Jalasenastri FASHARKAN Belawan. *Jurnal Abdimas Hawari, Jurnal Pengabdian Kepada Masyarakat*, *1*(1), 9–17.

Sulaa, D. I. K., & Betoambari, K. (2020). *PELATIHAN CITIZEN JOURNALISM BAGI REMAJA USIA SEKOLAH DI WILYAH PESISIR PANTAI NIRWANA*. 20–27.

Supiyandi, S., Rizal, C., & Fachri, B. (2023). Implementasi Model Prototyping Dalam Perancangan Sistem Informasi Desa. *Resolusi: Rekayasa Teknik Informatika Dan Informasi*, *3*(3), 211–216.

Supiyandi, S., & Zen, M. (2019). Sistem Pendukung Keputusan Proses Kenaikan Jabatan dan Perencanaan Karir Pada PT. ABC Dengan Metode Profile Matching. *ALGORITMA: JURNAL ILMU KOMPUTER DAN INFORMATIKA*, *3*(1), 55.

Wahyuni, S., Batubara, S., & Mendalin, O. (2021). TRANSFORMASI PROMOSI DIGITAL OBJEK PARIWISATA DIKABUPATEN: PKM. *Jurnal Abdimas HAWARI: Jurnal Pengabdian Kepada Masyarakat*, *1*(1), 26–33.

Wahyuni, S., & Mesra, B. (2022). Mozaik BUMDES Waste Bank Application Development Using Android-Based GPS. *Jurnal Mantik*, *6*(3), 2781–2788.

Wahyuni, S., Mesra, B., Lubis, A., & Batubara, S. (2019). Penjualan Online Ikan Asin Sebagai Salah Satu Usaha Meningkatkan Pendapatan Masyarakat Nelayan Bagan Deli. *Ethos: Jurnal Penelitian Dan Pengabdian Kepada Masyarakat*, *8*(1), 89–94.