



Implementation of E-ULT Application Innovation Diffusion as a Public Service Facility in the Integrated Service Unit of Universitas Mulawarman

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Abstract

Universitas Mulawarman Integrated Service Unit (ULT) serves as the main door for public services, integrating various services to improve service quality at Mulawarman University. One of the latest innovations is the implementation of online services through the E-ULT Application, which is designed to facilitate access and improve service efficiency. The purpose of this research is to analyze the implementation of E-ULT application innovation diffusion as a public service facility in the integrated service unit of Universitas Mulawarman. This research uses a qualitative approach to explore the implementation process of the diffusion of innovation of the E-ULT Application as a public service facility and this research also uses the Diffusion of Innovation Theory proposed by Everett M. Roger. Through in-depth analysis, this research identifies the factors that influence the adoption of the application, as well as the challenges faced in its implementation. This research shows that the use of the E-ULT Application at Universitas Mulawarman has not been optimal due to the low digital literacy of human resources, as well as the assumption that the application is complicated. A strategy in the form of training and socialization is needed to increase the understanding and acceptance of the academic community towards this application.

Keywords: *Diffusion of Innovation, E-ULT Application, Public Services*

Introduction

We are currently in an era of disruption, which has brought about many innovations and changes. This has transformed many government systems and structures into new forms. This is because ICT (Information and Communication Technology) plays a very crucial role in generating new innovations in the development of government bureaucracy (Kusuma & Meirinawati, 2023). As part of globalization, advances in information technology have become an integral part of modern life. Technological and informational developments have encouraged the leadership of Universitas Mulawarman to innovate in public services. This is part of their efforts to realize their vision and mission, which is to provide quality integrated information services, support UNMUL in bureaucratic reform in the field of

public services, implement orderly administration in accordance with excellent service standards, and develop a technology-based information service system.

One of the driving factors behind the innovation movement in government organizations is the demand from external environments and stakeholders to improve service quality, as well as central government policies that support the bureaucratic reform acceleration program (Divva, 2024). Innovation in public services is a new tactic and framework for building public trust. The Integrated Service Unit is one of the units at Mulawarman University.

The Integrated Service Unit (ULT) was established in 2020 by Prof. Dr. H. Masjaya, M.Si as Rector of Universitas Mulawarman for the 2014-2022 period (two terms). The

Integrated Service Unit (ULT) was established as an effort to improve the quality of public services and public information at Universitas Mulawarman based on the Public Service Law No. 25 of 2009 concerning Public Services and in the context of orderly management and quality information services at Universitas Mulawarman. The Integrated Service Unit (ULT) began operations on March 12, 2020, until 2024. The Integrated Service Unit (ULT) was established during the Covid-19 pandemic, so that its existence, which is to provide services specifically to the academic community by implementing health protocols, can still be carried out even without face-to-face services.

Customers of the Integrated Service Unit (ULT) consist of Universitas Mulawarman students, Universitas Mulawarman alumni, lecturers, Universitas Mulawarman teaching staff, and the general public. The needs of customers related to campus administration are increasing. Therefore, the leadership of Universitas Mulawarman strives to continuously optimize services to facilitate the community in meeting their needs by developing innovations in the field of campus administration services through online services using a system called the E-ULT (Electronic Service) Application.

By using the E-ULT application, customers do not have to wait too long, because long queues can hinder other activities. According to Moenir (2014), public services have several supporting factors, one of which is satisfactory and adequate service facilities, which ultimately can realize the efficiency and effectiveness of a service process.

The E-ULT (electronic service) application at the Integrated Service Unit (ULT) provides easy facilities for conducting services, consisting of internal and external services. Although it aims to make things easier, advanced technology still has its limitations. For example, many people are still unaware of the E-ULT (electronic service) application and the existence of the Integrated Service Unit (ULT), and some internal stakeholders do not implement the E-ULT (electronic service) application because they do not understand

technological advances, which results in them not understanding how to use the application.

Although there are several stakeholders and members of the academic community who do not use the E-ULT (electronic service) application, or even many who are unaware of this service system and lack digital literacy, the data on the use of the E-ULT (electronic service) application obtained by researchers from 2020 to 2023 shows an increase each year. The use of the E-ULT application service is also felt by customers who live far from Universitas Mulawarman when requesting data correction services at PDDIKTI, even though this innovation is said to make it easier and more time-efficient to take care of administrative matters. However, sometimes applicants attach incorrect or incomplete requirements, which causes delays in service and sometimes requires applicants to come directly to the Integrated Service Unit to avoid misunderstandings.

The quality of public services can be measured by the certainty of good and diplomatic communication, because all types of public services require communication, whether in the form of goods or services (Hardiansyah, 2015). Good communication between service providers and individuals receiving services can determine the quality of public services (Hardiansyah, 2015).

Rogers says that diffusion is the way in which an innovation is channeled through exclusive channels that have a certain time frame between social system groups (Effendy, 2015). In the theory of innovation diffusion, there is a term called opinion leader or change agent, which makes the theory of innovation diffusion a two-stage communication.

The purpose of this research is the implementation of E-ULT application innovation diffusion as a public service facility in the integrated service unit of Universitas Mulawarman

Method

This study uses qualitative research methods. It will analyze the implementation of the E-ULT application innovation diffusion as a public service facility at the Integrated Service Unit of Mulawarman University. This research

was conducted at the Integrated Service Unit of Mulawarman University, located at Jalan Kuaro Gedung MPK Lantai 1, Samarinda City, with the aim of determining the implementation of the diffusion of the e-ult application innovation as a public service facility at the Integrated Service Unit of Universitas Mulawarman.

The data sources for this study are secondary and primary data. Secondary data were obtained from archives, written documents (such as laws or policy regulations), photographs, and literature research, which were used as recommendations for collecting theories and literature relevant to this study. Primary data in this study can be obtained through interviews and documentation (Sugiyono, 2019). In this study, primary data came from key informants. The sampling technique was purposive, based on the determination of key informants and informants. In other words, the samples were not taken randomly but were determined by the researcher himself. The researcher used purposive sampling to obtain data from key informants. The key informants in this study were individuals who served as leaders in the Integrated Service Unit at Universitas Mulawarman. The subjects selected as informants were based on the fact that they had a lot of important information about the issues being studied and were willing to provide data. The informants in this study were a user as a front office at the Integrated Service Unit (ULT), an E-ULT application programmer, and Communication Science students from the 2021 batch as users or those who had submitted services at the Integrated Service Unit (ULT) through the E-ULT application.

In this study, the data collection method used was literature research by reading literature or books containing theories relevant to this study to be used as support in writing this thesis. Furthermore, field research was conducted by visiting the research location to obtain data.

This study used a data analysis technique in the form of a qualitative descriptive data analysis method. In the data analysis technique in this study, there are four components according to Matthew B. Miles and A. Michael Huberman, as cited by Sugiyono in

his book *Metode Penelitian kombinasi* (Sugiyono, 2012: 246-253), namely data collection, data reduction, data presentation, and drawing conclusions.

Results and Discussion

Efforts to improve public services at Mulawarman University, based on Rector's Decree Number 1282/SK/2020, Universitas Mulawarman established an Integrated Service Unit (ULT) as the main gateway for public services located on the 1st floor of the MPK Building. The ULT serves the academic, student affairs, finance, public relations, cooperation, general affairs, and PPID sectors with three categories of services: same-day services (completed within 24 hours), approval services (5 working days), and information services (provided through the ULT website/Instagram).

Referring to Everett M. Rogers' Theory of Innovation Diffusion, the ULT innovated through the E-ULT Application, which was launched in 2020 during the tenure of Rector Prof. Dr. H. Masjaya, M.Si. together with the ICT Team. The background for this innovation was the Covid-19 pandemic, which limited face-to-face interactions, but campus administration had to continue. This website-based application makes it easier for the academic community to access services at any time, track submissions, and integrate with academic and employment data. The main objectives are transparency, effectiveness, and digitization of services.

The innovation communication process began with online meetings and interpersonal communication with the applicant's front office. The impact has been positive as services are faster, more accessible, and save time and costs. However, acceptance among human resources varies; staff with high digital literacy find it helpful, while those with low literacy find it complicated.

The communication media used include websites, Instagram, YouTube, TikTok, WhatsApp, as well as socialization to faculties and student organizations. ULT also adopted Telkomsel's omnichannel system for digital communication integration. In addition, the application was introduced through

benchmarking and comparative studies with other universities. The obstacles faced include low digital literacy among some human resources, a conventional service culture that is still ingrained, and the lack of integration of all systems within the Universitas Mulawarman environment.

The decision-making process by the leadership of Universitas Mulawarman was carried out through meetings with the relevant leadership. The E-ULT application has been in operation from 2020 to 2024. It took one year to introduce this application, but the implementation of the system still requires development, especially for users in the back office and leadership. So far, front office services have been running, but they are often interrupted in the back office. Therefore, a high level of awareness is required from E-ULT application users, as well as encouragement from the leadership through a letter from the Rector of Mulawarman University. In addition, socialization regarding services at the Integrated Service Unit also needs to be carried out again to the academic community, and strict sanctions must be imposed on educators who work at the front office and back office if they do not perform their duties properly. The number of E-ULT application users has increased every year for students, but for educators and lecturers at Universitas Mulawarman who request services through the E-ULT Application, the number is still minimal. This is due to the lingering old culture of coming directly to the relevant department and conducting services in a conventional manner. The data on E-ULT Application users obtained by the author is from 2020 to September 2024. Information from call center informants shows an annual increase of 60%. The use of the E-ULT application is expected to continue because using this application makes public services at Universitas Mulawarman easier, faster, more transparent, and allows customers to track their service requests and submit service requests anywhere and anytime.

Based on the data obtained by the researcher above to answer the research question in this study, the researcher describes in more detail the results of the study related to

the implementation of the diffusion of the E-ULT application innovation as a public service facility at the integrated service unit of Mulawarman University, based on Rogers' Daryanto & Rahardjo (2016) theory of innovation diffusion, which states that there are five stages of innovation diffusion, including:

1. Knowledge stage: Not all educators, lecturers, and students at Universitas Mulawarman are aware of the Integrated Service Unit and the innovation related to campus administrative services that can be done online through the E-ULT application. This is due to a lack of socialization, because since the establishment of the Integrated Service Unit from 2020 to 2024, socialization has only been carried out once to all faculties at Mulawarman University, and the low level of digital literacy among human resources (HR).
2. Persuasion stage: The Integrated Service Unit managers utilize digital platforms such as Instagram and websites to disseminate information and new policies, as well as using conventional methods, namely word of mouth (interpersonal communication), which in this case has a more positive impact because applicants who want to submit services online using the E-ULT application find it easier to understand and implement for those who are digitally literate.
3. Decision-making stage: At this stage, the researcher obtained data and information from informants, all of whom were leaders and their staff who participated in the decision-making process, for example, regarding what services could be provided through the Integrated Service Unit. However, after agreeing, there were several areas that were inconsistent and continued to accept services from applicants conventionally. This caused the implementation of the E-ULT application innovation diffusion as a public service

facility at Universitas Mulawarman to be ineffective and inefficient.

4. Implementation stage: Based on the data obtained by researchers, the number of E-ULT application users has increased every year from 2020 to the end of 2024, but only among students. The number of educators and lecturers using the E-ULT application is still very low. This is due to the low digital literacy of human resources (HR) at Universitas Mulawarman and the persistence of a culture of manual service. With the E-ULT application system, some informants still consider it complicated.
5. Confirmation stage: All informants adopted the E-ULT application innovation. However, one informant explained that not all internal stakeholders have adopted the E-ULT application, due to low digital literacy skills and the perception that using the E-ULT application is complicated. Therefore, it is important for leaders and their staff to be more aware of the importance of digital literacy by conducting several training sessions related to digital literacy and public services. They must also be firm with stakeholders who do not follow the rules because with the rapid development today, human resources (HR) are required to be able to keep up and improve their work skills in order to achieve excellent public services. The following is a report on E-ULT application users obtained by the researcher: In 2020, online service innovation through the E-ULT application had just begun to operate. Because this was new at Mulawarman University, information and promotion related to the E-ULT application was still lacking at that time. This resulted in a low number of services received by the Integrated Service Unit (ULT) in one year. In addition to the lack of information and promotion in 2020, the COVID-19 pandemic also caused

limited activities on campus, with lectures being moved online through the Zoom application and access to the Universitas Mulawarman campus being restricted.

In 2020, a total of 22 requests were Since 2021, the Integrated Service Unit (ULT) at Mulawarman University has introduced the E-ULT application through social media to shift conventional services to an online system. Although the number of service requests has increased each year (2021: 2,242; 2022: 2,835; 2023: 4,222; 2024: 5,837), usage is still dominated by students. Many lecturers and staff are reluctant to use E-ULT because it is considered complicated and the services provided remain limited.

The main obstacles are low digital literacy, especially among senior staff, and the strong culture of conventional services. Although the ULT team has conducted socialization at faculties, many users still prefer to deal directly with the respective departments.

According to Rogers' diffusion of innovation theory, the spread of technology like E-ULT is influenced by both formal and informal communication. The university utilizes its website, Instagram, and interpersonal communication to accelerate adoption. As a result, financial, academic, and student affairs services have shown significant improvement, though full integration at the faculty level has not yet been achieved.

Overall, E-ULT has proven to speed up service processes, reduce queues, and improve efficiency. However, for optimal implementation, it requires expansion of service types, integration into faculties, enhancement of digital literacy, and stronger leadership enforcement to encourage system use. With these improvements, the ULT is expected to realize excellent and sustainable services at Mulawarman University.

Quality public services greatly influence the level of public satisfaction, as the public expects easy and responsive access to the various services they need (Divva, 2024). When the government or public institutions are able to provide fast, efficient, and transparent services, this not only increases public trust but also strengthens their participation in the

development process. Public satisfaction is often measured through direct experiences in interacting with public services, including ease of access, the attitude of officers, and the clarity of information provided (Zaitul, 2022). Thus, improving the quality of public services must be a priority because of its significant impact on the quality of life of the community. Therefore, efforts to understand the needs and expectations of the public in the context of public services are an important step in creating better services that are oriented towards public satisfaction.

Improving the quality of public services is a crucial step in achieving optimal public satisfaction and realizing excellent service. One effective approach is to prioritize the principles of transparency, responsiveness, and accountability in every aspect of service (Rohmah et al., 2022). Training and capacity building of human resources are also very important so that public service officers are able to provide friendly, professional, and efficient services. In addition, the use of information technology, such as digital applications and online platforms, can speed up the service process and make it easier for the public to access information and submit requests. By listening to input and feedback from the public, public institutions can continue to make continuous improvements and adjust services in accordance with the needs and expectations of the community. Through these measures, it is hoped that the quality of public services will not only improve but also provide a high level of satisfaction for the community, thereby creating excellent services that benefit all parties. The January–June 2024 community satisfaction survey showed an average score of 91.25 (excellent category) for public services at the Universitas Mulawarman Integrated Service Unit. This achievement reflects optimal service quality, responsiveness to user needs, and increased public trust.

Feedback from informants emphasizes the importance of continuing to use the E-ULT application in line with technological developments and the need to improve the digital literacy of human resources. With increased digital literacy, staff and students are expected to be able to utilize technology to

support more efficient learning and services. The integration of public services through a single portal via E-ULT provides easy access to information, increases transparency, effectiveness, and responsiveness of services. In addition to strengthening service quality, the implementation of this application also contributes to the development of human resource competencies that are ready to face the challenges of the digital era. To achieve excellent service, the demand to improve digital literacy among human resources (HR) is crucial. High digital literacy enables individuals to utilize information technology more effectively, so they can provide more responsive and efficient services. In the context of public services, improving digital literacy not only contributes to technical skills but also to users' understanding of the benefits and features offered by the service system. Thus, investing in training and developing digital skills is a strategic step to improve the quality of public services, which in turn will meet public expectations and create a positive experience for service users. This is an important foundation for achieving the desired goal of excellent service.

Conclusion

Based on the results of the study, the implementation of the E-ULT Application innovation diffusion at the Integrated Service Unit of Universitas Mulawarman has shown a significant increase in service requests since its launch in July 2020. However, adoption of this application is still limited to students, while educators and lecturers tend to prefer conventional methods of requesting services. This is due to low digital literacy among educators and a lack of effective socialization and training. To achieve efficiency and effectiveness in public services, it is important for the leadership of Universitas Mulawarman to increase digital awareness and provide training to all stakeholders so that they can optimize the use of the E-ULT Application to the fullest extent possible.

References

- Apriani, S. A. (2023). *Komunikasi Inovasi Aplikasi Pelayanan Publik Samsat Digital Nasional (SIGNAL) Di Kantor Samsat Duri Kabupaten Bengkalis*.

- Universitas Islam Negeri Sultan Syarif Kasim.
- Daryanto, & Rahardjo, M. (2016). *Teori Komunikasi*. Gava Media.
- Divva, W. (2024). *Difusi Inovasi Berbasis Pelayanan Digital Pemerintah Desa Perawang Barat Kecamatan Tualang Kabupaten Siak Provinsi Riau*. Universitas Islam Negeri Sultan Syarif Kasim.
- Effendy, O. U. (2015). *Ilmu, Komunikasi Teori dan Praktek Komunikasi*. PT. Citra Aditia Bakti.
- Ginting, F. A. (2022). *Komunikasi Inovasi Pelayanan Publik Melalui Aplikasi LAGU (Layanan Tunggu) Dinas Kependudukan dan Pencatatan Sipil Kota Pekanbaru*.
- Hardiansyah. (2015). *Komunikasi Pelayanan Publik Konsep dan Aplikasi*. Gava Media.
- Islam, J. A. N., Agustian, J. F., Sary, K. A., & Rohmah, A. N. (2024). Strategi Komunikasi Merek X dalam Proses Difusi Inovasi Alternative Channel di Kota Samarinda. *Jurnal JTIK (Jurnal Teknologi Informasi Dan Komunikasi)*, 8(3).
- Kusuma, A., & Meirinawati. (2023). Inovasi Pelayanan Elektronik Daftar Usulan Penetapan Angka Kredit Di Dinas Kesehatan Provinsi Jawa Timur. *Publika*, 11(4).
- Muharam, R. S. (2019). Inovasi Pelayanan Publik Dalam Menghadapi Era Revolusi Industri 4.0 Di Kota Bandung. *Jurnal Administrasi Publik*, 1(1).
<https://doi.org/https://doi.org/https://doi.org/10.23969/decision.v1i01.1401>.
- Rohmah, A., Abiyyu, K. Y., Elisa, C., Nurasimah, Pasapan, N. L., Safika, Firdaus, M. N., & Permatasari, N. R. (2022). Adopsi Inovasi Layanan Online di Dinas Kependudukan dan Pencatatan Sipil Kota Samarinda. *Jurnal Komunikasi Pembangunan*, 20(01), 47–60.
<https://doi.org/10.46937/20202239408>
- Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. CV Alfabeta.
- Sukardi, A., Purwanti, S., & Alfando WS, J. (2021). Implementasi Difusi Inovasi Aplikasi Super RT Sebagai Fasilitas Pelayanan Publik di Kelurahan Lok Tuan Kota Bontang. *Dunia Komunikasi: Jurnal Ilmu Komunikasi Universitas Mulawarman*, 9(1).
- Zaitul. (2022). Difusi Inovasi Sistem Informasi dan Kinerja Proses Internal Pemerintah Desa Destinasi Wisata Pemanfaatan Teknologi Sebagai Variabel Modernisasi. *National Conference of Vocational Business and Technology*.