
IMPLEMENTATION OF AN INTEGRATED MOBILE LIVESTOCK SERVICE PROGRAM AT THE LIVESTOCK AND ANIMAL HEALTH DEPARTMENT OF ACEH PROVINCE

Wenny Novita Sari¹, Mustaqim², T. Irfan Fajri³

^{1,2,3} Universitas Islam Kebangsaan Indonesia

Email: mustaqimt48@gmail.com

ABSTRACT

KEYWORDS

Mobile Services,
Livestock Diseases, App
usage

Implementation is the process of carrying out new ideas, programs, or a set of activities with the expectation that others can accept and make changes, conveying several messages, ideas, or concepts through the process carried out by an individual in the sense of human relationships or what is called human relations. Mobile services are one of the implementations that can be applied to livestock information and health management programs. The objective of this research is to determine the implementation of the Integrated Mobile Livestock Service Program at the Livestock and Animal Health Department of Aceh Province. The research approach used in this study is qualitative, which examines the object and reveals existing cases contextually through collected data. Each district surveyed includes 50 people for this mobile cow service program. The observed aspects of this program include: Public complaints about livestock diseases through the application, Interest in using health service information on the application, Public satisfaction with the application. The research results indicate that the complaints found in the community are about scabies and FMD (Foot-and-Mouth Disease). However, these complaints are obtained directly from the community, and only a few come through the application. The average application visitors in Pidie district are 29.87, Bireuen district 29.03, Aceh Utara district 27.47, Aceh Timur district 30.77, and Langsa city 29.33. User satisfaction with the application is assessed through questionnaires given directly to the community. The survey results show that, on average, people still have a limited understanding of the application's usage and are not very satisfied.

INTRODUCTION

With the development of technology and information, as well as the demand for good services, innovation for local governments becomes a necessity in efforts to advance the region, improve the welfare of the community, and facilitate services for the local population. Since the output of local government implementation is the acceleration of community welfare achieved through community empowerment, community participation, and the improvement of the competitiveness of both the community and the region. To encourage central and regional agencies to focus more on directed, in-depth, and sustainable public service innovation, in 2014, the Ministry of Administrative and Bureaucratic Reform (PANRB) initiated a competition for public service innovation within ministries/agencies/local governments. This is also seen as a factor that can stimulate various innovations in the public sector carried out by both central and regional government agencies (Suprapti, 2015).

Several regions in Indonesia have proven to bring progress to their communities and regions through various innovations. These innovations include direct services such as online licensing services, hospital governance, and smart city programs in various regions of Indonesia. The results of these innovations demonstrate that regions implementing innovations

in public service have been able to have a positive impact on development and progress in the area, both in terms of governance and the improvement of the welfare of the community.

Theoretically, the concept of innovation, according to Tang Abdullah (2016), in the context of public administration, became a major issue when the new public management (NPM) paradigm rapidly developed. One of the principles of the NPM paradigm is competitiveness. Public organizations can only survive and excel in this era of competition when they can present creative and more effective ways to address increasingly complex public issues through innovation. As known, innovation should be at the core of all activities in the public sector.

The definition of innovation summarized by Mulyadi et al., (2016) from various sources includes: a. The process of thinking and implementing an idea that has elements of novelty and expediency. b. A response to all problems within the organization. c. New discoveries that differ from what already exists or is known (ideas, methods, or tools). d. An idea, practice, or object considered new by individuals or other adopting units. In general terms, innovation is a creative idea that is implemented to solve the pressures of a problem (Suprpti, 2015). Ami Rahayu (2015) states that innovation represents the discontinuity of past conditions. This discontinuity becomes a characteristic that distinguishes innovation from change. Furthermore, innovation is the introduction of new elements into the organizational service in the form of new knowledge, new organizations, new management, or new process skills.

Pugh, as cited by Rahayu (2015), states that innovation is an introduction of new features in an organization. Innovation is reflected in new products and production processes, advancements in communication technology, new organizations, and new services in the public and non-profit sectors. Ami Rahayu (2015) states that organizational innovation is related to the adoption of a new idea or behavior that is new to the organization adopting it. Specifically, innovation is defined as the initial use of an idea by an organization with the same goal. This understanding implies that innovation adds value due to the novelty it brings to the organization.

Based on these facts, this research attempts to explore an innovative product/program carried out by the Sinjai Regency government through the Department of Livestock and Animal Health (DPKH) with the Integrated Mobile Livestock Service (LA SAPI) program. This program is interesting to study, considering that its creation utilizes mobile service applications as a communication tool between livestock farmers and the Sinjai Regency Department of Livestock and Animal Health (DPKH). This was inspired by numerous SMS scams that were prevalent in the community (JPPN.com, 2019).

The use of information technology is consistently regarded as the basis for the birth of innovative products. This is because, by leveraging information technology, besides facilitating service processes, its presence has become a necessity for almost all sectors, both in government and in society. Therefore, the LA SAPI program tries to capitalize on this momentum to launch the program.

However, since this program is an innovation in improving livestock services in Sinjai Regency, it certainly requires an in-depth study to understand the extent to which this program impacts the target community (livestock farmers). Because a true innovation has certain characteristics, a service or program can be considered an innovation. These characteristics include relative advantage, compatibility, complexity, trialability, and observability (Roger, 1983). Additionally, it is important to assess the extent to which the program has truly met specific criteria (indicators) and has become best practices that can be emulated and applied by other regions (Prasojo et al., 2004).

These questions underpin this research so that they can be identified and answered through an in-depth study related to the Integrated Mobile Livestock Service (LA SAPI) program. Therefore, the main problem examined in this research is how the LA SAPI program impacts the target community (livestock farmers) and the innovation indicators embodied in the program.

RESEARCH METHOD

The research will take place from August – September 2023 at the Livestock and Animal Health Office of Aceh Province by implementing it in 5 districts, namely Pidie, Bireuen, North Aceh, East Aceh, Langsa.

The type of research used in this study is a qualitative approach, which examines objects and reveals existing cases contextually through the collection of data obtained. Data related to the categorization of characteristics in the form of statements or in the form of narratives. Each district recorded 50 people for this cellular cattle service program.

By looking at the elements as interrelated units of study objects then describe them. The reason for using qualitative methods is because the problems are still very diverse, so to identify urgent problems, further deepening is needed. This method was used in research to obtain data and information on the Integrated Livestock Mobile Service Innovation (La Sapi).

The type of research used is a case study approach at the Livestock and Animal Health Office of Aceh Province which describes in detail the object of research and analyzes data or information about the Integrated Livestock Cellular Service Innovation (La Sapi).

Data collection is done through observation, interviews and documentation. Research instruments are the researchers themselves, interview guidelines, field notes, and supporting devices. The data analysis used is the data analysis model Miles et al., (2014) explained there are 4 stages, namely: data collection, data condensation, data presentation, and conclusion. The things that are observed from this program are:

1. Public complaints about livestock diseases through the application
2. Interest in using Healthcare information in the application
3. Community satisfaction with the application

RESULTS AND DISCUSSION

Community Complaints About Livestock Diseases Through the Application

In this research, it is observed that the complaints from the community are primarily related to scabies and FMD (Foot-and-Mouth Disease). However, these complaints are mostly received directly from the community, with only a small portion coming through the application.

Table 1. Farmers' Complaints About Diseases Through the Application

No	District	Service	Average
1	Pidie	Direct	15.67
		Aplikasi	2.67
2	Bireuen	Direct	13
		Aplikasi	2.67
3	Aceh Utara	Direct	30
		Aplikasi	2.5
4	Aceh Timur	Direct	13.67
		Aplikasi	2.67
5	Langsa	Direct	14
		Aplikasi	3.67

Survey data from each district involving 50 people each show that, on average, people are more inclined to express their complaints directly to local extension officers rather than using the application. This is attributed to the low understanding of livestock farmers regarding the use of applications via smartphones.

Interest in Using Health Service Information on the Application

Research data indicates a low interest in using the application among farmers. Out of 50 farmers in each district, the survey results show an average of application users in Pidie district as 29.87, Bireuen district 29.03, Aceh Utara district 27.47, Aceh Timur district 30.77, and Langsa city 29.33. This data is obtained from daily application visitors, visible directly on the admin account. It indicates the overall low technological literacy among livestock farmers in each district.

Community Satisfaction with the Application

User satisfaction with the application is evaluated through questionnaires given directly to the community. Survey results show that, on average, people still have limited understanding of the application's usage and are dissatisfied. This is due to the community's limited knowledge of technology and a preference for simplicity.

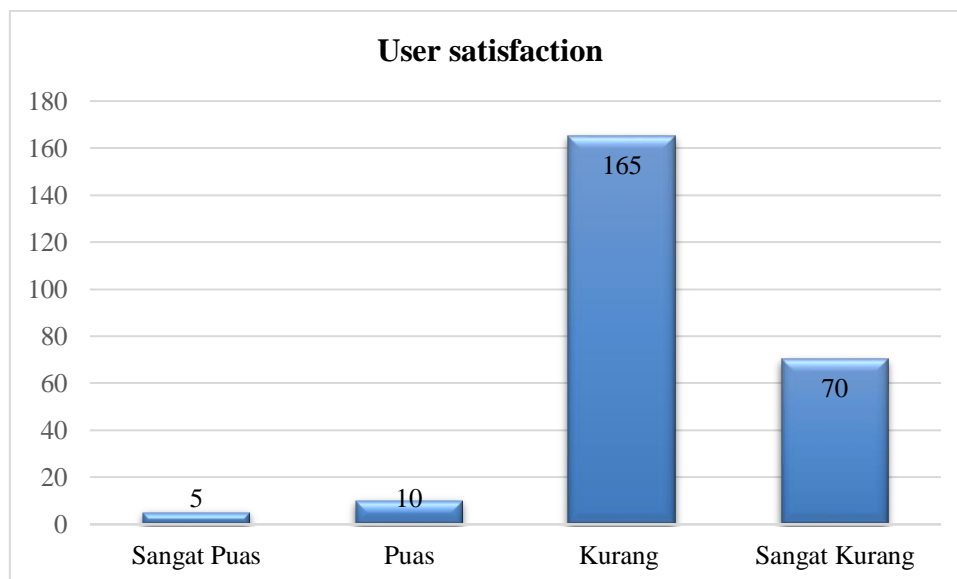


Figure 1. Application Satisfaction

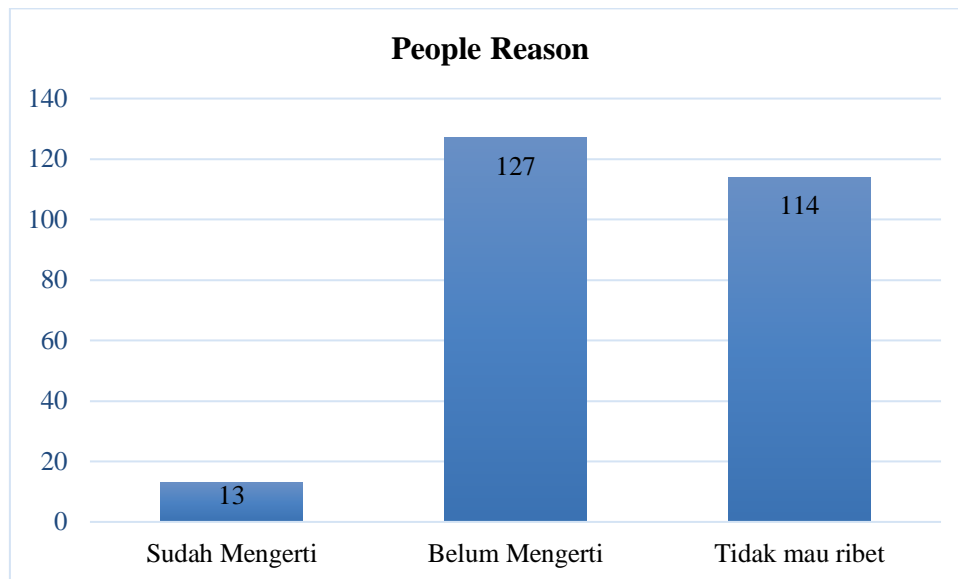


Figure 2. Community Reasons

Survey results indicate that the community is still dissatisfied with the existing application, choosing to stick with their existing habits. Looking at the reasons for community dissatisfaction with the application, it is evident that people, on average, lack understanding of technological advancements, even after training on application usage.

DISCUSSION

The livestock sector in Aceh is one of the most important sectors in the economy of Acehnese people. The livestock sector has a significant role in providing food sources in the form of meat and milk, as well as a source of income for farmers. However, livestock health problems, especially diseases, can hinder livestock growth and productivity, which impacts birth and mortality rates in livestock. The application of innovation in the livestock sector is one of the efforts to be made to increase productivity in the livestock sector. Rugh in Rahayu, (2015), states that innovation is an introduction to new features in the organization. Innovation is reflected by new products and production processes, advances in communication technologies, new organizations and services in the public and non-profit sectors. Daft in Rahayu, (2015), states that organizational innovation is related to the adoption of an idea or behavior that is new to the organization that adopts it.

Table 1 shows that the average community relies heavily on complaints directly to local extension workers. Local people are not used to technological advances, where the average person uses his cellphone to communicate and see news on social media. The application of applications to livestock actors is still very common for the community, there are even several application programs from the government regarding livestock are also neglected by animal husbandry. This is because the community continues to race on existing resources, so that the technology that enters for the development of the livestock sector is simply ignored. The average farmer in Aceh relies on complaints by calling directly to local extension workers or meeting directly, so that the management of livestock health reporting does not run according to procedures. Every implementation or provision of public services must have standardization in its services. Furthermore, the standardization of public services needs to be published so that they can be accessed or known by the public as users of public services so that the innovations implemented run according to plan (Riskasari, 2021).

The speed and ease of access to information and technological developments make interaction between individuals easier, without being limited by space and distance. One of the uses of technological developments in the livestock sector is a cellular service system. Cellular service is a service that makes it easier for farmers to transact without the need to come to the extension office or team. In other words, farmers can consult or see information anywhere and anytime. Mobile services include livestock health services, prevention of diseases of livestock and treatment of diseases of livestock. Digital technology is one way to have a positive and negative impact on society (ALshubiri et al., 2023); (Maria & Widayati, 2020). Apart from the emergence of new problems in society due to the development of digital technology, in reality digital technology is able to provide new breakthroughs that are more positive and innovative for people in all sectors (Hermawan, 2020). The development of digital technology today greatly affects social life to the economy (Wibowo, 2018), where all kinds of economic activities can be facilitated by involving digital technology such as promotions, transactions, and even transportation activities to health (Nugroho, 2021).

Results show the use of mobile service applications in each district is very low. Based on the survey, it shows that the average person still lacks knowledge about technology, and technological knowledge that can improve the economy of the community itself. Entering the present era with globalized technological advances has affected various aspects of life both in the fields of politics, economics, culture, art and even in the field of education (Maritsa et al., 2021). The level of willingness to develop the livestock community is classified as difficult, because the average livestock community does not want to use the application that has been provided to facilitate livestock problem services. (Cintamulya, 2015), people in rural areas have the following limitations: (1) Low knowledge and competence from the community; (2) Low economic level of the community; (3) Low quality of public health; (4) Limited access to finance both for access to funding, as well as other financial services such as money transfers; (5) Limited access to marketing of local products.

According to Zerrer and Sept (2020), rural digitalization is an implementation of digital social innovation. Digital social innovation is a type of social innovation and collaboration from rural communities that use digital technology to jointly create knowledge-based products or services as solutions to the needs of rural communities (Zerrer & Sept, 2020). Thus, rural digitalization can be said to be an effort from rural communities to empower the potentials that exist in rural areas both natural resources, human resources, production factors, knowledge through digital technology to overcome the limitations found in rural areas.

One of the performance indicators of the program of activities in the field of innovation and technology is the increase in public or user satisfaction in accessing the necessary information. Satisfaction is a function of the difference between perceived performance and expectations. If the performance is below expectations, then the community will be disappointed. When the performance is in line with expectations, the community will be satisfied. Meanwhile, if the performance exceeds expectations, the community will be very satisfied. Information technology is a combination of computer technology and communication technology used to process data, including processing, obtaining, compiling, storing in depth various ways to produce quality information, namely relevant, accurate and timely information, which is used for personal, business, and government purposes and is strategic information for decision making.

The results showed that public satisfaction with this mobile service application was still not satisfied, where the survey showed 165 people said they were not satisfied with the application, this was due to the reason that as many as 127 people did not understand this application, and 114 people chose not to bother in overcoming their animal health. This data

shows that the average farming community needs training on the use of technology for future development both in terms of economy and knowledge of the local community.

The success and benchmark of an application is not only from the ease of public services but also satisfaction with public services. An application technology can be said to be successful when the technology can be accepted by users or the community (Hartatik & Budihartanti, 2020). Technology must have the function of usefulness, convenience, attitude and also intention. Satisfaction with the use of technology or technology can be received by users as evaluation material for innovation in the future (Afni & Akil, 2017).

Public satisfaction is based on Evidence of Service Quality (Tangibles), Service Reliability (Reliability), Service Responsiveness (Responsiveness), and Service Assurance (Assurances). Related to the quality of service referred to (Servqual) the results of measurement through surveys are presented in the following table about respondents' satisfaction with service quality as a result of measurements on tangibles, reliability, responsiveness, and assurance as the following table (Sagai et al., 2018).

CONCLUSION

The results of this study can be concluded that people in several districts, namely Pidie, Bireuen, North Aceh, East Aceh, and Langsa still need more optimal training for the development of technological advances, where many people are still unable to use the Cellular Service application as a tool to see about livestock health, livestock health complaints and read information on prevention of livestock diseases.

REFERENCES

- Afni, N., & Akil, I. (2017). Analisis Tingkat Kepuasan Pengguna Commuter Line Terhadap Commuter Vending Machine dengan Metode Technology Acceptance Model Pada PT. KAI Commuter Jabodetabek. *Simnasiptek 2017*, 1(1), 7–13.
- ALshubiri, F., ALmaashani, A. A., & Thuaar, S. M. (2023). The impact of the digital economy paradigm on the productivity and monetary system of Oman. *Journal of Science and Technology Policy Management*, 14(5), 830–858.
- Cintamulya, I. (2015). Peranan Pendidikan dalam Memepersiapkan Sumber Daya Manusia di Era Informasi dan Pengetahuan. *Formatif: Jurnal Ilmiah Pendidikan MIPA*, 2(2).
- Hartatik, S. R., & Budihartanti, C. (2020). Analisis Kepuasan Pengguna Terhadap Penerapan Aplikasi Go-jek Dengan Menggunakan Metode TAM. *PROSISKO: Jurnal Pengembangan Riset Dan Observasi Sistem Komputer*, 7(1).
- Hermawan, Y. D. (2020). Dampak Pandemi Covid-19 terhadap Eksistensi Pendidik di Era Digital. *Quality*, 8(2), 303–318.
- Maria, N. S. B., & Widayati, T. (2020). Dampak perkembangan ekonomi digital terhadap perilaku pengguna media sosial dalam melakukan transaksi ekonomi. *JKBM (Jurnal Konsep Bisnis Dan Manajemen)*, 6(2), 234–239.
- Maritsa, A., Salsabila, U. H., Wafiq, M., Anindya, P. R., & Ma'shum, M. A. (2021). Pengaruh teknologi dalam dunia pendidikan. *Al-Mutharahah: Jurnal Penelitian Dan Kajian Sosial Keagamaan*, 18(2), 91–100.
- Mulyadi, D., Gedeona, H. T., & Afandi, M. N. (2016). *Administrasi Publik Untuk Pelayanan Publik: Konsep Dan Praktik Administrasi Dalam Penyusunan Sop, Standar Pelayanan, Etika Pelayanan, Inovasi Untuk Kinerja Organisasi*.
- Nugroho, L. (2021). Konsep Pembangunan dan Pengembangan Desa Digital. *Pengantar Manajemen Potensi Desa*, 1, 132–142.

- Rahayu, A. Y. S. (2015). *Manajemen Perubahan dan Inovasi*.
- Riskasari, R. (2021). Inovasi Layanan Seluler Peternakan Terintegrasi (La Sapi) Kabupaten Sinjai. *Kolaborasi: Jurnal Administrasi Publik*, 7(2), 217–229.
- Sagai, B. C. C., Rindengan, Y. D. Y., & Karouw, S. D. S. (2018). Analisa Kepuasan Masyarakat Pengguna Terhadap Layanan Aplikasi Pemerintah Kota Manado. *Jurnal Teknik Informatika*, 13(4).
- Suprapti, W. (2015). *Bahan ajar diklat kepemimpinan tingkat III: agenda inovasi-budaya kerja dalam efektifitas kepemimpinan*.
- Wibowo, E. W. (2018). analisis ekonomi digital dan keterbukaan terhadap pertumbuhan GDP Negara Asean. *Jurnal Lentera Bisnis*, 7(2), 66–80.
- Zerrer, N., & Sept, A. (2020). Smart villagers as actors of digital social innovation in rural areas. *Urban Planning*, 5(4), 78–88.

Copyright holders:

Wenny Novita Sari¹, Mustaqim², T. Irfan Fajri³ (2023)

First publication right:

Devotion - Journal of Research and Community Service



This article is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International](https://creativecommons.org/licenses/by-sa/4.0/)