

# Utilization of Information Systems in Handling the Spread of Hoaxes

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**Abstract.** The use of information systems in handling the spread of hoaxes at the Makassar City Communication and Information Office. This research is a qualitative descriptive research that aims to find out the Utilization of Information Systems in Handling the Spread of Hoaxes in the Makassar Diskominfo. The number of informants in this study was 5 people, namely 2 heads of fields from the war room and Public Information and Communication fields, 1 CCTV team leader, 1 from 112 operators, 1 from facility management employees. The data collection technique uses observation methods, interview methods, and documentation methods. The data analysis technique in this study uses data reduction techniques, data presentation, conclusion and verification. The results of this study show that the use of information systems at Diskominfo Makassar arises because of the lack of tools needed, namely applications that can connect directly between employees and the community to facilitate direct communication such as applications that have been provided in the past but have been discontinued because the application has a budget. This research can be used as a reference and knowledge about the use of information systems in more depth because unlike previous research that used quantitative methods that focused on numbers and statistics, this research uses qualitative methods that produce more detailed descriptions of information systems.

**Keywords:** Utilization, information systems, hoaxes, handling.

## 1. Introduction

The development of the times has changed a person's needs. The combination of information technology and the activities of people who use that technology to support operations and management called information systems is also very helpful in daily life. Information Systems is a collaboration between humans and technology to achieve a predetermined goal (Çelik & Ayaz, 2022; Chan et al., 2022; Meiryani et al., 2020; Xu et al., 2023). The existence of an information system can also help problems that can be handled, one of the problems that is usually solved by the existence of an information system is Hoaxes (Fauzy & Erwin Budi Setiawan, 2023; Siahaan et al., 2021; Varshney & Vishwakarma, 2021).

Hoaxes are fake news that is very detrimental to many people, both recipients or those who easily believe in news without *cross-checking* first (Juditha, 2018; Salaverría et al., 2020; Santoso et al., 2020). Hoaxes are very dangerous because of all negative access to freedom of speech and opinion on the internet (Delmana, 2023; Rini et al., 2023; Tchakounté et al., 2022). Especially social media and blogs. Hoaxes aim to create public opinion, lead opinions, shape perceptions, as well as for fun that tests the intelligence and meticulousness of internet and social media users.

The hoax phenomenon got a big moment when social media became very popular and developed in the internet age. So many people are deceived into believing it, even contributing to the spread of hoaxes. Easily and often unknowingly, social media users and *instant messaging* turn into an ideological battlefield. In fact, religious values are also bent to support hoaxes and not a few consider hoaxes to be common and halal because they are considered to still have wisdom.

*Utilization* is a derivative of the word 'benefit', which is a foresight that solely indicates the activity of receiving (Jamaluddin et al., 2021; Nasrullah et al., 2021; Saleh et al., 2020). Benefits are uses, benefits, profits, profits obtained from practicing or applying work results (Arhas et al., 2022; Darwis et al., 2024; Faradillah et al., 2018).

Information systems are the cooperation between humans and technology to achieve predetermined goals (McCleod Jr & Schell, 2007; Mustafa et al., 2023; Rahman et al., 2024; Syarifuddin et al., 2021). An information system is a collection of human or user, data and procedures that work

together to achieve the same goal, namely information management (Graesch et al., 2021; Irani et al., 2023; Sidani et al., 2022).

Diskominfo is a government apparatus of the Republic of Indonesia that is in charge of affairs whose scope has been mentioned in the 1945 Constitution of the Republic of Indonesia, namely information and communication. Therefore, the Communication and Information Service provides a reporting service or called the 112 service through the website that has been provided. In addition, people who want to get the correct information can visit the Makassar City Diskominfo agency directly because the Diskominfo has Cyber-security which functions to protect and secure information so that the data and network used, preventing unauthorized users in the network used.

The information system in the Diskominfo office is very helpful for the work of every worker, besides that it also not only handles hoax cases that are very detrimental to many people in the form of fraud but, also handles various kinds of cases, one of which is the local government's efforts to provide help to people who experience emergency conditions such as fires, natural disasters, The handling of the problem of security and order disturbances is one of the cases that is usually solved by the existing information system or called the 112 service at the Communication and Information Service or called the War room.

## **2. Method**

The research approach used in this study is a qualitative research approach. The following will be described more clearly about the meaning of qualitative research according to Qualitative research is a description generally used to evaluate a program or an organization to determine or monitor the changes that occur from the phenomenon being studied (Suprianto, 2024).

This research will be focused on "Utilization of Information Systems in Handling the Spread of Hoaxes at the Makassar City Communication and Information Office" by using indicators of information system utilization according to Irwan (2014) namely Humans/Users, data and tools.

The data collection technique is the method of collecting data obtained, the researcher uses the method of Observation, Documentation and Interview. Observation of this research is carried out directly at the Makassar Diskominfo office to conduct direct observations, researchers do not forget to record important things that are sources of information or data needed by researchers. Then the researcher's documentation collects data from existing documents. Then Interview, open interview, this is to get unlimited informant answers.

Data Analysis Techniques using Miles et al. (2014). This research is a descriptive research, with the data analysis used is a qualitative analysis in the form of sentences, after the data is collected. Data analysis techniques in this study, the researcher used four data procedures, namely: Data collection, data condensation, Data presentation, verification.

## **3. Result and Discussion**

Diskominfo is one of the regional apparatus that is further regulated by the regulation of the mayor of Makassar and the deputy mayor of Makassar along with the head of the agency, employees and staff who are tasked with fulfilling the work that has been determined, the number of personnel and the whole at the Diskominfo is 132 people.

To find out the overview of the challenges of using information systems in handling the spread of hoaxes at the Makassar City Communication and Information Office, data processing and presentation are carried out that are carried out processing and presentation of data that has been obtained during research with data collection techniques in the form of observation, documentation and interviews which will be described by adjusting the theory used, namely the theory put forward by Irwan Isa about Humans, Data and Tools. The description of the results of the analysis of research data conducted at the Makassar Diskominfo. They are as follows:

### 3.1 Humans

Humans are creatures that live and work to earn food while still alive in the world, which we know that the work done cannot be completed without the help of humans. Likewise in an office, there must be several fields that have been set to complete each task that has been determined. As is the case with the Makassar Diskominfo, which is the Department of Regional Apparatus which has the task of assisting the Mayor, Deputy Mayor and the Community. Related to Humans at the Makassar City Communication and Information Office. The total number of employees is 132 people, including employees and staff on duty. Here are some of the things that have been said related to humans / users in the Makassar Diskominfo.

Mr. Y.A as the head of the UPT war room of Diskominfo said that: One of the efforts that employees and staff often make is that employees often hold training to make their work easier by adding new experiences and more knowledge they get so that their insight is even broader.

Then facilities that support and help facilitate work in the office, for example laptops, computers and printers. Employees and staff can provide their skills in word processing, number processing, and data processing. These are some of the most commonly used media to receive information. (Interview 21/02/22)

Then added by Mr. M.F.U as the goods manager stated that for the skills of employees in mastering the employee application, all can use, we have an application but this application is not intended for handling hoaxes, there used to be a fraudulent application but it was paid so it was stopped by the office. (interview 24/02/22)

A different thing was also conveyed by Mr. R.K.W as the operator staff of 112 Diskominfo Makassar that: In the field of War Room, employees and staff consist of 45 people where in 3 teams there are those who enter the morning, afternoon and night shifts, each staff who works in the shift system has time to work at a predetermined time. Because of the determination of working hours where our field works 24 hours to carry out monitoring and reporting tasks. (Interview 16/03/22)

A different thing was conveyed by Mr. T.A as the head of the Makassar CCTV team said that: Employees always try to help pioneers or complete the form of incoming reports, if it feels difficult, then employees first do a discussion in the whatss app group to get advice and ways to make the work easier to do, this is one example of the ability that we usually strive for. (Interview 16/03/22)

From the results of the interview, it was concluded that every job can be easily completed if there is good cooperation, as evidenced by the group that has been provided for employees and staff to inform the work that requires direction or assistance from the colleague.

As is the case with humans/users who are used, namely to get news or information, employees must cooperate carefully such as news that comes in through the 112 call center then must be cross-checked by going through the CCTV team, of course this is easy to solve with good cooperation with other colleagues, not only that, the CCTV team also usually asks for help from the 112 call center to get related agencies or agencies from the information found through CCTV, this makes it easier to do what else is added by making it easier to communicate, then it is also helped by the whats app group that has been provided.

### 3.2 Data

Data is a source of information that is received by everyone, especially in an office, because what is known is that every office must have data, especially in the Makassar Diskominfo. Data in the form of sources of information or messages that usually come in, both from the Mayor and the community. In the service activities of an office, there should be every field that usually receives the source of information. Be it through *Makassar CCTV*, mandatory reporting services 112 and correspondence from other fields. Where all forms of service are of course ordinary through different service flows, depending on the type of report or a series of other affairs. But the form of service is definitely determined by employees who have expertise in their respective fields.

Regarding the data or source of information, Mr. R.K.W as the 112 operator staff said that: The data obtained from the complainant. For example, the 112 service of a person who needs health center services or called home care, of course he reports or conveys his message through the *war room* at 112,

not through the secretariat because of course the type of information is the duty of 112 to convey patient complaints and patient data to the nearest health center from the patient's address. Interview 10/03/22)

Furthermore, Mr. M.T.A. as the head of the *Makassar CCTV* team said that: The obstacles that employees usually get are in reconnaissance or *CCTV*, for example, there is a damaged camera, a fallen camera or a missing camera, it is one of the obstacles that often occurs and becomes an obstacle to cross-checking the area that wants to be inspected (interview 10/03/22)

Based on the results of the interviews that have been obtained, the researcher concludes that the data obtained must be accurate, and to obtain the source of information through the method of *cross checking* or re-checking the existence and origin of the news before following up to check again can be through the telephone book that has been provided.

### 3.3 Tools

Information systems are a collaboration between humans and technology that work together to solve a predetermined goal. Every work can be completed by the tools that have been provided by the office, for example facilities and infrastructure, namely rooms, technology that has been provided. Not only humans work, of course there are tools that can help get the job done, for example software and hardware.

Regarding these tools, Mr. A.I. Gobel as the head of the information and public communication division said that: Each field has facilities so that it is easier to complete tasks. An example of the software used is called a security firewall that protects computers from various threats on the network. For example, for the hardware, for example, a computer, if there is no computer, how is the work completed to serve the community and provide data and information needed by the community, of course, Diskominfo uses computers and so on. (interview 04/03/22)

The same thing was also conveyed by Mr. F.U as the manager of the Makassar city diskominfo goods said that: Some of the tools used in the office are computers and printers, besides that there are many more if you talk about the most technology in the field of *war rooms* because *the war room* has a large room that has 6 servers and 1 meeting room which is equipped with a large table along with sophisticated tools such as electric doors that function Only certain people can enter the room. (interview 04/03/22)

From the results of the interview, it can be concluded that every job requires adequate facilities to facilitate work, both in the field of *war rooms* and other fields to facilitate communication, receive information, and provide convenience to the community to improve the quality and quantity of public services because the three indicators support each other to utilize technology. And make it easier for employees or staff to collaborate with technology in completing predetermined tasks.

### 3.4 Supporting factors and Inhibiting Information Systems

The cooperation of employees and staff in carrying out their roles greatly affects the effectiveness and implementation of office activities, with adequate facilities can certainly be established good cooperation, both cooperation with fellow employees and staff is supported as well as with the knowledge of some employees and staff who master the technology that has been provided, this is supported by their respective educational backgrounds.

Then the inhibiting factor that currently often occurs is the head of the service who is being educated so that the files that want to be signed by the head of the service are piled up, so the whistleblower who needs help must be patient to wait for further information from the head of the service and the incoming letter must wait to be disposed of by the head of the service.

Mr. A.I. G as the head of information and public communication said that: The main supporting factor and inhibiting factor of having many employees is one of the advantages in this office, but if the usual inhibiting factor is in the employees, because not all employees can use the technology provided, usually there are old employees, then not all existing computers can be used because usually there are only those that are damaged due to computer damage eaten by age or old. It all depends on the use or time of the item. (interview 04/03/22)

From the results of the interview, it can be concluded that the supporting factors are from employees who have so many workers that it makes it easier to work and cooperate with each other in completing their tasks. Then from the inhibiting factors, it can be concluded that when handling or providing services for so long because the head of the agency is also while the education is so there is a little bit of work hampered. and not all are able to apply computers, including to elderly employees, and every computer displayed in Diskominfo is not all suitable for use because some are damaged by age.

#### 4. Conclusion

Based on the results of the research and discussion that has been described in Chapter IV that the use of information systems to handle hoaxes or fake news, employees and staff are always ready to receive incoming messages or reports, as evidenced by the existence of a war room divided into 2 teams, namely the CCTV call center 112 team. The supporting and inhibiting factors in the use of the information system are the supporting factors, namely having many employees and staff who are experts in their fields and working for 24 hours. Then the inhibiting factor is that computers are not all adequate because there are also some computers that are damaged because the computer is damaged by age, the age of the computer is long and some have been damaged so it is not suitable for use but is still on display, and not all employees who work at the Makassar Diskominfo can use existing technology for example computers, Because there are some employees who are old and do not really understand how to use computers. Then several procedures are passed and as a reporter must be patient because the report is followed up, to provide services in handling Hoaxes that are detrimental in the form of fraud, there must be approval from the police and the Ministry of Communication and Information if there is news of Hoaxes that are detrimental.

#### 5. References

- Arhas, S. H., Syazwani, S., & Nasrullah, M. (2022). Analysis of the Utilization of the Office Administration Automation Laboratory (Studies on Archival Subjects Class X) during the Covid-19 Pandemic at UPT SMK Negeri 1 Bulukumba. *Pinisi Journal of Education and Management*, 1(1), 51–58.
- Çelik, K., & Ayaz, A. (2022). Validation of the Delone and McLean information systems success model: a study on student information system. *Education and Information Technologies*, 27(4). <https://doi.org/10.1007/s10639-021-10798-4>
- Chan, S. W., Abid, S. K., Sulaiman, N., Nazir, U., & Azam, K. (2022). A systematic review of the flood vulnerability using geographic information system. In *Heliyon* (Vol. 8, Issue 3). <https://doi.org/10.1016/j.heliyon.2022.e09075>
- Darwis, M., Alfiah, N., & Jamaluddin. (2024). Effectiveness of Utilization of Facilities and Infrastructure in the Education and Culture Office of Soppeng Regency. *Journal of Public Policy and Local Government (JPPLG)*, 21–28.
- Delmana, L. P. (2023). Strategi Penanganan Hoaks Pemilu Melalui Penerapan Smart Contract Logic Serta Sistem Deteksi Hoaks Otomatis. *Electoral Governance: Jurnal Tata Kelola Pemilu Indonesia*, 4(2).
- Faradillah, N., Saleh, S., Arhas, S., Haerul, & Nasaruddin H. (2018). Pemanfaatan Media Pembelajaran Pada Mata Pelajaran Simulasi Digital, Utilization of Learning Media in Digital Simulation Subjects. *Jurnal Office: Jurnal Pemikiran Ilmiah Dan Pendidikan Administrasi Perkantoran*, 4(2), 79–90.
- Fauzy, A. R. I., & Erwin Budi Setiawan. (2023). Detecting Fake News on Social Media Combined with the CNN Methods. *Jurnal RESTI (Rekayasa Sistem Dan Teknologi Informasi)*, 7(2). <https://doi.org/10.29207/resti.v7i2.4889>

- Graesch, J. P., Hensel-Börner, S., & Henseler, J. (2021). Information technology and marketing: an important partnership for decades. In *Industrial Management and Data Systems* (Vol. 121, Issue 1). <https://doi.org/10.1108/IMDS-08-2020-0510>
- Irani, Z., Abril, R. M., Weerakkody, V., Omar, A., & Sivrajah, U. (2023). The impact of legacy systems on digital transformation in European public administration: Lesson learned from a multi case analysis. *Government Information Quarterly*, 40(1). <https://doi.org/10.1016/j.giq.2022.101784>
- Irwan isa. (2014). *pentingnya sistem informasi dalam keberhasilan sebuah proyek*.
- Jamaluddin, J., Adiguna, A. F., Suprianto, S., Nasrullah, M., Saleh, S., & Syaekhu, A. (2021). Utilization of Information and Communication Technology at the Baranti District Office, Sidenreng Rappang Regency. *Jurnal Ad'ministrare*, 8(1), 157–164.
- Juditha, C. (2018). Hoax Communication Interactivity in Social Media and Anticipation (Interaksi Komunikasi Hoax di Media Sosial serta Antisipasinya). *Journal Pekommas*, 3(1). <https://doi.org/10.30818/jpkm.2018.2030104>
- McCleod Jr, R., & Schell, G. P. (2007). *Management Information Systems*.
- Meiryani, Siagian, P., Puspokusumo, R. A. A. W., & Lusianah. (2020). Decision making and management information systems. In *Journal of Critical Reviews* (Vol. 7, Issue 7). <https://doi.org/10.31838/jcr.07.07.52>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook*. Sage publications.
- Mustafa, D., Askar, A., Rahman, N., Arhas, S. H., & Niswaty, R. (2023). *Analysis of the Application Of Information Technology Systems and Employee Performance*.
- Nasrullah, M., Agustang, A., & Idhan, A. M. (2021). Utilization of Information Technology at the Mangarabombang District Office. *Jurnal Ad'ministrare*, 8(2), 339–346.
- Rahman, N., Hasda, A. Y., & Niswaty, R. (2024). Effectiveness of the Use of Mail Application Information Systems at the Center for Security and Enforcement of Environmental and Forestry Law in Sulawesi Region. *International Journal of Administration and Education (IJAE)*, 29–40.
- Rini, E., Setiyono, B., & Wijayanto, W. (2023). Partisipasi Publik Virtual dalam Pencegahan Hoaks Melalui Kanal Jabar Saber Hoaks. *Journal of Education, Humaniora and Social Sciences (JEHSS)*, 6(1). <https://doi.org/10.34007/jehss.v6i1.1873>
- Salaverría, R., Buslón, N., López-Pan, F., León, B., López-Goñi, I., & Erviti, M. C. (2020). Disinformation in times of pandemic: Typology of hoaxes on Covid-19. *Profesional de La Informacion*, 29(3). <https://doi.org/10.3145/epi.2020.may.15>
- Saleh, S., Wekkeng, A. E. T., Nasrullah, M., & Nasaruddin, H. (2020). The effectiveness of the utilization of learning media in the otkp department at smkn 1 Makassar. *Jurnal Administrare*, 7(2), 301–310.
- Santoso, H. A., Rachmawanto, E. H., Nugraha, A., Nugroho, A. A., Setiadi, D. R. I. M., & Basuki, R. S. (2020). Hoax classification and sentiment analysis of Indonesian news using Naive Bayes optimization. *Telkomnika (Telecommunication Computing Electronics and Control)*, 18(2). <https://doi.org/10.12928/TELKOMNIKA.V18I2.14744>
- Siahaan, C., Nahria, N., & Tampubolon, M. (2021). Strategy for identification of Hoax News in digital media in facing case of racism of Papua students in Indonesia. *Technium Social Sciences Journal*, 21. <https://doi.org/10.47577/tssj.v21i1.3959>
- Sidani, D., Veglianti, E., & Maroufkhani, P. (2022). Smart Cities for a Sustainable Social Inclusion Strategy – A Comparative Study between Italy and Malaysia. *Pacific Asia Journal of the Association for Information Systems*, 14(2). <https://doi.org/10.17705/1pais.14203>

- Suprianto. (2024). Memahami Esensi Penelitian Kualitatif : Pendekatan, Proses, dan Praktik Terbaik. *ASHA Publishing*. <http://ashapublishing.co.id/>.
- Syarifuddin, H. M., Tahir, H., Akib, H., & Rusdi, M. (2021). Innovation of Electronic Licensing Information System at the Office of Investment and One Stop Integrated Services (DPMPTSP) of Bone Regency. *Jurnal Office*, 7(1), 169–182.
- Tchakounté, F., Amadou Calvin, K., Ari, A. A. A., & Fotsa Mbogne, D. J. (2022). A smart contract logic to reduce hoax propagation across social media. *Journal of King Saud University - Computer and Information Sciences*, 34(6). <https://doi.org/10.1016/j.jksuci.2020.09.001>
- Varshney, D., & Vishwakarma, D. K. (2021). Hoax news-inspector: a real-time prediction of fake news using content resemblance over web search results for authenticating the credibility of news articles. *Journal of Ambient Intelligence and Humanized Computing*, 12(9). <https://doi.org/10.1007/s12652-020-02698-1>
- Xu, J., Liu, Z., Wang, S., Zheng, T., Wang, Y., Wang, Y., & Dang, Y. (2023). Foundations and Applications of Information Systems Dynamics. *Engineering*, 27. <https://doi.org/10.1016/j.eng.2022.04.018>