PUBLIC SERVICE MODEL AND EMPLOYEE WORK EFFECTIVENESS THROUGH A WEBSITE-BASED MANAGEMENT INFORMATION SYSTEM

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Abstract: Services to the public and work effectiveness experience changes in activities so a management information system needs to be implemented. The purpose of this study was to obtain information on the results of implementing a website-based management information system on public services and the effectiveness of employee work. This study uses a qualitative approach in this case completing the formulation that has been determined, while the data collection method is by interviewing 3 employees who are in charge of running the management information system. Furthermore, interviews were also conducted with 2 people who had used information services. Based on the results of research conducted on informants, it was stated that the website-based management information system that was implemented was not optimal in providing services to the public, while for work effectiveness it was sufficient to make it easier for employees to work. The management information system that is implemented in general makes employee work effectiveness easier, but the service does not meet public needs.

Keywords: Community Service, Work Productivity, Use of Information and Technology

Abstrak: Pelayanan kepada masyarakat dan efektifitas kerja mengalami perubahan kegiatan sehingga perlu diterapkan sistem informasi manajemen. Tujuan penelitian ini adalah untuk memperoleh informasi hasil implementasi sistem informasi manajemen berbasis website pada pelayanan publik dan efektifitas kerja pegawai. Penelitian ini menggunakan pendekatan kualitatif dalam hal ini melengkapi rumusan yang telah ditentukan, sedangkan metode pengumpulan datanya adalah dengan mewawancarai 3 orang pegawai sekretariat Bawaslu Provinsi Sulawesi Selatan yang bertugas mengoperasikan sistem informasi manajemen. Selanjutnya dilakukan juga wawancara terhadap 2 orang yang pernah menggunakan layanan informasi. Berdasarkan hasil penelitian yang dilakukan terhadap informan disebutkan bahwa sistem informasi manajemen berbasis website yang diterapkan belum optimal dalam memberikan pelayanan kepada masyarakat, sedangkan untuk efektifitas kerja sudah cukup untuk memudahkan pegawai dalam bekerja. Sistem informasi manajemen yang diterapkan secara umum mempermudah efektivitas kerja pegawai, namun pelayanannya tidak sesuai dengan kebutuhan public.

Kata Kunci: Layanan publik, Produktivitas Kerja, Pemanfaatan Informasi dan Teknologi

INTRODUCTION

Accurate and timely information is needed to implement cost-effective solutions in the delivery of services provided effectively and efficiently. The management of information resources within an organization is one of the modern International Standards Organizational Requirements (ISO) intended to improve

service quality (Adenekan & Haliso, 2019). Service quality can be measured through the principles of public service, namely transparency, accountability, conditional, participative, equal rights, and balance of rights and obligations (Septia Phurma, 2022). Public services in Indonesia are currently lacking in information, coordination, responsiveness, accessibility, inefficiency, and lack of listening to complaints from the public (Yuniningsih & Suwitri, 2019). So that the need for more concrete public services, one of which is by utilizing information technology.

Achieving service and work effectiveness requires reliable and competent human resources. Human resources as operators or managers of management information systems that run the management information system to produce something informative according to organizational goals (Sholeh & Wahyudin, 2021). So that the relationship between the implementation of system information management and organizational performance shows that the system has an influence and an impact on organizational performance, which is measured by the performance of internal processes (Al-Tit, 2016). Even though the organization has good performance, it is not only measured by internal processes but also measured by external processes, especially by organizations engaged in the service sector. So, there is a need for feedback and suggestions on how to use the service from the community side. One of the problems is that the system is underutilized and does not fully utilize the capabilities of the available resources (Beadles et al., 2015).

The application of information systems in management previously was still manual, where the recording process was time-consuming and used a lot of print media, but after using the system there were significant changes for the better (Afrida Indra, 2020). Significant improvements occurred such as presenting information that was complete, accurate, and could be used for further analysis of activities. Apart from that, the resulting financial reports are also more honest, fair and can be tested (Silfiani & Hasanah Purnomowati, 2021). As is the case at the Bawaslu Institution, the implementation of information systems will begin to be implemented intensively in 2022, where previously some services were still manual. Some reports from the public require going to the Bawaslu office, even though current technology can be designed to make information services easier for the public.

Several previous studies have also conducted a lot of analysis of the management information system, which states that the use of information technology has a positive influence and has a significant correlation with organizational performance (Umar et al., 2018; Alawaqleh, 2021). Other things also show that the use of information technology has a significant effect on performance, but the use of information technology only acts as a predictor of work experience on performance and interpersonal communication skills on performance (Rahimi et al., 2016). In addition, it is related to showing that companies that pay more attention to the quality of systems, quality of information, and informatics services affect organizational results (Abrego Almazán et al., 2017). Therefore, it is also necessary to measure how the impact of implementing a management information system specifically on the ease and speed of work completion. Although several other studies have shown that the impact of information systems is not significant in managing work management (Dia Ningtyas & Khusniyah Indrawati, 2014). Therefore, it

is important for organizations to carefully consider the implementation and development of information systems to ensure that the system has a positive impact on the organization.

Previous research related to management information systems and public services has a positive and significant influence on web-based management information systems for service development (Setyawati, 2021). In addition, direct access in service management must be considered and sustainably offered to the public and must be following needs (Qekaj-Thaçi & Thaçi, 2023) so that public services must continue to experience developments toward changes in people's behavior with the help of the use of website-based technology but there is research that states that information system management is not directly significant to the user satisfaction index through service quality (Friyatna et al., 2021a). Therefore, this research was conducted to see and find out how the results of implementing a website-based management information system have been created. Information systems, in this case, the use of website-based technology, whether it makes it easy to complete work and improve services to the public or vice versa. Previous research only looked at how it affected but did not try to see how it had an impact and the methods used were not in-depth with informants, so it was very necessary for informants not only from internal organizations but also external parties to be very necessary for assessing organizations, especially institutions engaged in services.

LITERATURE REVIEW

The management information system uses formal procedures in providing management at all levels to function as appropriate information based on data from internal and external sources to make timely and effective decisions to plan, direct and control a given activity responsibility. An effective management information system generally uses computers and sophisticated technological devices to process information that reflects the company's daily operations (Mary & Ph, 2018). Based on the above, a management information system is an integrated manual computer system that provides information to support the management operations and decision-making functions of an organization.

Management Information System

Management Information Systems (MIS) have a close relationship with service and effectiveness in organizations. MIS is used to record, store, and process data to produce information that can be used by managers in making decisions. An effective MIS can help improve the services provided by organizations and increase effectiveness in decision-making (Al Moaiad et al., 2023). An integrated management information system can provide benefits in improving company services and effectiveness. This research shows that organizations are looking to strengthen their competitive advantage through business processes supported by information technology. However, the challenges faced include difficulties in integrating the various technologies available on the market, the overall organizational system integration process, and the operational costs involved (Madonsela, 2020). Therefore, an integrated management information system is needed to overcome these challenges to improve company services and effectiveness.

Public service

Public service is a series of activities carried out by public organizations or government agencies to fulfill community requests for goods or services carried out following predetermined standards and regulations, government facilities and all institutional devices prepare willingness and rules for service to the community (Dwiyanto, 2015). Public service is one of the important tasks of the government. The government is obliged like an institution to provide for or meet the needs of society. Services are actions that can be offered by one party to another, which are essentially intangible and do not lead to personal ownership but to everyone. Services help in preparing or caring for what a person needs, as a service product has special properties, that is the reason for the difference because it varies from one product to another (Laia et al., 2022). The information system implemented certainly improves service quality, helps managers in decision making, collects data quickly, and speeds up and simplifies reports (Puji Utami, 2021).

Work effectiveness

Effectiveness is an important concept for organizations because effectiveness can describe the level of organizational success in achieving targets or goals that have been set through the process of the stages of activities that have been carried out (Sutriani & Hamdiah, 2022). Actions that need to be considered in work effectiveness include (Kencana et al., 2021) namely loyalty, creativity, cooperation, skills, and responsibility. Although previous research states that system equipment has no impact. Therefore, the management information system is continuously updated, employees are involved in building the system, and training is provided to employees regarding the use of the system (M.A.AL-Gharaibeh & M.M. Malkawi, 2013)

The implementation of management information systems has an important role in improving organizational performance and effectiveness (Fadhil et al., 2021a; Zulfina et al., 2020). Implementing MIS in organizations helps increase productivity, reduce errors, make information flow effective, and facilitate timely decision making (Ghafoor Awan & Multan Fahad-Ul-Haq Khan, 2016a). By implementing SIM, of course it increases work effectiveness so that achieving organizational goals is very important by utilizing existing information technology.

RESEARCH METHODS

In general, this research methodology will be passed in 4 processes, which can be seen in Figure 1;

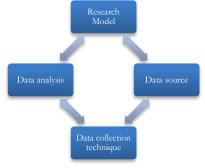


Figure 1. The research method developed

Based on the image above. In detail the research methods developed relate to each stage of the process. This research is included in descriptive research with a qualitative approach. This research uses a qualitative approach to explore how to see the existence of a variable clause relationship. as according to Sugiyono, (2017) stated that descriptive research is research that is needed to determine the existence of variables, namely independent variables, either one or more variables that are not created to compare or combine other variables.

This research obtained data obtained from primary data sources through an interview process, namely collecting data and information directly from Bawaslu employees of South Sulawesi Province who worked on and managed the information. Apart from that, it is obtained directly from stakeholders or the public who have an interest in using the public services provided by the institution. Data collection was carried out by interviewing informants and studying documents relevant to the research being conducted. The sources of informants in conducting interviews (table 1):

Table 1. List of sources of research informants

No	Informant Sources	Amount	Position	Kode
1	Policy Maker	1 people	Secretary or Head of Legal, Public Relations and Information Data	Informant 1
2	Implementor	2 people	a. Dispute Resolution staffb. Legal, Public Relations, and Information Data Staff	Informant 2 Informant 3
3	External Targets	2 people	a. Studentb. Officials of Political Parties	Informant 4 Informant 5

Source: data processing results

Data processing techniques derived from the results of interviews, observations, and literature reviews were carried out using the analytical method through the steps in Figure 2 as follows (Fahmi & Ratnawati, 2020):

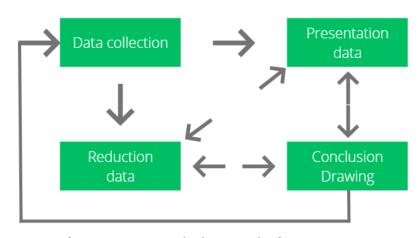


Figure 2. Research data analysis process

Based on Figure 2, the process will be carried out in analyzing research data later. The stages with explanations are (1) Data reduction, collecting information from the field, then analyzing it using selected data reduction and selecting data from the results of interviews, observations, and literature for further processing so that it has more important value; (2) After that, the data information obtained from the data reduction results is presented, providing a brief and clear picture so that the information has a certain meaning. Presentation of information is information that is collected and organized to provide possible conclusions so that there are action steps; (3) the final step is to draw conclusions that are drawn and then verified during the research based on progress towards the goal of the analysis that will be carried out in response to existing problems.

RESULT AND DISCUSSION

Based on Article 97 of Law Number 7 of 2017, in maximizing the duties, authorities, and obligations, one of the strategies of current government agencies is to develop innovations, namely creating website applications to maximize tasks so that they are achieved following the targets and rules that have been assigned. The current application of management information systems is that almost all organizations, both government agencies, and companies, even both groups and individuals, are starting to use the system to achieve their goals, currently all are very dependent on the development of digital-based technology. This is unavoidable because of the current condition that work can be completed quickly, and precisely, transparently simplifying the process by using the governance of an applicationbased management system. Bawaslu is one of the government institutions formed under a law that has the main task of supervising elections in which there is a duty to serve the community. The management information system not only speeds up the processing time for data management but also relevant and accurate information because the data managed by Bawaslu both internally and institutionally are interrelated from the Kelurahan/Village level to the Center. Bawaslu at the provincial level is one of the regional levels that implement these systems to facilitate work and meet community needs in service.

Based on the results of research that has been carried out using the interview method with 3 predetermined informants, the questions submitted to the internal Bawaslu employee informants of South Sulawesi Province regarding how the management information system impacts work effectiveness and produce answers in table 2 are as follows:

Table 2. Results of interview research

No	Reference	Question Items	Answer
1	(Gunadi,	How does the	- Applications are submitted manually,
	2019)	application of	and the work process takes too long
		website-based	because the process of completing the
		information	work is by accepting it manually and
		technology	then inputting it into the application

No	Reference	Question Items	Answer
		make work easier?	and the announcement is also inputted into the application, but it is different when the application goes directly through the application because the acceptance process is online, and the results of the remaining decisions are inputted into the website. The current SIPS system is well integrated with dispute applicants with the presence of notifications, making it easier to complete work (informant 2) The birth of the application can provide motivation and add additional knowledge to employees because by managing the application employees read and disseminate legal products produced by Regency/Municipal and Provincial Bawaslu (informant 1) The application that is currently used in work is still standard, meaning it is not very smooth and does not slow it down either, because the Bawaslu application is still not integrated with all other applications in a single signon system (SSO) (informant 3) So, it depends on the designation of the application, for public services it has been very helpful but for internal employees it is still minimal use of the
2		What achievements have been achieved since using information technology systems	 available website (informant 3) In 2022 there has not been a process for dispute requests that have been processed at the Provincial level which have been accepted but at the Regency/City there have been requests for disputes which have been received and decided (informant 2) The South Sulawesi Province Bawaslu achieved work performance, namely being the first best with the most upload categories in Indonesia besides that the PPID application is also one of

No	Reference	Question Items	Answer
			the South Sulawesi Province Bawaslu website applications which is a mainstay because it achieved achievements as an informative institution on the results of an assessment from the Public Information Commission (KIP (informant 1)
3		What are the obstacles encountered in the implementation of information technology systems?	
<u> </u>	ource results o	of personal interviews, 20	

Source: results of personal interviews, 2023

Based on the results of research that has been carried out using the interview method with 2 predetermined informants, the questions submitted to external informants, namely political party officials and students regarding how the services provided are related to the implementation of the management information system

owned by the Sulawesi Province Bawaslu South and produce answers in table 3 as follows:

Table 3. Results of interview research

		Table 3. Results of 11	iterview research
No	Reference	Question Items	Answer
1	(Gunadi,	How is the -	Generally, the information and data
	2019)	implementation	managed by the South Sulawesi
		of the available	Province Bawaslu are reports on the
		systems related	results of election supervision,
		to providing	reports on the results of election
		services	handling and violations, and dispute
			resolution reports on financial
			results. The ease of information
			services provided by the South
			Sulawesi Province Bawaslu is good
			(informant 4)
		-	The needs of election participants are
			not just service applications but more
			a direct communication process to
			obtain information on the
			development of election supervision
			regulations and work results
			(informant 5)
2		How the data -	The data provided is still not relevant
		and	to the needs of the community and
		information	the responsibility is still not fast
		provided is	enough in terms of confirmation of
		appropriate or	the request whether the data is
		not	available or not available, so that the
			information requester does not place
			any hope, especially since the
			expected information and data will
			be managed again and have a time
			limit for completion (informant 4)
		-	Communication is difficult, human
			resources are needed to be more
			proactive to election participants in
			serving information that can be
			accessed (informant 5)
			, ,

Sumber: results of personal interviews, 2023

Based on the informants above who were obtained through interviews, it has been described that the management information system implemented based on the website is the right step in increasing work effectiveness and service to the public but cannot be separated from deficiencies in its management. The resulting

achievements are a form of outcome for the use of website-based information technology, although not all employees use it yet. Ease of collecting data such as legal products made by districts/cities can speed up the collection process. Meanwhile, in terms of public services, it is easily accessible to the public, but the resources managing the system are less responsive and communicative. Human resources that operate services in a focused manner are relatively lacking, especially since the data provided is not relevant to what is needed.

The Bawaslu institution in completing administrative work is assisted by a modern information system but there are still some that are not optimal such as experiencing maintenance, 404 errors (accessed January 27, 2023), and others even though this is common in the framework of public services it is not optimal in obtaining information. In addition to being used for internal purposes, the management information system can also be used as a means of connecting with the public in providing services, obtaining information and communication, and even more effective and efficient promotions. The role of human resources is the main factor in its implementation. Apart from the role of human resources, the ability of institutions to create other service products such as web management information systems must also be maximized (Loryana & Syahidul, 2021). Public service is the responsibility of the government and is carried out through government agencies from the central level to the lower levels. The current portrait of public services based on data from the Indonesian Ombudsman's annual report in 2021 totals 7,186 reports with detailed reports consisting of 6,176 regular reports, 835 Quick Response reports, and 175 Investigative reports.

As stated by informant (1), the implementation of the current management information system makes work effectiveness much easier, especially by managing the system, as an employee you also add information because the data in the system is always the latest information. Of course, this states that information systems are very important in managing the ease and speed of completing work. Likewise, informant (2) stated that the work process was made easier by the presence of the management information system. The convenience provided by technology has an impact on employees being more able to quickly compile work reports and receive complaints/responses from the public.

However, the management of the information system is still not optimal because the capabilities of human resources still need to be optimized in operating the information technology based on the results of informant interviews (3). Of course, in terms of convenience and speed, it has really had an increasing effect, an integrated information system can provide space for employees who, with just access to the system, are able to access other information, known as single sign-on.

The results of interviews with internal parties are in line with several previous research results which stated that management of information system variables has an impact on public service performance and service quality (Friyatna et al., 2021b). Apart from that, MIS can significantly influence work effectiveness by providing the data needed for business executives to identify areas that are not performing well in the organization, explore various alternatives in decision-making, and increase productivity (Fadhil et al., 2021b; Ghafoor Awan & Multan Fahad-Ul-Haq Khan, 2016b).

As conveyed by informants (4) and (5) as service users, the management information system for public services implemented has not been optimal in meeting the needs of the community. The needs in question are the information and data that the community wants or needs. The main indicators of information system utilization in this research focus on accuracy, timeliness, relevance, and completeness as well as the process of extracting information from informants to make it more open about how the relationship between information systems and effectiveness must be communicated partially so that the information is more accurate and open. The research results obtained by the applied information system have produced more accurate and complete values, but the relevance and timeliness have not been maximized. So the role of employees in charge of handling and management needs to have good communication competence and be more responsive. No matter how sophisticated the technological system is, the human resources placed have not been able to keep up with the needs of external parties, and the system is still not functioning well. As stated, the optimal management information system is delivery and evaluation by community-based behavior (Penn et al., 2019).

In contrast to research conducted by (Fitri Ariesta Susilo & Afandi, 2021), the use of management information systems is determined by the presence of three indicators, namely trust, efficiency and effectiveness, and satisfaction. Based on these indicators, the results of information mining carried out on informants using the method of being asked at one time at the same time, so that there is a possibility of opinion intervention, thereby affecting the independence of each respondent's opinion. Meanwhile, in this research, the interview process was not carried out simultaneously, it was carried out partially with the informants, to obtain a maximum picture of the results.

The research carried out had limitations in terms of data collection time, the number of informants that had been determined was 5 people and several informants had difficulty determining the time for the interview. In particular, South Sulawesi Province Bawaslu staff informants were busy with several internal activities so the process of presenting data to drawing conclusions had to wait for all the data to be collected. Apart from that, some of the questions that will be asked to informants are personal so in the data reduction process there is a lack of information that supports the research being carried out.

CLOSING

The application of a management information system can improve public services and employee work effectiveness and it is concluded that the website application-based management information system implemented by the South Sulawesi Province Bawaslu as a whole has not optimally provided services to the public even though the aspect of ease of access it is good because it obtains information without having to go to the location. To the office but from the other side the responsive and communicative aspects are still lacking. In addition, the application of the website application in terms of employee work effectiveness has provided good results because there has been an increase compared to previous

achievements, as evidenced by the achievements obtained. facilitate employees in completing work.

To maximize all of the work achievements of the South Sulawesi Province Bawaslu in the implementation of work effectiveness and services to the public, it is necessary to increase efforts to improve aspects of human resources such as intense training, staffing of employees in strategic positions in particular public services so that they are more focused. In addition, aspects of improving and utilizing technology such as data storage capacity so that data collected from all departments are available before any application is made, as well as aspects of work programs that require relevant and massive socialization, not only formal programs such as face-to-face activities but can also be informed through marketing services this is to inform all levels of society so that institutional goals can be achieved.

BIBLIOGRAPHY

- Abrego Almazán, D., Sánchez Tovar, Y., & Medina Quintero, J. M. (2017). Influencia de los sistemas de información en los resultados organizacionales. *Contaduria y Administracion*, 62(2), 303–320. https://doi.org/10.1016/j.cya.2016.07.005
- Adenekan, T. E., & Haliso, Y. (2019). *Role of Government in the Provision of Information System and Services in Nigeria*. https://digitalcommons.unl.edu/libphilprac
- Afrida Indra, Y. (2020). Penerapan Sebelum Dan Sesudah Sistem Informasi Akuntansi Syariah Dengan Menggunakan Aplikasi Software Accounting Dalam Penyusunan Laporan Keuangan Bagi UMKM. *Al-Intaj*, 6(20).
- Al Moaiad, Y., ABaker El-Ebiary, Y., Hatamleh, A., Thaher Amayreh, K., Mohamed, R. R., Abdulkarem Al-Haithami, W., Iryani Ahmad Saany, S., Ts, A., Author, C., & ABaker El-Ebiary Assoc Ts, Y. (2023). A Review Of The Effectiveness Of Management Information System In Decision Making. *Journal of Pharmaceutical Negative Results* 1, 14, 2023. https://doi.org/10.47750/pnr.2023.14.S02.155
- Alawaqleh, Q. A. (2021). The Effect of Internal Control on Employee Performance of Small and Medium-Sized Enterprises in Jordan: The Role of Accounting Information System. *Journal of Asian Finance, Economics and Business*, 8(3), 855–863. https://doi.org/10.13106/jafeb.2021.vol8.no3.0855
- Al-Tit, A. A. (2016). Management Information Systems in Public Institutions in Jordan An Eye on Implementation Success Factors and their Relationship with Organizational Performance. In *IJACSA*) *International Journal of Advanced Computer Science and Applications* (Vol. 7, Issue 7). www.ijacsa.thesai.org
- Beadles, N. A., Lowery, C. M., & Johns, K. (2015). The Impact of Human Resource Information Systems: An Exploratory Study in the Public Sector. *Communications of the IIMA*, 5(4). https://doi.org/10.58729/1941-6687.1280
- Dia Ningtyas, N., & Khusniyah Indrawati, N. (2014). Kinerja Keuangan Sebelum Dan Sesudah Penerapan Sistem Entreprise Resource Planning (ERP). *Jurnal Management Risiko Dan Keuangan*, 1(3).
 - https://doi.org/10.21776/jmrk.2022.01.3.03
- Dwiyanto, A. (2015). *Mewujudkan Good Governance Melalui Pelayanan Publik*. Yogyakarta: Pustaka Pelajar.

- Fadhil, S., Mahmood, N., & Ahmed, N. (2021a). The Significance of Management Information System in Improving Organizational Performance and Effectiveness. *Journal of Garmian University*, 7(4), 195–211. https://doi.org/10.24271/garmian.207017
- Fadhil, S., Mahmood, N., & Ahmed, N. (2021b). The Significance of Management Information System in Improving Organizational Performance and Effectiveness. *Journal of Garmian University*, 7(4), 195–211. https://doi.org/10.24271/garmian.207017
- Fahmi, L. I., & Ratnawati, S. (2020). Teknologi Informasi Sebagai Fasilitas Kerja Dalam Meningkatkan Efektifitas Kerja di Pengadilan Negeri Magelang Kelas IB. *Jurnal Maneksi*, 9(2).
- Fitri Ariesta Susilo, G., & Afandi, P. (2021). Continuance Use of Management Information Systemsfor Civil Registration Services. *Jurnal Riset Akuntansi Kontemporer (JRAK)*, 13(1), 37–41. https://journal.unpas.ac.id/index.php/jrak/index
- Friyatna, A., Hidayatullah, S., & Ardianto, Y. T. (2021a). The Influence Of Management Information Systems And Public Service Performance On The User Satisfaction Index With Service Quality Mediator At The Office Of Communication And Information Technology In Blitar. *International Journal of Scientific and Technology Research*, 10(11). www.ijstr.org
- Friyatna, A., Hidayatullah, S., & Ardianto, Y. T. (2021b). The Influence Of Management Information Systems And Public Service Performance On The User Satisfaction Index With Service Quality Mediator At The Office Of Communication And Information Technology In Blitar. *International Journal Of Scientific & Technology Research*, 10(11). www.ijstr.org
- Ghafoor Awan, A., & Multan Fahad-Ul-Haq Khan, P. (2016a). Impact of Management Information System on the Performance of the Organization (Profitability, Innovation, and Growth). In *An International Peer-reviewed Journal* (Vol. 21). www.iiste.org
- Ghafoor Awan, A., & Multan Fahad-Ul-Haq Khan, P. (2016b). Impact of Management Information System on the Performance of the Organization (Profitability, Innovation, and Growth). In *An International Peer-reviewed Journal* (Vol. 21). www.iiste.org
- Gunadi, G. (2019). Qualitative system dynamics modelling of the impacts of maintenance, effort, competence and collaboration on e-government website availability. *Electronic Government, an International Journal*, 15(2), 189–212. https://doi.org/10.1504/EG.2019.098671
- Kencana, P. N., Asmalah, L., & Munadjat, B. (2021). The Effect of Discipline and Work Motivation on Work Productivity on Shaza Depok Employees. http://e-journal.stie-kusumanegara.ac.id
- Laia, O., Halawa, O., & Lahagu, P. (2022). Pengaruh Sistem Informasi Manajemen Terhadap Pelayanan Publik. *Jurnal Akuntansi, Manajemen Dan Ekonomi, 1*(1), 70–76. https://doi.org/10.56248/jamane.v1i1.15

- Loryana, D., & Syahidul, M. (2021). Implementasi Sistem Informasi Manajemen Dalam Meningkatkan Pelayanan Pendidikan Sekolah di Masa Pandemi Covid-19. *Jurnal Inspirasi Manajemen Pendidikan*, 9(5), 1221–1235.
- M.A.AL-Gharaibeh, S., & M.M. Malkawi, N. (2013). The Impact of Management Information Systems on the Performance of Governmental Organizations-Study at Jordanian Ministry of Planning. www.ijbssnet.com
- Madonsela, N. S. (2020). Integration of the Management Information System for Competitive Positioning. *Procedia Manufacturing*, 43, 375–382. https://doi.org/10.1016/j.promfg.2020.02.176
- Mary, M., & Ph, I. (2018). Importance of Management Information System in service Delivery and Paper Work in Nigeria University. *IOSR Journal of Business and Management (IOSR-JBM)*, 20(9), 30–38. https://doi.org/10.9790/487X-2009013038
- Penn, L., Goffe, L., Haste, A., & Moffatt, S. (2019). Management information systems for community based interventions to improve health: Qualitative study of stakeholder perspectives. *BMC Public Health*, 19(1). https://doi.org/10.1186/s12889-018-6363-z
- Puji Utami, K. (2021). The Role of Management Information Systems in the Decision-Making Process in the Hospital Sector. In *Turkish Journal of Computer and Mathematics Education* (Vol. 12, Issue 14).
- Qekaj-Thaçi, A., & Thaçi, L. (2023). The Quality of E-Government Management, Information Security and Quality. *Emerging Science Journal*, 7(1), 228–244. https://doi.org/10.28991/ESJ-2023-07-01-016
- Rahimi, H., Ghoraba, M., & Dehbashi, A. (2016). The Effects of Human Resources Information Systems on the Quality of Work Life in Public Sector Organization. *International Journal of Academic Research in Economics and Management Sciences*, 4(4). https://doi.org/10.6007/ijarems/v4-i4/2007
- Septia Phurma, V. (2022). Analisis Sistem Informasi Desa dalam Pelayanan Publik di Desa Gunong Kleng Kabupaten Aceh Barat. *JESS (Journal of Education on Social Science, 6,* 206–215. https://doi.org/10.24036/jess.v6i2
- Setyawati, E. (2021). Web-Based Management Information System for Services Development: A Literature Review. *International Journal of Current Science Research and Review*, 04(03). https://doi.org/10.47191/ijcsrr/V4-i3-05
- Sholeh, M., & Wahyudin, D. (2021). Pengaruh Sistem Informasi Manajemen Dan Kompetensi Terhadap Efektifitas Kerja di PT. Citra Solusi Informatika (Vol. 3, Issue 1). http://ojs.stiami.ac.id
- Silfiani, S., & Hasanah Purnomowati, N. (2021). Efektivitas Pelaporan Keuangan Sebelum Dan Sesudah Implementasi Sistem Informasi Manajemen Keuangan Daerah (Simda Keuangan) Pada Pemerintah Kabupaten Magelang. *Jurnal Akuntansi Dan Bisnis*, 21(2).
- Sutriani, & Hamdiah. (2022). Analisis Efektivitas Kerja dan Tata Ruang. *Jurnal Visioner & Strategis*, 11(1), 55–59.
- Umar, R., Rompas, W. Y., & Pombengi, J. D. (2018). Pengaruh Teknologi Informasi Terhadap Efektivitas Organisasi di Sekretariat Dprd Kabupaten Kepulauan Sula Provinsi Maluku Utara.

- Yuniningsih, T., & Suwitri, S. (2019). Pelayanan Publik di Era Otonomi Desa Antara Harapan dan Kenyataan (Sebuah Tinjauan Kritis). In *JPALG* (Vol. 3, Issue 2). http://jurnal.untidar.ac.id/index.php/publicadmini
- Zulfina, A., Rahim Matondang, A., Karina, B., Sembiring, F., & Zulfina, A. Al. (2020). The Effects of Employee Management Information System (SIMPEG), Workplace Environment and Human Resources Quality on Performance through Employee Motivation to Digital System. *International Journal of Research and Review (Ijrrjournal.Com)*, 7(7), 7.