

INTERNAL AUDIT PROCESSES: FACTORS AND CHALLENGES OF TECHNOLOGY APPLICATIONS

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Abstract: The use of technology has brought many benefits to an organization. It can help organizations make decisions more quickly and expeditiously, demonstrate transparency in organizational management and service delivery with the outside community, prevent fraud among employees or customers of the organization, and provide effective services to the community. The effectiveness of the use of this technology is applied by the Kedah State Zakat Board (KSZB) which is also taking steps towards IR 4.0 as a mission-based organization to improve Islamic social financial management efficiently and with integrity to upgrade the socio-economy of Muslims, especially in Kedah. This is evident when KSZB does not deny that using technology in the audit process can speed up the process itself. It is equivalent to the use of technology in other applications such as “Zakat on Touch”, “Jom Zakat Kedah” and “Jom Cari Asnaf”. However, the factors that should be considered in transforming the audit process with the use of technology systems need to be studied first. This is taking into account the possible challenges faced by KSZB, especially in the internal audit division. Observations, discussions, and interviews were conducted with all internal auditors and information system officers of KSZB to apply the use of technology in the internal audit process. Such information is important and should be given attention in strategic plan statistics related to financial management audits. Undoubtedly, there is room for improvement to reduce the gap in theory or management.

Keywords: Technology, Internal Auditor, Kedah State Zakat Board, Challenges

INTRODUCTION

The Kedah State Zakat Board (LZNK) is one of the important organizational bodies within the Kedah state government where it assists the state government in managing *zakat* funds from collection processes to distribution processes. Some of these processes have already utilized technology such as “Zakat on Touch,” “Jom Zakat Kedah,” and “Jom Cari Asnaf.” The introduced systems are smartphone applications for the general public, assistant collectors, and LZNK staff in general. Additionally, the use of this technology provides a more efficient and systematic *zakat* payment platform, ease in checking the appropriate tax rates, and identifying the status of *asnaf* in the state of Kedah in particular. The introduced online applications greatly facilitate income deduction, *zakat* fitrah, *zakat* on gold, and various other types of *zakat* deductions or distributions directly through salary deductions or via online

banking payment mediums. Indirectly, it facilitates *zakat* payers in fulfilling the fourth pillar of Islam.

At LZNK, evidence management, activity verification, auditing processes, review, and reporting still rely on manual systems despite the availability of advanced technology. As a result, auditors at LZNK have to spend a significant amount of time, money, and energy on printing, verifying, and reporting evidence materials. The internal audit department, consisting of four individuals, including the chief executive, executives, and executive assistants, aspires to systemize the auditing process, but they have not yet been able to do so (LZNK, 2020). This is why a study focusing on the capabilities and challenges of using technology in internal audit systems is necessary. Such a study can help internal auditors utilize technology efficiently and effectively to ensure the development of any type of system related to LZNK's internal audit. Moreover, it can serve as a financial support system and enhance public confidence in LZNK's auditing processes.

Theoretically, the auditing process system for each organization is unique. For example, although there is an auditing process system in public organizations, it cannot be directly referenced and practiced because there are differences in aspects of activities, audit procedures, reporting formats, and follow-up audit actions. The uniqueness of the auditing process for each organization requires a clear understanding of the organization. Therefore, the results of the literature review are quite limited and cannot provide a comprehensive overview of an organization's auditing process. However, literature reviews on the auditing process in the public financial sector, taxation, banking, and human resources sectors that have been developed either in Malaysia or abroad can still be used as references for a deeper understanding (Rahayu, Rasid, & Tannady, 2019; Tawaqal, & Suparno, 2017; Zamzami, & Pramesti, 2018; Djanegara, 2017; Apadore, Ramli, & Palil, 2018).

However, empirically, the auditing process at LZNK is lacking in practical application. LZNK is currently in the planning stage of developing an auditing process system. However, no related studies have been conducted yet. The gap between expectations or planning and the reality of the situation is seen as an opportunity for research to develop a technology-based system for the internal auditing process which is needed. Qualitative research is seen as a way to understand the requirements of the organizations involved, especially LZNK, in a more detailed and open manner. This could help develop a suitable technology system that aligns with the organization's needs, vision, and planning towards the Industrial Revolution (IR) 4.0. Accordingly, this study addresses two main questions: (i) what is the organization's capability in implementing the use of technology by internal auditors in LZNK? and (ii) what are the challenges faced by the organization in implementing the use of technology by internal auditors in LZNK?

LITERATURE REVIEW

Auditing is a process of assessing, examining, and analyzing an organization's financial statements, operations, records, and administrative management to ensure that they comply with policies, financial and accounting regulations, and procedures that are currently in place. Auditing is broadly classified into two categories i.e., external audit and internal audit.

External Audit

External audit is defined as an examination of a company's or organization's financial records conducted by independent auditors. Its purpose is to meticulously examine the validity of financial records to detect any fraud, errors, or misappropriations and report any fraud to the stakeholders within the company or organization (Manita, Elommal, Baudier, & Hikkerova, 2020).

The objective of an external audit is to determine the completeness and accuracy of customer accounting records to ensure that customer records are prepared per applicable accounting frameworks. Additionally, it can also ensure that customer financial statements reflect true and fair financial results and positions.

The usage of external audits is very crucial as shareholders, stakeholders as well as the public are highly dependent on the information, confirmation, and conclusion of decisions reported. Specifically, shareholders and potential investors rely on external audit reports to assess the credibility and reliability of a company's financial statements. The assurance provided by external auditors helps build trust and confidence in the accuracy of the reported financial information. Besides that, many regulatory authorities require companies to undergo external audits to ensure compliance with financial reporting standards and regulations. These reports help demonstrate adherence to legal requirements and promote transparency in financial reporting. In addition, banks and other creditors often use external audit reports to evaluate the creditworthiness of companies seeking loans or credit facilities. A clean audit opinion can enhance a company's credibility and increase its ability to access financing at favorable terms. Indeed, external audit reports are also valuable communication tools for management to convey the financial health and integrity of the organization to various stakeholders, including board members, employees, customers, and suppliers. Indirectly, external audits could help identify weaknesses in internal controls, processes, and risk management practices. Recommendations provided by auditors could assist management in implementing improvements to mitigate risks and strengthen the organization's operations.

In summary, external audit reports play a crucial role in enhancing transparency, accountability, and trust in the financial reporting process, benefiting stakeholders and contributing to the overall stability and integrity of the business environment.

Internal Audit

Internal audit, on the other hand, is an independent function that provides assurance and consulting services objectively to add value and improve the organization's operations. The objective of internal audit is to help an organization achieve its goals through a systematic and disciplined approach to assess and determine the effectiveness of all control and governance processes, especially those involving finances. A quantitative study conducted by Johl, Johl, Subramanian, and Cooper (2013) found that internal audit plays a significant role in the financial reporting process. Internal audits are conducted by internal auditors who are employees within the organization in question. Internal audit is responsible for designing and implementing audits within an organization. Additionally, internal audit also helps identify whether internal controls exist in the administrative processes and systems used. Internal audit also assists in providing recommendations and effective measures to improve the efficiency and effectiveness of organizational administrative processes.

Operationally, internal audit serves several important purposes within an organization. Internal auditors assess risks across various business functions and processes, helping management identify potential threats to the achievement of organizational objectives. Internal audit functions contribute to the organization's overall risk management by conducting risk assessments and providing recommendations for mitigating risks. Internal auditors also evaluate the effectiveness of internal controls designed to safeguard assets, ensure the accuracy of financial reporting, and promote compliance with laws and regulations. Through testing and analysis, internal audit helps identify weaknesses in control processes and recommend improvements to enhance efficiency and effectiveness. Moreover, operational efficiency is ensured via internal audit reviews of operational processes and procedures to identify opportunities for improvement and optimization. Internal audit implicitly assists management in improving efficiency, reducing costs, and enhancing productivity through the assessment of operations. Accordingly, internal auditors are responsible for ensuring that an organization complies with laws, regulations, and internal policies and procedures. It is via conducting compliance audits and reviews. This helps provide assurance to management and stakeholders that the organization is following all relevant legal and regulatory requirements. Through the examination of financial transactions and processes, internal audit helps identify red flags and anomalies that may indicate fraudulent activity. Additionally, internal auditors assess the adequacy of controls designed to prevent and detect fraud, making recommendations for strengthening anti-fraud measures. Undeniably, internal audit functions assure management, the board of directors, and external stakeholders regarding the effectiveness of governance, risk management, and control processes within the organization. Independently assessing and reporting on the organization's internal controls and operations would assist internal audit to build confidence and trust in the organization's ability to achieve its objectives.

Overall, internal audit serves as a valuable resource for management in promoting good governance, managing risks, improving operational efficiency, and ensuring compliance with laws and regulations.

Technology Applications in Internal Audit

It is undeniable that the use of technology has greatly impacted the tasks of auditors, especially internal auditors. Many studies have been conducted by researchers in the past regarding factors influencing the use of technology in the internal audit process and the impact of technology on audit processes and findings, as well as the benefits it provides to enhance the efficiency of internal auditors. Among the studies involving factors influencing the use of technology by internal auditors is the background of the organization itself, which has undergone digitization processes in its business operations (Jones, Baskerville, Sriram, & Balasubramaniam, 2017). Management support, technological competence, and audit standards are also important factors influencing technology use, according to a study conducted by Li, Dai, Gershberg, and Vasarhelyi (2018).

Studies related to the impact of technology use on internal audits have been widely conducted. One such study is a literature review conducted by Moorthy, Mohamed, Gopalan, and San (2011) using secondary data from journal articles. The study found that technology can assist internal auditors in understanding an organization's risk analysis and management. This process requires two-way communication between management and internal auditors. With technology, proposed risks can be analyzed promptly and transparently, stored in a

database, and enable effective communication between management and internal auditors. The use of technology can also enhance the role of an internal auditor from a controller to a consultant to the organization and further to an indirect business strategy partner (Betti, & Sarens, 2020). Lloyd and Singh (2016) stated that there are four important benefits to using data analytics, including performing audit work faster and cheaper, expanding audit targets, and making innovation a focus in audit tasks.

METHODOLOGY

A qualitative study was conducted to explore two main objectives i.e., to determine (i) the organization's capability in implementing the use of technology by internal auditors in LZNK; and (ii) the challenges faced by the organization in implementing the use of technology by internal auditors in LZNK. Specifically, internal auditors and information system officers of LZNK were the study's respondents. The internal auditors are directly involved in internal audit tasks, and the information system officers are responsible for the development of any system.

The data collection method involved interviews and face-to-face discussions. This method was used to gain detailed insights into the capabilities and challenges faced by internal auditors, specifically within LZNK, in implementing the use of technology. Several meetings and discussions were conducted face-to-face to obtain an accurate and comprehensive understanding of the capabilities and challenges that will be encountered when implementing internal audit technology in internal audit tasks.

DISCUSSION

The discussion of this study is based on the capability of LZNK to implement technology in handling internal audit tasks. Additionally, potential challenges are also discussed in this study to assess how the application of technology in the specifications of internal audit tasks could impact LZNK as a whole. This strategic plan can provide an overview of LZNK's ability to integrate technology to achieve the goals of the IR 4.0 revolution, especially in the internal audit department.

Technology Application Capability

The incorporation of technology in an organization can significantly improve the efficiency and output of internal auditors, specifically by enhancing their ability to analyze data. In this regard, LZNK's capability to facilitate the use of technology to enhance the effectiveness of internal audit tasks can be observed from various perspectives.

Stable Infrastructure Facilities

LZNK has a comprehensive technology infrastructure related to information management and usage. This is evidenced by the Information Technology Department's ability to oversee all online applications (such as *Jom Zakat* and *AsnafCare*) and continuous monitoring of the effectiveness and functionality of online application systems. It also demonstrates the capability of LZNK's servers to support the use of the introduced technology applications to a satisfactory level. The Information Technology Department is also seen as capable of providing technical support for the use of technology applications by having a group of highly skilled and knowledgeable information technology personnel.

Management Commitment

Management commitment is crucial to ensure the capability and success of any program introduced in an organization. The management's seriousness in addressing information technology capabilities can also be seen through effective website management and various successful online initiatives. This is in line with LZNK's Customer Charter, which emphasizes "innovation in service delivery" and "up-to-date and accurate information." The "Zakat on Touch" application is an excellent example of a system that adheres to the two customer charters. The application enables management to monitor *zakat* collection and distribution in real-time, which leads to efficient, accurate, and prompt decision-making. In order to make sure that the application is implemented successfully, it is important that management demonstrates commitment and support towards this initiative.

Readiness to Embrace Change

The field of internal audit tasks involves financial management audit, compliance audit, and performance audit processes that need to be consistently conducted throughout the year. However, the number of internal auditors at LZNK is limited, resulting in audit procedures being selectively performed based on risk assessment decisions. This limitation can be overcome if technology is introduced into the audit process, supported by the findings of this study. Technology applications can assist in updating and measuring the internal audit operations themselves. A systematized internal audit application enables the internal audit process to be more comprehensive and systematic, from audit planning to audit processes and follow-up audits. The readiness of internal auditors to accept changes in audit procedures, from manual to computer-based systems, is an essential element in determining the success of technology applications in LZNK.

The findings of this study overall indicate that LZNK has the capability to adapt to the use of technology in the field of internal audit specifically. Identifiable capabilities include a stable infrastructure, high management commitment, and readiness for change. These elements are crucial in any organization wishing to adopt a technology, including this internal audit process technology. The importance of these capability elements has also been found in other research findings (Li, Dai, Gershberg, & Vasarhelyi, 2018). The study found that management support, technology competence, and audit standards are important for organizations wishing to adopt technology in auditing work. In another study by Bierstaker, Janvrin, and Lowe (2013) found that technical infrastructure support is one of the factors influencing technology use among auditors.

Challenges in Technology Application

Challenges are factors that test the abilities and resilience of an individual or an organization. The application of technology in an organization also presents challenges or may bring challenges to that organization or, specifically, to those involved in using that technology (Jamil, Sepikun, & Muhammad, 2021). Therefore, if technology applications are introduced in the internal audit department at LZNK, several challenges may arise for LZNK, internal auditors, or information system officers. Among the main challenges that could be identified are current reporting methods, staff rotation systems, and cost increases.

Current Reporting Methods

The use of technology involves different types of data, whether structured or unstructured. As long as data is in digital form, it can be accessed through various platforms. The data is analyzed, and the results obtained help stakeholders make more efficient decisions.

At LZNK, most of the internal audit tasks are performed manually. This indicates that internal audit tasks are performed using conventional audit techniques. Among the manual audit tasks at LZNK are the preparation of questionnaires related to questions to be asked of the auditees based on the scopes made, the process of entering audit answers and scores into audit inspection forms, sample selection for auditing, *zakat* collection calculations, and annual audit planning.

This manual audit process tends to lead to errors or delays. One of these is the sampling process based on established criteria. Although criteria have been established, it still depends on the responsible party to carry out the sampling process. This may be due to the sampling process being based on the choice of the executor and not randomly. These errors can be avoided with the use of technology where sample selection can be done more accurately and justified. Apart from that, the manual audit process involves a long time to complete an audit task including inspection and calculation of monthly assistance payments. Every calculation has to be done manually which not only takes a long time but also is likely to make mistakes during the calculation. This will take quite a long time for audit tasks that are already quite strict if a recalculation is required when an error occurs.

Data limitations are also likely such as difficulty accessing files and documents involved when the audit task is carried out. Data such as staff training data needs to be examined and checked by the auditor in reference to the data in the Excel file. Loss of files or documents may occur, and it is quite a significant challenge to internal auditors. The limitation and loss of this data can be overcome with the use of technology as a data-based system that could avoid the same negligence repeating every year.

In addition to the technical aspects, finances are also affected by this manual data storage method. It is due to the high cost of storage, the probability of errors or data loss, and the difficulty of access. The existence of data in various computerized sources (structured and unstructured) that are difficult to access for analysis will make the process of preparing a complete and current report difficult. So, there is no denying that a systematic database storage method is able to facilitate access, analysis, and reporting more quickly, easily, and efficiently according to the use of auditors in and management of LZNK, but it requires a large storage capacity.

The Need for Frequent Training

LZNK practices an internal staff rotation system where this practice allows staff to venture into various fields or assignments but still in the same field of expertise. The internal auditor staff is also not exempt from the rotation system, and it is one of the challenges to the use of technology. This is because every user not only needs to be skilled in the field of auditing but also needs skills in the use of this technology to enable the optimal capabilities of this technology to be achieved.

Internal auditors require specific skills to perform their tasks competently and thoroughly. They must understand and comply with auditing, accounting standards, and public money management procedures. In addition to these skills, auditors need different professional knowledge and skills in planning, implementing, and reporting audit findings to ensure the effectiveness of the audit process. However, due to the rotation system being implemented,

regular training sessions are necessary to train new auditors every time there is a change. This can interfere with on-duty time and increase training costs. Despite these challenges, training is crucial, especially for staff who lack experience in using technology. According to a study conducted by Lombardi, Bloch, and Vasarhelyi (2015), regular training on the use of technology is essential for auditors to improve their skills and ensure that they can perform their tasks effectively.

However, it cannot be denied that the application of technology could speed up the decision-making process; reduce the probability of errors and information leaks; and expand the scope of the audit, in addition to being able to reduce the time and energy of internal auditors. Nevertheless, frequent training is required to train the replaced staff in learning the system to be able to use the auditing system efficiently and effectively.

Cost Involvement of Construction or Upgrading the System

The current auditing process carried out by auditors is a manual process that involves high costs. This is because a lot of paper is used to print the necessary forms and documents required for auditing work. Additionally, the storage space required to store the increasing number of documents from year to year also involves relatively high costs.

Although technology can bring many benefits to auditing tasks, it does come with some challenges that require high-cost involvement during the initial stage of introduction. The cost is not related to paper usage but rather to the building, maintenance, and monitoring of internal auditor systems and other systems related to auditing tasks. Some of the systems that need to be developed are a web-based system for aid recipient applications and a defeating system to create a more centralized, systematic auditing ecosystem. This will shorten the audit processing time, save storage space, and increase the efficiency of the auditing task. Furthermore, technology could improve the security of the data itself, adopt a paperless environment that is more environmentally friendly, and expand the size of information from the audit. The use of technology by auditors will help to strengthen the findings from the analytical procedures carried out and facilitate communication between auditors and management (Tang & Karim, 2018). It can also provide opportunities for organizations to carry out audit work more frequently and continuously (Lombardi, Bloch, & Vasarhelyi, 2015). Although the costs involved may seem high, could be overcome after all the benefits from the use of this technology can be achieved.

Technology-based applications have the potential to improve decision-making efficiency and effectiveness. Digital data, regardless of its structure, could be quickly and easily accessed to aid in making better decisions. This could help users save time, energy, and space, while also improving the overall effectiveness of decision-making processes.

CONCLUSION

LZNK has made significant advancements in line with technological developments. Several existing applications such as "Jom Zakat," "Jom cari Asnaf," and "Zakat on Touch," LZNK has demonstrated a strong emphasis on leveraging technology in various *zakat* management processes. These applications have opened up more opportunities for LZNK to remain competitive and move forward towards IR 4.0. The efficiency and effectiveness of auditors in completing audit tasks can be enhanced through the benefits of big data analytics and auditing systems. The use of technology is seen as a necessity to ensure that the audit process can be expedited compared to manual methods. The time saved with technology applications provides room for focusing on other aspects that require attention, such as risk assessment or reporting.

The contribution of research related to technology applications in assisting LZNK towards IR 4.0 is based on findings that may be important for further knowledge or research. Audit knowledge gained is valuable because every organization has a similar foundation of audit processes, whether it is in the public sector or organizations that are similar in management aspects. However, LZNK is an organization with unique audit processes. Therefore, the audit knowledge gained applies only to LZNK or possibly similar to *Zakat* Boards in other states. The selection process for audit tasks may be similar to the basic process, but the subjects selected for audit are unique to LZNK and may not exist in audit situations in other states. For example, audit subjects include Pondok schools/tahfiz managed by LZNK or food banks in mosques. Indeed, the generalization of the internal audit process could not be simply applied without knowing the basic process of the organization. Reporting on technology usage during audits contributes to knowledge and can improve the efficiency and effectiveness of LZNK's audit tasks. Thus, indirectly, it adds to the existing internal audit technology knowledge. If the basic system is the same as the technology application process in other organizations, but the data and reporting requirements are somewhat unique to an organization, it means that *zakat* authorities in other states also need customization if they want to use it according to the audit requirements in their respective institutions. Therefore, every introduced application is a new input in internal audit knowledge and the audit process indirectly.

The findings of the study have important implications for policy and practice. The research has a significant impact on the responsible authorities, specifically LZNK. By considering the capabilities, needs, and challenges of LZNK, the study could contribute to decision-making and improve the efficiency and effectiveness of the audit process through the use of big data analytics applications. In addition to saving time, auditor energy, and costs, technology applications in internal audit systems can streamline LZNK's annual planning. This is because the strength of recorded reporting is not only for the current year but could also provide references for past years in one system. The ability of a recorded and data-based audit system to store data from previous years could help in planning for the coming years. Annual audit planning takes into account aspects that have been audited in previous years and avoids repeated audit processes for the same aspects in subsequent years. If the audit process from last year was focused on the local mosque's food bank mechanism failure or doubt, and if the audit process was successful, which means that the audit questions were answered, justifications were accepted, follow-up actions were taken, audit findings were satisfactory, and questions were closed with sufficient explanations, then the system could store all the audit processes data. This way, the same questions do not need to be asked again in the coming

year, and focus can be directed to other aspects, such as the management of *zakat* distribution among *asnaf* or the construction process of *asnaf* houses. Hence, it is essential to have comprehensive annual planning to ensure that all aspects of *zakat* management are based on *asnaf*, and beneficiaries are supported.

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REFERENCES

- Apadore, T., Ramli, R., & Palil, M. R. (2018). Faktor-Faktor Yang Mempengaruhi Tempoh Audit Cukai: Kajian dari Perspektif Juruaudit Cukai Di Malaysia. *Asian Journal of Accounting and Governance*. 10. 83-96.
- Betti, N & Sarens, G. (2020), Understanding the internal audit function in a digitalized business environment. *Journal of Accounting & Organizational Change*. 17 (2). 197-216.
- Djanegara, M. S. (2017). Pengaruh Kualitas Audit Terhadap Kualitas Laporan Keuangan Pemerintah Daerah. *Jurnal Akuntansi*. 21(3). 461-483.
- Jamil, M., Sepikun, M., & Muhammad, M. (2021). Kesiapan Pelajar Diploma Kejuruteraan Elektronik (Komputer) Mengaplikasikan Kemahiran Teknikal Bagi Menghadapi Cabaran Kerjaya dalam Internet of Things (IoT). *Online Journal for TVET Practitioners*. 6(1). 45-58.
- Johl, S.K., Johl, S. K., Subramaniam, N., & Cooper, B., (2013). Internal audit function, board quality and financial reporting quality: Evidence from Malaysia. *Managerial Auditing Journal*. 28(9). 780-814.
- Jones, K.K., Baskerville, R.L., Sriram, R.S. & Balasubramaniam, R. (2017). The impact of legislation on the internal audit function. *Journal of Accounting and Organizational Change* 13(4). 450-470.
- Li, H., Dai, J., Gershberg, T., & Vasarhelyi, M. A. (2018). Understanding usage and value of audit analytics for internal auditors: An organizational approach. *International Journal of Accounting Information Systems*. 28. 59-76.
- Lloyd, J. & Singh, R., (2016). *Implementing Analytics in Internal Audit*. Deloitte Report.
- Lombardi, D. R., Bloch, R., & Vasarhelyi, M. A. (2015). The Current State and Future of the Audit Profession. *Current Issues in Auditing American Accounting Association*, 9. 10–16.
- LZNK (2020). *Pelan Strategik Lembaga Zakat Negeri Kedah 2021 – 2025*. Lembaga Zakat Negeri Kedah (LZNK). LZNK & UUM Press. 1-86.
- Manita, R., Elommal, N., Baudier, P., & Hikkerova, L. (2020). The digital transformation of external audit and its impact on corporate governance. *Technological Forecasting and Social Change*. 150. 119751.

- Moorthy, M. K., Mohamed, A. S. Z., Gopalan, M, & San, L.H. (2011). The impact of information technology on internal auditing. *African Journal of Business Management*, 5(9). 3523-3539.
- Rahayu, M., Rasid, F., & Tannady, H. (2019). The Effect of Career Training and Development on Job Satisfaction and its Implications for the Organizational Commitment of Regional Secretariat (SETDA) Employees of Jambi Provincial Government. *International Review of Management and Marketing*, 9(1), 79.
- Tang, J. & Karim, K. E. (2018). Financial fraud detection and big data analytics – implications on auditors' use of fraud brainstorming session. *Managerial Auditing Journal*. 34(3). 324-337.
- Tawaqal, I., & Suparno, S. (2017). Pengaruh Penerapan Sistem Informasi Akuntansi, Sistem Pengendalian Internal, dan Kompetensi Sumber Daya Manusia Terhadap Kualitas Laporan Keuangan Satuan Kerja Perangkat Daerah di Pemerintah Kota Banda Aceh. *Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi*. 2(4). 125-135.
- Zamzami, F., & Pramesti, A. E. (2018). *Audit keuangan sektor publik untuk laporan keuangan pemerintah daerah*. UGM PRESS.