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IMPROVING ORGANIZATIONAL ARCHIVAL MANAGEMENT THROUGH AN APPSHEET-BASED DIGITAL SYSTEM

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ABSTRACT

This study aims to develop and evaluate the feasibility of an AppSheet-based archival media to support the management of customer inquiry document archives in the Marketing Department of PT XYZ. The research method employed was Research and Development (R&D) using the ADDIE development model, which includes the stages of analysis, design, development, implementation, and evaluation. Data were collected through validation by media experts and subject-matter experts, as well as a user acceptance test conducted by the company. The evaluation instruments used Likert scale and were analyzed using descriptive quantitative techniques. The results indicate that the AppSheet-based archival media achieved a feasibility score of 95% from media experts and 100% from subject-matter experts, both classified as "Very Suitable" The user acceptance test also yielded a 85,33% feasibility score, indicating that the application can be used without functional constraints. The developed archival media improves storage organization, accelerates archive retrieval processes, and supports more efficient archival reporting.

Keywords: Digital archives, Office administration, Information management, AppSheet, ADDIE model

ABSTRAK

Penelitian ini bertujuan untuk mengembangkan dan menilai kelayakan media arsip berbasis AppSheet dalam mendukung pengelolaan arsip dokumen permintaan customer di Departemen Marketing PT XYZ. Metode penelitian yang digunakan adalah Research and Development (R&D) dengan model pengembangan ADDIE yang meliputi tahap analisis, perancangan, pengembangan, implementasi, dan evaluasi. Pengumpulan data dilakukan melalui validasi oleh ahli media dan ahli materi serta uji penerimaan pengguna oleh pihak perusahaan. Instrumen penilaian menggunakan skala Likert dan dianalisis secara deskriptif kuantitatif. Hasil penelitian menunjukkan bahwa media arsip berbasis AppSheet memperoleh persentase kelayakan sebesar 95% dari ahli media dan 100% dari ahli materi dengan kategori "Sangat Layak". Uji penerimaan pengguna juga menunjukkan hasil 85,33% pada kategori "Sangat Layak" yang menandakan aplikasi dapat digunakan tanpa kendala fungsional. Media arsip yang dikembangkan mampu meningkatkan keteraturan penyimpanan, mempercepat proses temu balik arsip, serta mendukung pelaporan arsip secara lebih efisien.

Kata kunci: Arsip digital, Administrasi perkantoran, Manajemen informasi, AppSheet, Model ADDIE

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INTRODUCTION

Advances in information and communication technology have prompted organizations to shift from conventional archive management to digital archiving systems. Archives are no longer viewed as static documents, but rather as organizational memories that play a strategic role in supporting decision-making and administrative services. According to the official website of the Indonesian Internet Service Providers Association, the number of internet users in Indonesia will reach 80.66% by early 2025, reinforcing the urgency of implementing digital archives in organizations. The Indonesian government, through the Ministry of State Apparatus Empowerment and Bureaucratic Reform and the National Archives of the Republic of Indonesia, is actively promoting the digital transformation of archives to achieve transparent and accountable governance.

Electronic archives are a system for managing documents in digital form so that they are easy to view, manage, find, and reuse (Birrell, 2019). However, the effectiveness of archive management is often hampered by limited storage space and suboptimal filing systems, resulting in poorly organized archives (Amalia & Panduwinata, 2022). This problem was found in the Marketing Department of PT XYZ, a company engaged in the distribution and trade of specialty steel, gas, and manufacturing. Based on observations during the Field Work Practice, customer request documents are still managed manually using physical cabinets and shared folders. Of the 120 documents observed, the average retrieval time was 11 minutes per document, with 14% of documents difficult to find on the first search. In addition, the monthly recapitulation of customer request documents takes up to four working days. Interviews and preliminary research through questionnaires showed that all employees experienced difficulties in storing and searching for archives. This condition does not meet the ideal archive retrieval time standard, which is no more than one minute (Juairiah et al., 2024). Research (Fabrianne & Indrahti, 2022) shows that the use of the SIPAS archival information system can reduce retrieval time to 8–10 seconds. This is reinforced by (Aihunan et al., 2025) that the use of electronic archives can speed up information retrieval and increase transparency and accountability.

Based on these conditions, this study developed an AppSheet-based archive media as a no-code platform using the ADDIE model approach. This study aims to design digital archive media that suits user needs and assesses its suitability in managing customer request document archives in the Marketing Department of PT XYZ. This study is also in line with previous research conducted by (Agustya & Agustina, 2021) entitled “Development of a village electronic archiving system (SAEDES) to improve employee performance effectiveness”. In the previous study, the implementation of the system was still limited, so this study proposes feature updates that will be designed more specifically to overcome these limitations, namely (1) a search feature to facilitate the retrieval of archives that have been inputted. (2) a design display tailored to user needs.

LITERATURE REVIEW

According to Law No. 43 of 2009 concerning Archives, archives are records of activities or events in various forms and media in accordance with developments in information and communication technology that are created and received by state institutions, local governments, educational institutions, companies, political organizations, community organizations, and individuals in the implementation of social, national, and state life. This is different from the opinion expressed by (Arimbi, 2024) that archives are by-products of individual or organizational activities, regardless of the form or media in which they are captured, and can be retrieved and used as evidence of transactions. According to research (Nabila et al., 2025) archives as written documents containing important and accurate

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information must be managed with good systems and procedures.

Digital archives are defined as important documents or records that are managed, stored, and accessed through electronic systems for the purposes of preservation, reference, legal evidence, and administrative needs. Digital archives not only include electronic documents stored in computer systems, but also provide easy access and optimal management through technology-based platforms (Setyarto, 2025). According to (Faslah et al., 2020), the advantages of digital archives include: (a) Reducing the need for paper and ink, making them more efficient than manual archives. (b) Electronic searches facilitate entering archive codes as if we were searching for documents on our computers. (c) The need for human resources can be reduced because human resources are only needed in the form of media transfer, testers, and distributors; (d) It is easy to back up data so that you always have a backup of important files to prevent damage to records caused by disasters such as floods, fires, etc.

AppSheet is a no-code application development platform that provides pragmatic solutions to accelerate the digitization process (Hasian & Bachtiar, 2025). AppSheet integrates with various other applications, such as Google Sheets and Excel, making it easier to collect and organize data more effectively and in real-time via mobile devices (Wilodati et al., 2024). AppSheet is easy to use from both a development and user perspective (Chozin & Maula, 2024). The ADDIE model is used to build basic performance in learning, namely the concept of developing a learning product design (Hidayat & Nizar, 2021). ADDIE is a more rational and comprehensive research and development model that can be applied to various forms of product development, such as models, learning strategies, learning methods, media, and teaching materials based on product development steps (Ibrahim et al., 2024). According to research (Safitri et al., 2022) the ADDIE model is very relevant to use because
this model can adapt very well to various conditions and there are revisions and evaluations at each stage.

METHOD

This research uses the Research and Development (R&D) type. The R&D method is an approach used to conduct research to produce new products and then test the feasibility and effectiveness of these products (Sugiyono, 2023). This approach is very suitable for use in projects that aim to produce innovations, whether in the form of physical products, digital devices, or educational systems (Ade, 2025). The development model used is ADDIE (Analysis, Design, Development, Implementation, and Evaluation). This model was chosen because it can adapt very well to various conditions and allows for revision and evaluation at each stage (Safitri et al., 2022).

Activities in the analysis stage include analyzing archive system requirements through observation and interviews, user and functional analysis, and software analysis using AppSheet. The second stage is design, focusing on framework development, testing strategies, and user interface (UI) design. The workflow of the AppSheet-based archive media to be developed can be seen in Figure 1. The third stage is development, which includes the creation of AppSheet-based archival media, including product feasibility testing conducted by subject matter experts and media experts based on assessment criteria. The fourth stage is implementation, focusing on the application of validated and revised products. The evaluation stage is the final process to assess the functional quality and practicality of the implemented products. Data collection in this study utilized qualitative and quantitative data sourced from experts using validation sheets. Feasibility assessments were conducted by distributing questionnaires to subject matter experts and media experts. These questionnaires used a 5-point Likert scale, where a score of 1 (one) represented the lowest answer and a score of 5 (five) represented the highest answer.

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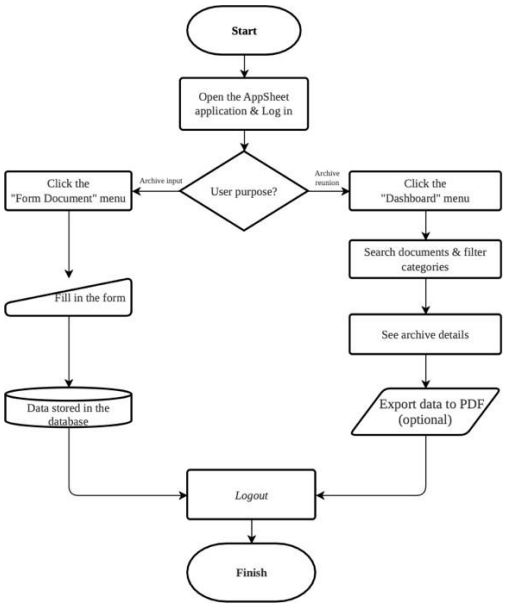

Figure 1. Research Product Development Flow

Table 1. Answer Scores on the Likert Scale

Answer	Score
Strongly Disagree	1
Disagree	2
Undecided	3
Agree	4
Strongly Agree	5

Source: (Sugiyono, 2023)

After the data is collected, the analysis will use percentage calculations to determine the feasibility level.

$$Percentage\ of\ Eligibility\ (\%) = \frac{Observed\ score}{Expected\ Score} \text{ x } 100\%$$

Source: (Alhadi & Cholik, 2021)

After the data is processed using the percentage calculation formula, the results will be used to determine the suitability level of the developed archive media. The determination of this suitability level is based on the following five assessment categories:

Table 2. Suitability Category Percentages

Category	Percentage
Very Suitable	81% - 100%
Suitable	61% - 80%
Moderately Suitable	41% - 60%
Unsuitable	21% - 40%
Very Unsuitable	0% - 20%

Source: (Kusuma & Mahardi, 2021)

RESULTS AND DISCUSSION

Project Implementation Stages

The project implementation follows the ADDIE development model, in which each

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stage produces interrelated temporary outputs until an AppSheet-based archive medium is formed that is ready for testing. The analysis stage was conducted to ensure compatibility between the actual conditions of archive management and the application feature design. The main users of the application are marketing employees, with a usage context that includes: 1) receiving customer request documents, 2) storing archives, 3) retrieving archives when needed, and 4) exporting data for recap and reporting purposes. Manual archive management relying on physical storage or shared folders was a major problem before the application was developed. Therefore, in developing the AppSheet-based archive media, functional requirements focused on archive data management, search and filter, and reporting that emphasized a simple interface, clear input flow, and minimal steps for retrieving archives. The design phase involved developing the archive process flow design, UI/UX and menu structure design, database design, and business rule design. During the development phase, the application was configured using the AppSheet platform with Google Sheets database support as the main repository. The application was developed to be accessible via browser and mobile. The access scheme is set using a single account as the administrator account with seven modules, namely the database module, user authentication module, navigation and menu structure module, archive input module, dashboard module, archive details module, and data export module.

The implementation stage was carried out through trials involving media experts, material experts, and Marketing Department employees. The trials were conducted through web access and smartphone devices using Wi-Fi or cellular data. The User Acceptance Test focused on end-user acceptance of the application's main functions. Based on the UAT implementation, the partner testers successfully executed the core functions of the application with a UAT pass rate of 85,33% without encountering any obstacles. Finally, the evaluation stage was divided into two parts: formative evaluation, which was carried out during the development process to ensure that all main modules could be run according to the design and that no bugs or functional errors were found that could hinder the work process; and summative evaluation, which aimed to assess the final achievement of the product based on indicators of feature success rate, user satisfaction, and ease of use. The evaluation instruments were designed to obtain data on the feasibility and acceptability of the AppSheet-based archive media developed. The evaluation was carried out by media experts, subject matter experts, and company testers using a Likert scale. The overall validation data results are described in Table 3:

Table 3. Evaluation Results

Type of Evaluation	Validator	Aspects Assessed	Success Indicators	Results	Notes	Follow-up
Media expert validation	Media experts	Usability, Functionality, Visual Communication	Percentage meeting the "Very Suitable /Suitable"	95% (Very Suitable)	Improvements to form display, dashboard made neater, access links using QR codes	Suitable for use with improvements
Content expert validation	Content experts	System Design, Functionality, Visual Communication	Percentage meeting the "Very Suitable /Suitable"	100% (Very Suitable)	No comments or suggestions	Suitable for use without improvements
UAT	Company Testers	User-friendliness and User Acceptance, Effectiveness of the Filing Process	Percentage meeting the "Very Suitable /Suitable"	85,33% (Very Suitable)	No comments or suggestions	Suitable for use without improvements

The final results show that the application has met the operational requirements for

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inquiry file management, as demonstrated by the success of the UAT scenario, which received a Very Suitable rating. Thus, the final version of the application is declared suitable for use in supporting the inquiry filing process within the company, particularly in terms of file input, retrieval, document access, and reporting, which are now more standardized, efficient, and documented compared to manual methods.

Archive Media

The application developed is an AppSheet-based archive media that functions to support the management of inquiry archives in the Marketing Department of PT XYZ. This application utilizes AppSheet as a no-code development platform that can be accessed via the web or mobile devices. This application is designed with a single account scheme, namely one administrator account that has full access to all features. The main features of the application are: 1) Inquiry archive input, 2) Search, 3) Category filter displaying archive details and visualizations, 4) Print reports. The login menu interface for the AppSheet-based archive management system can be seen in Figure 2, the main page interface in Figure 3, and the document form interface in Figure 4.

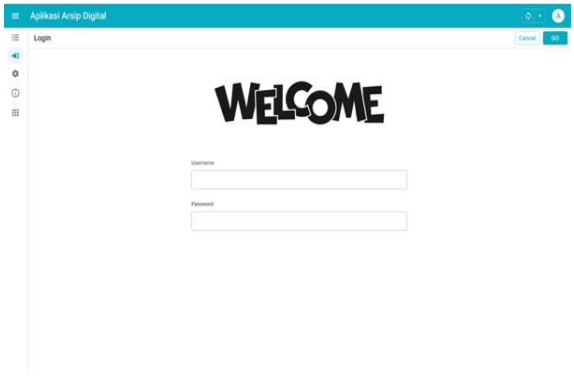

Figure 2. Login Screen

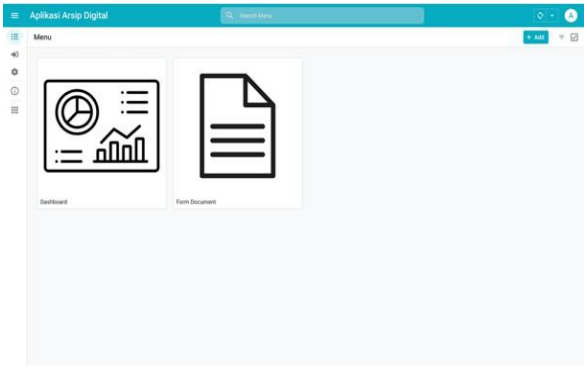

Figure 3. Main Page Display

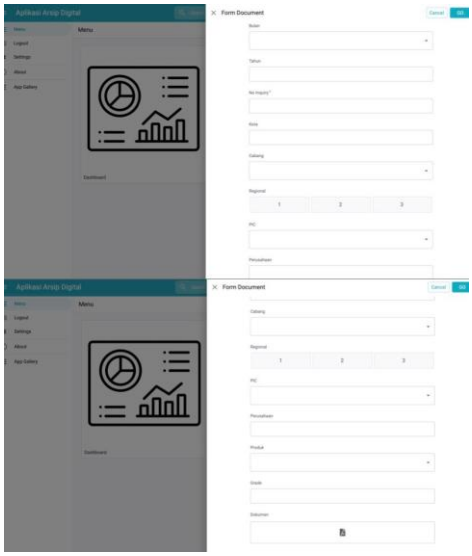

Figure 4. Document Form Display

Based on Figure 5, the dashboard menu found in AppSheet-based archive media includes filter and visualization features. Figure 6 shows the archive details feature, Figure 7 displays the

report download feature, and Figure 8 shows the exit menu display.

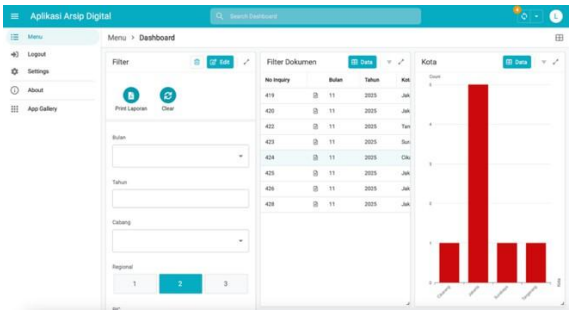

Figure 5. Dashboard Menu Display

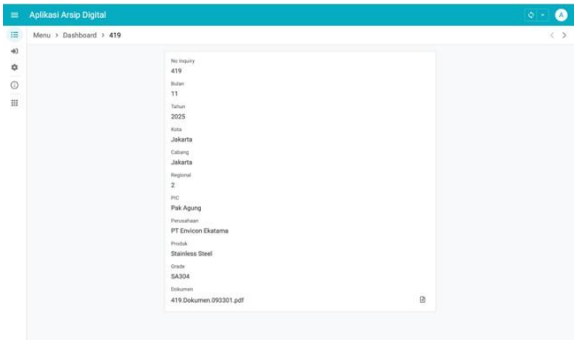

Figure 6. Archive Details Display

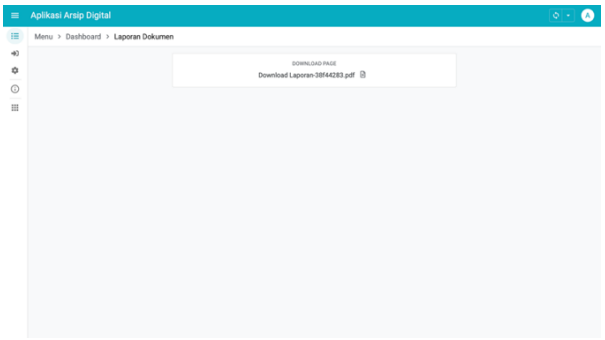

Figure 7. Report Download Display

Figure 8. Logout Screen

Discussion

The findings of this study demonstrate that the implementation of an AppSheet-based digital archival system significantly improves the efficiency and effectiveness of archive management processes. The high feasibility scores from media experts (95%), content experts (100%), and user acceptance tests (85.33%) indicate that the developed system is not only technically functional but also well-accepted by users in real operational contexts. These results support previous studies by Nyfantoro et al. (2020) and Faslah et al. (2020), which emphasize that digital archiving systems enhance accessibility, retrieval speed, and overall document management efficiency. Compared to manual systems that rely on physical storage or unstructured digital folders, the AppSheet-based system offers a more standardized and integrated approach, reducing retrieval time and minimizing data loss risks.

Furthermore, the integration of features such as search filters, dashboards, and automated reporting aligns with findings from Fabrianne and Indrahti (2022), who reported that electronic archive systems can significantly accelerate document retrieval processes. In this study, the application design focuses on simplicity and usability, which contributes to high user acceptance and ease of operation. The use of a no-code platform such as AppSheet also confirms the findings of Hasian and Bachtiar (2025), who argue that no-code technologies can accelerate digital transformation in organizations by reducing technical barriers and enabling rapid system development tailored to user needs.

However, while the results indicate strong feasibility and usability, the study also highlights several limitations in system scalability and feature scope. This finding is

consistent with previous research suggesting that digital archive systems require continuous development to address issues such as data security, integration complexity, and long-term sustainability (Cheng, 2018). Therefore, although the current system effectively addresses immediate archival challenges, future enhancements are necessary to ensure adaptability to larger data volumes and more complex organizational requirements. This reinforces the importance of iterative development approaches, such as the ADDIE model, in continuously improving system performance and relevance in dynamic organizational environments.

CONCLUSION AND RECOMMENDATION

The stages of developing archival management requirements in companies have become a major urgency because manual archival management causes a backlog of physical documents, slows down the search process, and impacts business service delays. This condition is demonstrated by an average archive retrieval time of 11 minutes per document and 14% of documents that are difficult to find on the first search, as well as monthly recap requirements that take a relatively long time. The Research and Development method with the ADDIE model is appropriate because it allows the development process to be carried out systematically. This research resulted in AppSheet-based archive media integrated with Google Sheets as a database. The product contains the main features, namely document forms, dashboards, archive details, and reporting.

AppSheet-based archive media was successfully developed and implemented according to company needs. Expert evaluation results showed a very good level of feasibility. The feasibility of the product was demonstrated through evaluation by validators, namely: media experts with a percentage of 95% meeting the Very Suitable category, material experts with a percentage of 100% meeting the Very Suitable category, and company testers with a percentage of 85.33% meeting the Very Suitable category. Thus, the application is declared feasible for use in supporting inquiry archive management.

The implication is that the developed application has an impact on improving the regularity of work processes because archive input is carried out through a standardized form, thereby minimizing variations in naming and differences in recording methods between users. The dashboard and filter features speed up the archive retrieval process, while detailed access allows users to reopen soft copies according to the selected records. The data-filtered report printing feature supports administrative and monitoring activities because data can be presented more neatly for documentation and internal reporting purposes. However, this study has limitations, such as the application not yet implementing multi-level user management. the use of AppSheet with Google Sheets database has limitations when the data volume increases, integration needs increase, or stricter security controls are required, and the scope of archiving features is still focused on the input, retrieval, document access, and reporting cycles, so it does not yet cover more advanced archiving aspects such as retention schedules, archive security classification, and disposition automation.

REFERENCES

Ade, R. (2025). Metode Penelitian Dan Pengembangan (R&D): Pengertian, Jenis Dan Tahapan. *Diajar: Jurnal Pendidikan Dan Pembelajaran*, *4*(3), 459–470. https://doi.org/10.54259/Diajar.V4i3.5092

Agustya, S, N, A., & Agustina, Y. (2021). Pengembangan Sistem Arsip Elektronik Desa (Saedes) Untuk Meningkatan Efektivitas Kinerja Pegawai. *Jurnal Ekonomi, Bisnis Dan Pendidikan*, *1*(4), 413–441. https://doi.org/10.17977/Um066v1i42021p413-41

Aihunan, S. S., Ohoiwutun, S. K., Ufi, J. A., & Patty, J. T. (2025). Penerapan Arsip Elektronik

Dan Pengaruhnya Terhadap Peningkatan Kinerja Pegawai Di Pt. Perusahaan Listrik Negara (Persero) Unit Induk Wilayah Maluku Dan Maluku Utara. *Presidensial: Jurnal Hukum, Administrasi Negara, Dan Kebijakan Publik*, *2*(1), 175–184. https://doi.org/10.62383/Presidensial.V2i1.571

Alhadi, D. F., & Cholik, M. (2021). *Pengembangan Media Pembelajaran Interaktif Berbasis Articulate Storyline Pada Mata Pelajaran Gambar Teknik Kelas X Smk Negeri 1 Sidoarjo*. *11*.

Amalia, A. T., & Panduwinata, L. F. (2022). Sistem Informasi Manajemen Arsip Elektronik (E-Arsip) Berbasis Microsoft Access Terhadap Efektivitas Penemuan Kembali Arsip Pada Smkn 4 Surabaya. *Jurnal Pendidikan Administrasi Perkantoran (Jpap)*, *10*(3), 195–210. https://doi.org/10.26740/Jpap.V10n3.P195-210

Arimbi, S. S. I. A. S. (2024). Peran Manajemen Kearsipan Dalam Pengelolaan Tata Persuratan. *Socius: Jurnal Penelitian Ilmu-Ilmu Sosial, 1*(10), 267-272 https://doi.org/10.5281/Zenodo.11238918

Birrell, L. (2019). Leaving the Stuff Behind: One Leader's Approach to Managing Academic Archives. *Collections*, *15*(4), 240–252. https://doi.org/10.1177/1550190619888919

Cheng, E. C. K. (2018). Managing Records and Archives in a Hongkong School: a Case Study. *Records Management Journal*, *28*(2), 204–216. https://doi.org/10.1108/RMJ-02-2017-0004

Chozin, M. N., & Maula, N. (2024). Pengembangan Sistem Pemantauan Tugas Akhir Berbasis Appsheet: Studi Kasus Di Universitas Negeri Yogyakarta. *Jurnal Teknodik, 28*(2), 159-172

Fabrianne, A. F., & Indrahti, S. (2022). Efektivitas Sipas Sebagai Temu Balik Arsip Aktif. *Information Science And Library*, *3*(2), 113. https://doi.org/10.26623/Jisl.V3i2.5997

Faslah, R., Marsofiyati, & Eryanto, H. (2020). Implementation Of Digital Archives For Teachers And Administrators At State Vocational School 16 Jakarta. *Jurnal Pemberdayaan Masyarakat Madani (Jpmm)*, *4*(1), 430-444. https://doi.org/10.21009/Jpmm.004.1.11

Hasian, A., & Bachtiar, M. (2025). Digitalisasi Dengan Appsheet: Studi Kasus Dan Implementasi Untuk Efisiensi Administrasi Pada Pt.X. *Jurnal Praktik Keinsinyuran, 2*(1), 55-63. https://doi.org/10.25170/jpk.v2i01.6276

Hidayat, F., & Nizar, M. (2021). Model Addie (Analysis, Design, Development, Implementation And Evaluation) Dalam Pembelajaran Pendidikan Agama Islam. *Jurnal Inovasi Pendidikan Agama Islam (Jipai)*, *1*(1), 28–38. https://doi.org/10.15575/Jipai.V1i1.11042

Ibrahim, M. S., Nur A. I., & Azwary, K. (2024). Model Addie Dan Assure Dalam Pengembangan Media Pembelajaran. *Journal Of International Multidisciplinary Research*, *2*(5), 258–268. https://doi.org/10.62504/Jimr469

Juairiah, J., Hamsinah, H., & Asmawardah, A. (2024). Mekanisme Sistem Temu Kembali Arsip (Studi Deskriptif Di Dinas Perpustakaan Dan Kearsipan Provinsi Kalimantan Selatan). *Pustaka Karya : Jurnal Ilmiah Ilmu Perpustakaan Dan Informasi*, *12*(2), 149–163. https://doi.org/10.18592/Pk.V12i2.13035

Kusuma, A. M., & Mahardi, P. (2021). Analisis Deskriptif Terhadap Pengembangan Media Pembelajaran E – Modul Interaktif Berbasis Software Aplikasi Lectora Inspire. *JKPTB: Jurnal Kajian Pendidikan Teknik Bangunan, 7*(2), 1-11. https://doi.org/10.26740/jkptb.v7i2.42726

Nabila, B., Wahono, P., & Rachmadania, R. F. (2025). Analisis Manajemen Arsip Elektronik Pada Sekretariat Daerah Kabupaten Tangerang. *Musytari: Jurnal Manajemen, Akuntansi, dan Ekonomi, 20*(2).

Nyfantoro, F., Salim, T. A., & Mirmani, A. (2020). Perkembangan Pengelolaan Arsip Elektronik Di Indonesia: Tinjauan Pustaka Sistematis. *Diplomatika: Jurnal Kearsipan Terapan*, *3*(1), 1. https://doi.org/10.22146/Diplomatika.48495

Safitri, M., Aziz, M. R., & Sjakyakirti, U. (2022). Addie, Sebuah Model Untuk Pengembangan Multimedia Learning. *Jurnal Pendidikan Dasar*, *3*(2), 51-59

Setyarto, D. B. (2025). *Pengelolaan Arsip Digital*. Yayasan Putra Adi Dharma

Sugiyono, D. (2023). *Metode Penelitian Kuantitatif, Kualitatif, Dan R&D*. Alfabeta

Wilodati, W., Wulandari, P., & Nur, R. J. (2024). Design Of Information, Communication, And Technology (Ict)-Based Appsheet For Collecting Data In Decision Making: A Case Study Of Father's Parenting In Children's Character Education In Female Migrant Worker Families. *Journal of Engineering Science and Technology, 19*(4), 1420-1441