Research Paper

Unlocking Digital Archive Efficiency: ERP Implementation in the Wooden Furniture Industry

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Abstract

The rapid growth of digital technology has driven businesses to transition from manual processes to automated systems to improve efficiency and reduce human error. Archive management is one of the crucial administrative functions that require transformation, particularly in manufacturing and export companies. The Wooden furniture manufacturer and exporter in Jepara, still relied on physical archives, causing inefficiencies in document retrieval, lack of systematic classification, and absence of integrated backup systems. This study aims to analyze the company's document management process and design a digital archiving system using the "Document" module in Odoo ERP to improve efficiency, accelerate information access, and minimize the risk of data loss. The research employed a qualitative descriptive method with a case study approach, involving interviews, direct observations, and document analysis to identify problems, design solutions, and test the system. To further ensure system efficiency and relevance, a GAP analysis using the NPF method was conducted to evaluate the alignment of the Odoo ERP "Document" module with the company's current manufacturing and administrative processes. The developed digital archiving system features structured document classification, unique coding, keyword-based search, hierarchical access rights, encryption, and automated backups. Implementation results show a significant reduction in document retrieval time, improved storage accuracy, enhanced data security, and reduced physical storage needs. The system also facilitates audits, supports compliance, and provides a practical model for medium-sized companies managing large volumes of operational documents. Future research should explore cross-module integration and assess user acceptance to optimize the system's potential.

Keywords: *ERP, digital archive, Document module, Odoo, e-Filing*

INTRODUCTION

The development of digital technology has an impact on every aspect of life including business people. They are required to adapt and innovate in order to maintain and or develop their business in the face of changes in a fairly competitive business environment. Over time, business people began to think about automating previously manual business processes that were prone to human error with digital systems to increase effectiveness and efficiency (Suryono, 2022). The utilization of technology such as Enterprise Resources Planning (ERP), which expands market reach and facilitates access to financing. Companies need to optimize information systems for operational efficiency and competitiveness (Faeni et al., 2025).

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Records management is an important part of the company's administrative system, especially for wood furniture manufacturing and exporting companies. Activities such as purchasing raw materials, marketing and sales, exports and logistics, finance and accounting, and human resources require systematic and organized archive management in both physical and digital forms. CV Babah & Co is a manufacturer and exporter of wooden furniture, both for indoor and outdoor needs, which has been established since 2002. The company is located in Jepara, Central Java, which is known as the center of the national furniture craft.

In its daily operations, the company manages various documents, namely: (1) financial documents (invoices/proof of payment/notes); (2) marketing documents (offer letters, order confirmations, repurchases); (3) human capital documents (employment agreement letters, attendance lists, employee data); (4) and other activity reports. The main obstacles felt are the difficulty of finding old documents, the growing pile of physical archives, and the absence of an integrated digital document backup system. Documents are still stored in physical form in cabinets or archive shelves. The documents are also still actively utilized by employees for the purposes of data verification and matching information with stakeholders. The absence of classification based on sensitivity or priority shows that archival principles have not been applied thoroughly (Tiara and Husna, 2018). This not only disrupts the efficiency and accuracy of information management, but also risks legal and reputational repereussions, especially for companies engaged in manufacturing and exporting such as CV Babah & Co, which depends on the completeness and security of documents in the export and legality process. Referring to the gap phenomenon above, through this research, it is expected to formulate an integrated digital archiving system design in accordance with modern archival principles. The system is expected to improve the efficiency of document management, accelerate information access, minimize the risk of data loss, and support legal compliance and sustainability of company operations, especially in the context of manufacturing and export industries that require speed, accuracy, and document security.

The purpose of this research is to analyze the archive management process at CV Babah & Co. The analysis is simulated in the Odoo ERP module, namely Document. By using the module, it is expected that its implementation in the operational sustainability of CV Babah & Co Jepara will be able to improve efficiency, accelerate access to information, and minimize the risk of data loss.

LITERATURE REVIEW

a. Archive Classification and Filing Process

Archives have various benefits for organizations, including as a source of information, a basis for decision making, evidence of the implementation of activities, and a reference in designing future development plans. Special facilities are needed to store the archives that have been produced, including the application of archive media transfer as an effort to preserve and facilitate access. The management and arrangement of active archives aims to organize the physical and information archives neatly, as well as compile a list of archives to facilitate the process of finding or retrieving the required documents. One important step in this process is to do active archive filing, which is organizing archives systematically based on activities so that they form a single file with information linkage from a work unit. Active archive packing includes archive classification, information description, time, quantity, and information. The contents of the file include file number, archive item number, classification code, archive information description, and date (Tiara and Husna, 2018).

b. ERP as an Integrated Solution for Business Efficiency

According to (Firmanto et al., 2025), Enterprise Resource Planning (ERP) is software used to plan and manage company resources as a whole. ERP consists of various integrated applications

with components that support and perform various business functions. ERP has three main components, namely Enterprise, Resource, and Planning, which focus on planning and analyzing company resources (Iordache et al., 2020). ERP is an integrated system designed to simplify existing business processes, facilitate collaboration, and utilize information technology to generate data that can increase company competitiveness. Its application is an effective solution in accelerating the transaction process while increasing data security, both in large and small companies (Alzahmi et al., 2025).

c. Document Module in Odoo ERP

Odoo is an open source ERP program that allows users to access its source code and obtain a software license for free. This software functions as a back-end ERP system that is connected to front-end applications such as e-commerce, so that it can be used by large, medium and small companies (Nugroho and Ardiana, et al., 2023). One of the important features in Odoo is the "Document" module, which is an application that facilitates centralized document management in the ERP system. This module provides the ability to upload, store, organize, share, and control access to various types of documents, such as contracts, invoices, and other files from one integrated location. The advantages of this module include: (1) centralized storage of all company documents, eliminating the need for separate storage and manual processes; (2) enables document sharing with internal and external parties via secure links; (3) provides specific access permission settings to maintain confidentiality; (4) integration with other modules such as Sales, Purchase, and Accounting, so that transaction-related documents can be accessed easily; and (5) supports document verification, approval, and revision tracking processes to improve efficiency and transparency. By utilizing the "Document" module, companies can reduce paper usage, speed up workflow, and ensure security and complete control over their important documents.

RESEARCH METHOD

This research uses a qualitative descriptive method with a case study approach to the company, in this case CV. Babah & Co, to identify existing system problems, implementation. This method was chosen because it allows researchers to analyze real conditions in depth, compare with ideal standards, and produce recommendations based on company specific needs. The research process was carried out through several stages:

1. Finding companies that have system constraints, then identifying research subjects who experience archive management problems and need system development.
2. Business identification process by reviewing workflows, types of documents, roles of each division, and systems currently used.
3. Gap analysis is comparing actual conditions with ideal business processes to find deficiencies that must be corrected.
4. System requirements planning is determining the features and technical specifications needed to improve the efficiency and security of document management.
5. Creation of an ERP-based digital filing system (Odoo) tailored to the company's needs.
6. Testing and implementation of the system in the company's work environment to see the performance, ease of use, and impact on work efficiency.
7. Standardize business processes by establishing standard procedures for digital system-based archive management so that they can be carried out consistently.

Data collection in this study was carried out through several methods. First, interviews were conducted with one managerial informant (the company manager) and two supporting informants (finance and administrative staff), making a total of three participants. The manager was considered the key informant because of his strategic knowledge of company policies and system

needs, while the administrative staff acted as supporting informants, providing practical insights into daily archive management practices. Second, direct observations were made of the work process and archive management practices in the field, allowing the researchers to understand the real workflow of storing, searching, and utilizing documents. Third, a document study was conducted on the physical and digital archives owned by the company to identify the types of documents, the frequency of their use, and the storage patterns applied. The number of informants was considered sufficient for this qualitative case study, as the data obtained reached saturation with no significant new information emerging after repeated confirmation. To ensure data validity and reliability, triangulation was applied by comparing findings from interviews, observations, and document analysis. This methodological triangulation strengthened the credibility of the results and ensured that the data provided a comprehensive understanding of the company's document management practices.

The analysis in this study was carried out qualitatively through several stages. First, data reduction was carried out to filter and focus information on the main problems and relevant system needs. Second, a gap analysis was conducted by comparing the condition of the existing archive management system with the standard or ideal process, in order to identify aspects that need to be improved (Terminanto et al., 2017). Third, data synthesis is carried out to formulate a system design that is able to close these gaps and improve archive management performance. The results of this analysis then become the basis for the results and discussion section to explain how the digital archiving system developed can overcome existing obstacles, improve work efficiency, and support the sustainability of company operations.

FINDINGS AND DISCUSSION

Archival collections are information or records created, received and maintained by an institution or individual as evidence and assets to fulfill legal obligations or support business transactions (Ramudin, 2020). At CV Babah & Co, the archival collections include staffing, production, administration, finance, and business documentation. One informant emphasized the importance of this archival role by stating:

"Previously, we often lost track of documents, especially financial receipts. With this new system, I feel more confident that everything is stored safely and can be retrieved anytime."
(Informant 1, Finance Staff)

This research uses the "Document" module in Odoo ERP to design and implement a centralized document.

The implementation of the Odoo ERP "Document" module demonstrated improved efficiency, security, and orderliness in managing company archives, replacing the previously manual filing system. As one manager described:

"In the past, searching for a single contract could take half a day. Now, with just a few clicks, we can find it within seconds."
(Informant 2, Administrative Staff)

The master file structure in the company's archive management system is organized based on the main categories that represent certain functions or work fields, then broken down into more specific subcategories. The Human Capital (KP) category consists of employee attendance records and employee data. These archives record employee attendance and store personal and administrative data. The Production (PK) category includes work order archives. This document is

a reference for the implementation of work in the production or operational field. The Administration (AD) category has five subcategories, namely road letters, outgoing letters, confirmation letters, incoming letters, and request letters. All of these documents are related to correspondence activities and official company communications. The Documentation and Activity (DA) category contains two types of records, namely documentation, and activity reports. This category records various forms of documentation of company activities as well as reports related to internal and external activities. The Finance (KU) category includes invoices, payment receipts, and purchase notes that serve as proof of the company's financial transactions and records. With the structure as presented in Table 1, each document has a unique code that facilitates grouping, searching, and archive maintenance. The arrangement of codes based on categories and subcategories also supports the consistency of archiving and the efficiency of document management.

Table 1. Parent File Structure

KP	**Human capital**	
	KP.01.01	Employee Attendance
	KP.01.02	Employee data
KU	**Production**	
	PK.02.01	Work order
AD	**Administration**	
	AD.03.01	Surat Jalan
	AD.03.02	Outgoing letter
	AD.03.03	Confirmation letter
	AD.03.04	Incoming letter
	AD.03.05	Quotation
DA	**Documentation and activities**	
	DA.04.01	Documentation
	DA.04.02	Activity report
KU	**Finance**	
	KU.05.01	Invoice
	KU.05.02	Payment receipt
	KU.05.03	Purchase note

Source: Data processed by researchers, 2025

The digital archive system implements a structured classification of documents into five main categories (Table 1). Each category has a specific letter code and number code, along with a unique coding format that includes the upload date and document sequence number. This mechanism simplifies the search process and reduces potential errors in archive placement. According to (The, 2009) there are five types of archive storage systems: (1) alphabetical system: archives are sorted alphabetically by the name of the person or organization so that it is efficient for quick searches in the context of names; (2) subject system: grouping grehives based on issues or topies listed in the document, suitable for thematic documents; (3) numerical system: systematic and consistent use of numbers as archival identifiers, ideal for large collections; (4) regional system: records are stored by geographical location, such as country or province often used in institutions with location references; (5) chronological system: sorting by date, effectively used for chronological documents such as bills. An ERP-based digital archiving system (Odoo) has been created and designed according to the company's needs. The login process to Odoo is designed to be simple yet secure,

with username and password based authentication that matches the user's access rights. After logging in, users can access the "Documents" module to perform records management, as presented in Figure 1 and Figure 2.

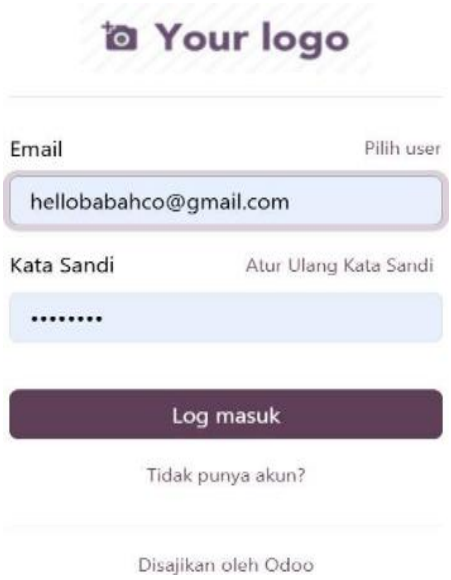

Figure 1. Odoo Login Page
Source: Data processed by researchers, 2025

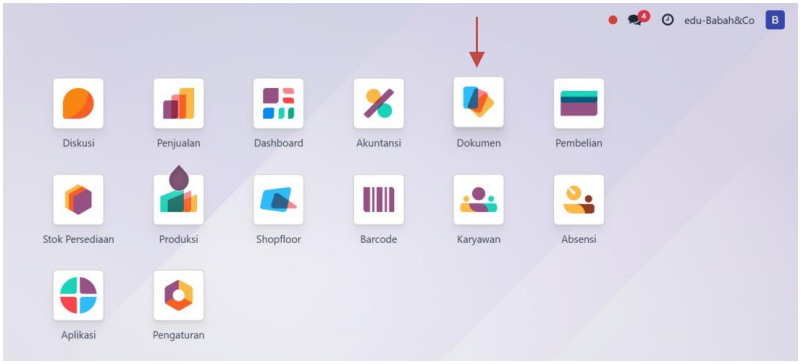

Figure 2. Odoo Dashboard Page
Source: Data processed by researchers, 2025

Document uploading is done in a structured manner by creating a main folder according to the work unit (c.g.Human Capital), then subfolders based on document types such as attendance, employment contracts, incoming letters, or reports. Each document is equipped with metadata that serves as a label and archive identity, which is then verified before being saved. The "upload successful" notification is an indicator that the document has officially entered the system and is ready to be accessed by authorized users.

Figure 3. Document Upload Display
Source: Data processed by researchers, 2025

The "Document" module in Odoo ERP also provides a "Label" feature to facilitate the classification of documents by labeling them according to the categories and subcategories listed in the parent file structure, for example KU.05.02 Payment Receipt. Documents with similar labels will be automatically grouped in the search, making it easier to search by code or document type, as shown in Figure 4 and Figure 5. This feature also accommodates cross-folder grouping, as a search by label can display all documents of a certain category even if they are stored in different folders. Functionally, the application of labels in Odoo acts as a digital filing guide that replaces the role of guide cards in manual filing systems. This ensures that the master file structure is not only physically reflected, but also integrated in the digital system, supporting order, search efficiency, and long term archive maintenance.

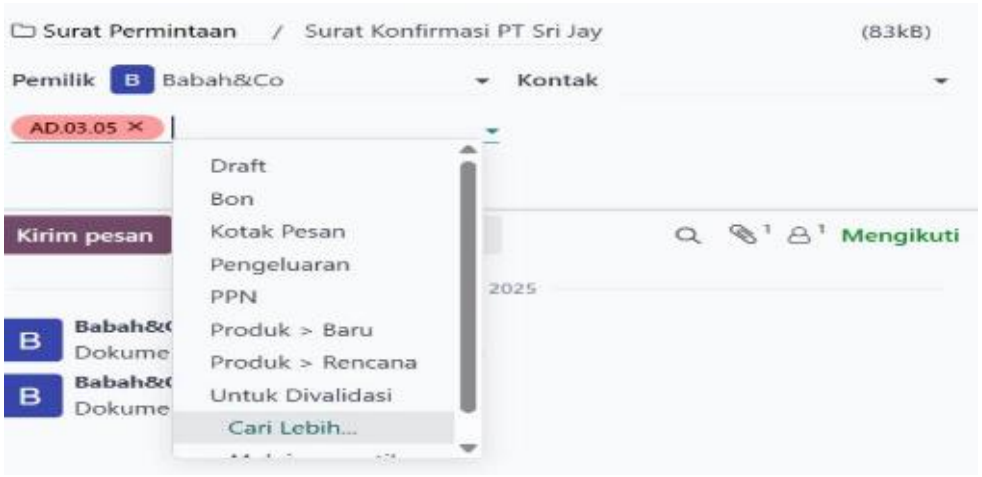

Figure 4. Label Display
Source: Data processed by researchers, 2025

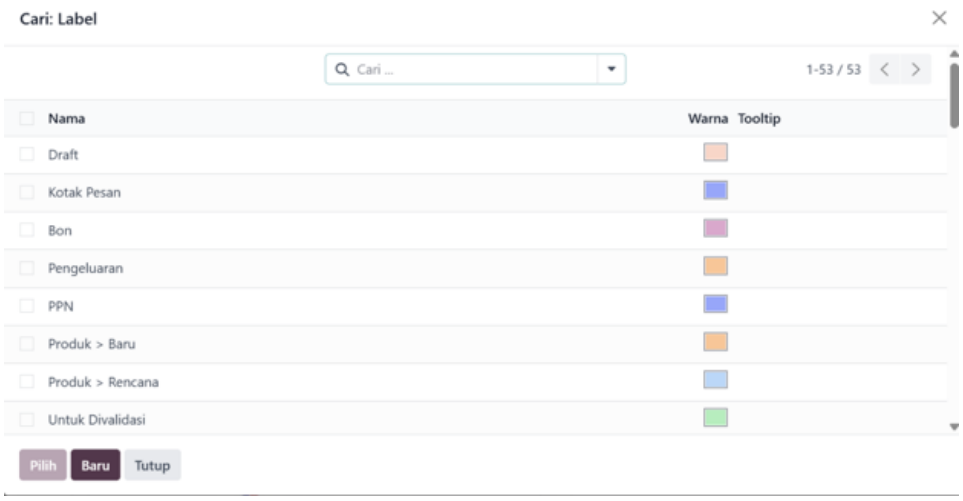

Figure 5. New Label Creation View
Source: Data processed by researchers, 2025

The search feature utilizes the search field to find documents based on keywords, codes, or names. Search results can be accessed for preview, download, or metadata update according to the user's access rights. Overall, this supports the principles of efficient, secure, and easily accessible digital archive management.

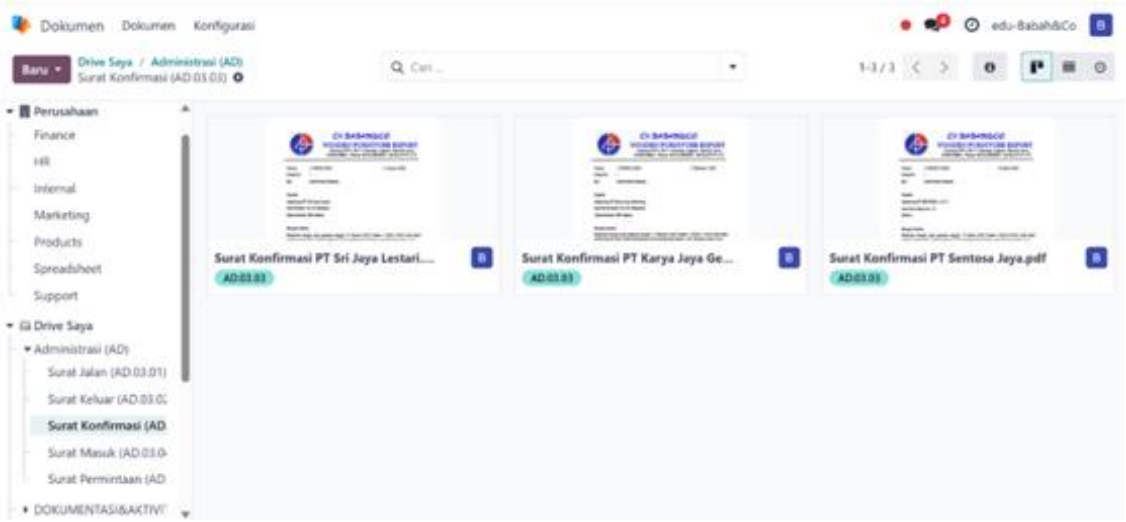

Figure 6. Display of Document Search Column
Source: Data processed by researchers, 2025

Search results in the "Document" module display a list of documents relevant to the keywords or codes entered, either in the form of one or several documents. This module is also equipped with a disposition feature or other types of activities that allow employees and management to add activity notes related to documents, so that document history can be monitored through the details page and log notes. After the detail page is opened, users according to their access rights can perform several actions, including: (1) preview the document directly in the Odoo

system; (2) download the document to a local device; and (3) change the document metadata, such as name, category, date, or other relevant information.

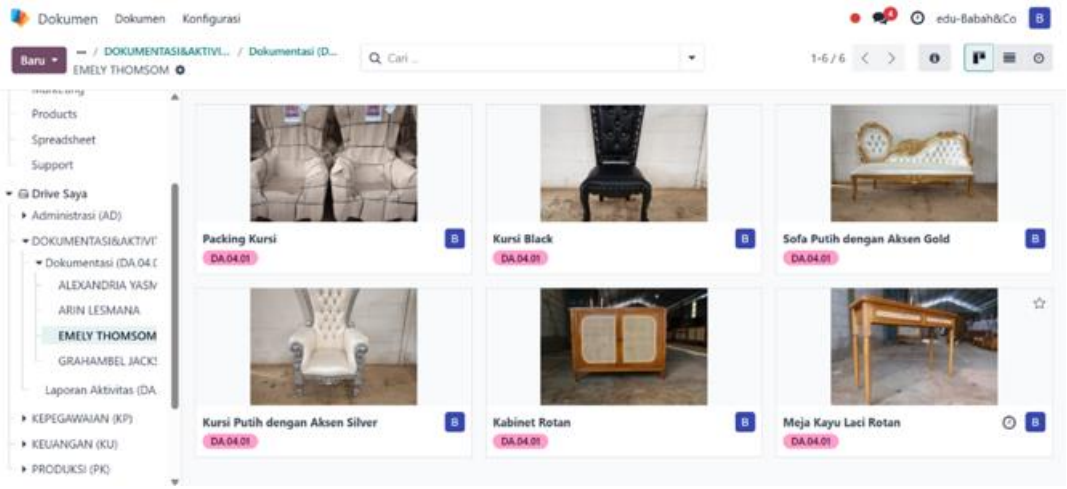

Figure 7. Document Display in the Digital Archive System
Source: Data processed by researchers, 2025

Document deletion procedures are also available in the "Document" module and aim to maintain data order and accuracy. Irrelevant or erroneously uploaded documents can be permanently deleted through a system confirmation step, thus minimizing the risk of errors. One important finding is the implementation of multilevel access rights that limit users to only the documents they are authorized to access. For example, financial documents can only be accessed by system admins, finance managers, and finance staff; while human capital documents are limited to HR and relevant managers.

GAP analysis is a method used to compare the current business process (AS IS or existing business process) with the business process needed to achieve the goals that the company/organization wants to achieve (Firmanto et al., 2025).

Table 2. GAP Analysis of the Odoo ERP System

Business Process	**Needs**	**Fullfillment Description**				
		N	P	F	AS IS (Existing Business Process)	Business Process Reengineering (BPR)
Document storage	An archive storage system that is structured, easily accessible, and able to categorize documents based on certain categories			V	Physical archives in cabinets are less structured	All documents are stored in Odoo with clear classification
Document coding	Application of a unique code to each document to facilitate identification and search, as well			V	5-15 minutes (depending	less than 30 seconds with code (label)

Business Process	Needs	Fullfillment Description				
		N	P	F	AS IS (Existing Business Process)	Business Process Reengineering (BPR)
	as avoid duplication				on location and archive condition)	and keyword-based search feature
Document handling	Standard procedures for document management starting from receipt, disposition, storage, distribution, to destruction so that the workflow is orderly and documented			V	Manual, without documented standardized procedures, document distribution, storage, and tracking processes are time-consuming and error-prone, No document status control mechanism	Documents can be tracked in real time, equipped with version control, and changes are automatically recorded
Access rights setting	Document access restriction mechanism based on position or authority, in order to maintain confidentiality and information security			V	No clear restrictions, all staff can access	Position-based access rights, strict control as needed
Document retention	Document retention management system in accordance with company rules or regulations			V	Unmanaged, old documents accumulate	Managed shelf life, expired documents are moved / deleted

Source: Data processed by researchers, 2025

In this study, the GAP analysis as presented in Table 2, has been adjusted to the needs, namely to find out how much the Odoo ERP system is able to meet the needs that CV Babah & Co. GAP analysis using the NPF method, namely: (1) N (No fit) means that the system cannot meet the needs;

(2) P (Partial) means that the system can meet the needs, but only partially; (3) F (Full) means that the system can meet the needs as a whole (Nugroho and Lestari et al., 2023). Finally, the GAP analysis (Table 2) confirms that the Odoo ERP system addressed inefficiencies in document storage, coding, handling, and retention. As the Director concluded:

"This system transformed how we work. It is not just about digitizing, but about reshaping discipline in handling documents."
(Informant 3, Manager of CV Babah & Co)

The novelty here is that instead of merely comparing ERP "before-and-after," this study contextualizes GAP analysis within archival management, providing a model that can be replicated by other SMEs.

CONCLUSIONS

The findings clearly demonstrate that the implementation of the Odoo-based digital archive system is efficient and aligned with the research objectives, namely improving efficiency, accelerating access to information, and minimizing the risk of data loss. The system successfully addressed major issues in the existing conditions, including unstructured document storage, time-consuming retrieval, lack of unique coding, undocumented document distribution, and weak access control. After implementation, archives were centrally managed with structured classification, unique coding, fast keyword-based search, integrated workflow, multilevel access rights, encryption, and automatic backup. These improvements significantly reduced retrieval time, improved accuracy, enhanced data security, and supported transparency and auditability, confirming that the research objectives were achieved.

Theoretical implications of this study highlight the role of ERP-based digital archiving in supporting Business Process Reengineering (BPR), demonstrating how the integration of information systems theory with archival science contributes to organizational efficiency and sustainability. This research also enriches the literature on ERP adoption in medium-sized manufacturing and export companies, especially in developing countries. Practical implications include providing a reference model for companies seeking to modernize their archive management practices through ERP. The study shows that the "Document" module can be applied effectively in real business contexts, helping organizations reduce operational inefficiencies, support compliance, and strengthen competitive advantage. For practitioners, the research underscores the importance of structured archive management, system integration, and user training as key factors in achieving long-term efficiency.

LIMITATIONS & FURTHER RESEARCH

This study has several limitations that should be acknowledged. First, the research was conducted using a single case study at CV. Babah & Co, which may limit the generalizability of the findings to other industries or larger-scale organizations. Second, the data collection relied on a relatively small number of informants (one manager and two staff members), which might not fully capture the diversity of user experiences and perspectives. Third, the study employed a qualitative descriptive approach without quantitative measurement of efficiency gains or user satisfaction, thus limiting the ability to statistically validate the improvements observed. Fourth, the research focused only on the "Document" module in Odoo ERP and did not analyze integration with other modules such as Sales, Purchase, or Inventory, which could provide a more holistic view of system performance. Future research is encouraged to expand the analysis by integrating the "Document" module with other Odoo applications (Sales, Purchase, and Inventory) to maximize cross-functional

efficiency, and to quantitatively assess user adaptation and acceptance to ensure sustainable system adoption.

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