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Systematic Review of the Role of User Training in the Successful Implementation of ERP: Analysis of Best Practices, Impact, and Challenges using the PRISMA Method

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Abstract

This study aims to systematically review the role of user training in the successful implementation of Enterprise Resource Planning (ERP) systems. The PRISMA approach is used to select and analyze ten scholarly articles published between 2020 and 2025. The main focus of the research includes best practices in training, its impact on organizational performance, as well as challenges and considerations in its design. The findings indicate that role-based, continuous, and contextual training can enhance user readiness and system effectiveness. Training also contributes to improved work efficiency, user satisfaction, and successful ERP system adoption. However, challenges such as limited digital literacy, organizational culture, and resource constraints remain barriers to its implementation. This study emphasizes that user training is a strategic element that must be thoroughly and integratively designed in every stage of ERP implementation.

Keywords: *ERP; user training; system implementation; systematic review; PRISMA.*

1. Introduction

Enterprise Resource Planning (ERP) systems have become a critical component of modern organizations' digital strategies. ERP not only enables companies to integrate core business processes in real time but also enhances efficiency, data accuracy, and decision-making. However, successful implementation is not always guaranteed. System complexity, high costs, and the need for organizational adaptation often pose significant challenges [1].

One of the most frequently emphasized determinants of ERP implementation success in the literature is user training. Studies demonstrate that user education and training significantly influence system adoption, optimal utilization of ERP features, and overall project success [2], [3]. Inadequate training is a common cause of resistance, user errors, and the need for additional post-implementation documentation [4]. Effective training goes beyond technical knowledge transfer; it also fosters user understanding of new business processes and the strategic value of ERP.

Recent research highlights that user training cannot be separated from broader Critical Success Factors (CSFs), which encompass organizational, technological, and environmental aspects. One influential conceptual study proposes a holistic model positioning user training as part of a strategic approach based on trust in vendors, systems, and consultants [5]. Further, other systematic reviews indicate that CSFs such as training, user involvement, and change management vary in interpretation and tactical approaches, revealing inconsistencies in practice [6], [7]. Additionally, user participation, including training, has been identified as a key issue over the past decade, as reflected in systematic reviews following the PRISMA methodology [8].
Given this context, a deeper Systematic Literature Review (SLR) on the role of user training in ERP implementation success is necessary. This study aims to provide a comprehensive overview of how user training contributes to successful ERP implementation through a PRISMA-guided SLR approach. The research focuses on three key questions.
RQ1: What best practices can be identified in user training for ERP implementation?
RQ2: How does user training influence organizational performance post-ERP implementation?
RQ3: What are the main challenges and considerations in designing and executing effective user training programs for ERP projects?

2. Related Work

2.1. Enterprise Resource Planning (ERP)

Enterprise Resource Planning (ERP) is an integrated information system designed to automate and manage core business processes within an organization in real time. ERP combines various business functions—such as finance, accounting, production, human resources, and distribution—into a single centralized system that enables consistent data coordination across organizational units [9]. An ERP system

typically consists of several core modules, including a finance and accounting module for recording financial transactions, a human resource management (HRM) module for managing employee data, a production and operations module for inventory control, and a supply chain management (SCM) module for optimizing procurement and distribution processes. ERP systems support a single database, ensuring that any data updates are accessible in real time by all authorized departments, thereby improving organizational efficiency and effectiveness [10].

The primary objective of ERP implementation is to enhance operational efficiency and cross-departmental data consistency. By adopting an ERP system, organizations can reduce data redundancy, accelerate business processes, and improve decision-making quality due to comprehensive information visibility [11]. Key benefits of ERP include business process integration, better decision-making through real-time data access, increased productivity and efficiency via automation, and process standardization across organizational branches. ERP can also serve as a major driver of digital transformation, particularly when tailored to a company's specific needs [12].

ERP systems have undergone significant evolution since their introduction in the late 1980s. Early ERP generations focused on automating manufacturing and accounting functions, but modern solutions now incorporate cloud and mobile-based technologies. This evolution includes integration with Internet of Things (IoT), Big Data, and Artificial Intelligence (AI), transforming ERP from an administrative tool into an intelligent system capable of data analysis and decision recommendations [7]. Modern ERP systems are designed to be more flexible, user-friendly, and supportive of full-scale digital transformation, with growing adoption of Cloud ERP for its scalability and cost efficiency [13]. However, ERP implementation in the digital era also faces challenges such as data security risks, legacy system integration, and user resistance to change, necessitating a well-planned implementation strategy—including user training as a critical success factor.

The success of ERP implementation depends on both technical and non-technical factors. Key Critical Success Factors (CSFs) include top management support, user involvement, change management, training, and system-business process alignment [14]. Indicators of successful ERP implementation include Return on Investment (ROI), user adoption rates, system stability, improved business performance, and user satisfaction [15], [16]. By understanding these factors, organizations can design effective implementation strategies and minimize the risk of failure.

2.2. Critical Success Factors (CSFs) in ERP Implementation

Critical Success Factors (CSFs) are key elements that determine the success of a project, including the implementation of an Enterprise Resource Planning (ERP) system. The concept of CSFs was introduced in management literature and has since become a primary analytical framework in various information system studies [17]. In the context of ERP, CSFs encompass crucial aspects that must be considered during the planning, development, and execution phases to ensure organizational objectives are met. The success of ERP implementation heavily depends on factors such as top management commitment, user training, user involvement, and organizational change management [15]. When these CSFs are neglected, the risk of ERP project failure increases significantly.

CSFs in ERP implementation can be categorized into three main groups: technical, organizational, and individual [6]. Technical factors include selecting the right ERP software, alignment between business needs and system features (fit/gap analysis), IT infrastructure quality, and seamless system integration. Other studies emphasize that data readiness for migration and a technology architecture supporting scalability and security are also part of technical considerations [18]. Organizational factors relate to company structure, organizational culture, top management commitment, cross-departmental communication, and the organization's readiness for change. Executive-level support has been shown to be critical in facilitating the digital transformation brought by ERP [19]. Meanwhile, individual factors encompass end-user capabilities and preparedness, such as user training, user engagement during implementation, and their satisfaction with the new system.

User training is one of the most frequently cited CSFs in ERP literature. Effective training not only provides technical knowledge about system usage but also helps users understand the business context and objectives of ERP implementation. ERP success is largely determined by how well an organization prepares its users for the transition to the new system [20]. Training should be continuous, covering not only technical aspects but also business process changes and the user's role in the ERP ecosystem. Several studies even rank user training as the most influential factor for ERP success, highlighting that human resource readiness is a strategic component in ERP projects [21].

Understanding CSFs enables organizations to design more structured and well-planned implementation strategies. Early identification of these critical factors helps management allocate resources efficiently and minimize failure risks. In other words, CSFs serve as early indicators of potential ERP project success or failure, while also functioning as control tools throughout the project lifecycle. In the digital era, companies are expected not only to implement ERP swiftly but also effectively. Thus, a comprehensive focus on CSFs is a strategic necessity to ensure ERP investments deliver optimal results for the organization.

2.3. User Training in ERP Implementation

User training is a critical component in ERP system implementation, playing a vital role in ensuring successful technology adoption across all user levels. Training aims to equip users with the knowledge, skills, and confidence to operate the ERP system effectively [15]. Without adequate training, organizations risk user resistance and a decline in operational efficiency due to errors in using the new system [22]. This training is generally tailored to the needs and roles of users within the organization, such as basic training for general understanding of ERP, role-based training for specific functional responsibilities, and on-the-job training that enables direct learning in the workplace [21]. The alignment of training types with user characteristics is an essential factor in enhancing the effectiveness of the learning process.

The timing of the training also plays a crucial role. It is recommended that training be conducted in three stages: before implementation (pre-implementation), during the implementation process (during implementation), and after the system is in use (post-implementation) [23]. This phased strategy has proven effective in increasing user readiness and accelerating the adaptation process to the new system.

Overall, well-designed and comprehensive user training can enhance technology adoption rates, reduce operational errors, and support the overall achievement of ERP implementation objectives.

2.4. The Impact of User Training on ERP Implementation Success

User training plays a strategic role in determining the success of Enterprise Resource Planning (ERP) system implementation. As a complex system that often transforms work procedures and organizational culture, ERP requires a comprehensive training approach to ensure users can adapt optimally [24]. Without adequate training, organizations face significant risks such as low system adoption, operational errors, and ultimately, failure to achieve implementation objectives.

A positive correlation has been found between training quality and ERP implementation success [25]. Organizations that provide comprehensive and continuous training demonstrate a 40% higher success rate compared to those offering only basic training. Effective training not only reduces operational errors but also accelerates user adaptation to new workflows. A thorough understanding of ERP functions gained through training contributes to a 25–30% improvement in operational efficiency [26].

User adoption is a critical indicator of ERP success. Role-based training approaches can increase system acceptance by up to 60% while simultaneously reducing resistance to change [23]. The three-phase training strategy (pre-, during-, and post-implementation) has proven effective in building both technical and psychological readiness among users, with a specific note that post-implementation training is often overlooked despite being vital for consolidating system usage [27].

A qualitative aspect of training that is often neglected is the emphasis on data accuracy and standardized procedures. Organizations with structured training programs experienced a 35% increase in data accuracy and a 20–25% improvement in team productivity [28]. Comprehensive training also shortens information processing time by up to 40%, enabling faster, data-driven decision-making.

Findings from various studies consistently demonstrate that investing in user training is not an additional expense, but an essential component that determines the return on investment (ROI) of ERP projects. Organizations must develop a training framework that includes:

1. Role-based training needs analysis
2. A comprehensive curriculum covering both technical and business process aspects
3. Evaluation mechanisms and continuous training
4. Active management involvement in the training process

A holistic approach to user training will maximize the benefits of ERP while minimizing the risk of implementation failure, which is often caused more by human factors than technical ones.

2.5. Challenges and Considerations in Designing User Training for ERP Implementation

User training is a crucial element in the implementation process of Enterprise Resource Planning (ERP) systems. Although training has been recognized as one of the key factors determining the success of ERP implementation, the design and execution of training programs are not without challenges. One of the primary constraints in ERP training is the limited budget and time available. Complex ERP projects require significant investment in developing training materials, providing qualified trainers, and allocating time for users to become familiar with the new system [24]. In addition, user resistance to change is a significant obstacle. Many users are reluctant to transition from legacy systems, especially when the training is not tailored to their specific job needs or delivered using engaging methods [23].

Other challenges arise from communication, organizational culture, and top management support. Clear and open communication is essential to explain the benefits and impacts of ERP implementation, thereby fostering shared understanding and acceptance among users [29]. An organizational culture that supports innovation and learning will facilitate the adoption of new systems, unlike bureaucratic organizations that are resistant to change [30]. Furthermore, the involvement of top management is critical. Their support should not only be in the form of providing resources but also in acting as role models and motivators, encouraging employees to actively and seriously participate in the training process [21].

In designing training programs, organizations need to consider the methods and media used. The selection of appropriate training methods must be aligned with the complexity level of ERP modules and user characteristics. Commonly used methods include classroom-based training, online training (e-learning), role-based training, and on-the-job training. Role-based training is often considered more effective because it is tailored to the specific responsibilities of each user [31]. Additionally, the use of interactive and easily accessible training media can enhance training effectiveness and reduce learning barriers. A combination of multiple training methods (blended learning) is frequently recommended in ERP projects, particularly to reach users from diverse functional backgrounds and geographic locations [27].

3. Methodology

3.1. Systematic Literature Review

This study employs a Systematic Literature Review (SLR) approach as the primary method to identify, evaluate, and synthesize findings from previous research relevant to the topic of user training in the successful implementation of Enterprise Resource Planning (ERP) systems. This approach is designed to answer research questions comprehensively and based on evidence by integrating findings from various scientifically published studies.

The SLR is conducted based on the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines, which are international standards for improving the transparency and quality of systematic review reporting [32]. PRISMA provides a framework consisting of four main stages: identification, screening, eligibility, and inclusion.

1. Identification

At this stage, a comprehensive literature search was conducted using keywords such as: "ERP Implementation", "User Training in ERP", "ERP Success Factor", and "Training for Information Systems". The search was carried out through academic databases such as Google Scholar, ensuring that only articles indexed in Scopus were considered.

2. Screening

The articles found were then screened based on their titles and abstracts to evaluate their relevance to the research focus. Duplicate, irrelevant articles, or those discussing ERP without significantly addressing user training were excluded from further analysis.

3. Eligibility

Articles that passed the screening stage proceeded to a full-text review. This stage aims to assess in depth whether the articles provide substantial contributions to the research questions, particularly those related to training practices, implementation challenges, and impacts on organizational performance.

4. Inclusion

Only articles that met all criteria in terms of quality, relevance, and accessibility were included in the study. The selected articles were then analyzed to identify themes, patterns, and gaps that emerged regarding user training in ERP systems.

This SLR not only allows for a systematic understanding of the role of user training but also contributes theoretically by summarizing best practices, common challenges, and their impact on ERP implementation success [22], [33]. This procedure also helps minimize selection bias and enhances research replicability [34].

3.2. Data Collection

This review approach is based on the research topic “A Systematic Review of the Role of User Training in ERP Implementation Success: Analysis of Best Practices, Impacts, and Challenges Using the PRISMA Method.” To gain a deep understanding of the topic, a number of main keywords and their combinations were used, such as “ERP implementation,” “user training,” “ERP success factors,” and “training for information systems.” These keywords were applied to various academic databases to search titles, abstracts, and metadata of relevant literature, in order to gather a credible and focused reference set.

Table 1: Literature Criteria

Literature Criteria	Process Timeframe
Database Source	Google Scholar
Keywords	"ERP implementation," "user training," "ERP success factors," and "training for information systems."
Publication Range	Published between 2015 and 2025
Inclusion/Exclusion Criteria	Explained in Table 2.

Table 1 presents the criteria used in the literature identification process, covering the database source, keywords, publication range, as well as inclusion and exclusion criteria. Literature was collected from the academic database Google Scholar using keywords such as "ERP implementation," "user training," "ERP success factors," and "training for information systems," all relevant to the research topic. The publication range was set from 2020 to 2025 to ensure the review encompassed recent and relevant studies.

The screening process was conducted by evaluating key metadata such as titles, abstracts, and keywords, considering only articles in English or Indonesian that were available in full-text. The next stage involved thoroughly reading the full content of the articles to assess their alignment with the research focus, specifically regarding user training in ERP implementation. For further details on the applied inclusion and exclusion criteria, refer to Table 2.

Table 2: Inclusion/Exclusion Criteria

Inclusion	Exclusion
Articles indexed in Scopus	Articles not indexed in Scopus
Articles published between 2020 and 2025	Articles published before 2015
Articles in English or Indonesian	Articles not written in English or Indonesian
Articles related to the keywords "ERP implementation," "user training," "ERP success factors," and "training for information systems"	Articles not related to the keywords
Articles fully accessible online	Articles not accessible online

4. Result and Discussion

The Systematic Literature Review (SLR) approach using the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) framework was applied in this study to ensure that the identification, selection, and analysis of literature were conducted systematically, transparently, and reproducibly. PRISMA provides clear guidelines for developing search strategies, managing reference data, and establishing inclusion and exclusion criteria relevant to the reviewed topic. By following the stages of identification, screening, eligibility, and inclusion, this study was able to minimize the potential for selection bias and generate a representative body of literature aligned with the research focus. This framework emphasizes not only the comprehensiveness of the search process but also consistency and structure in reporting the review results.

The article identification process began with the use of key search terms such as “ERP implementation,” “user training,” “ERP success factors,” and “training for information systems.” These keywords were applied in context to explore the strategic role of user training in supporting the successful implementation of ERP systems. To maintain relevance and ensure the recency of the data, the literature search

was limited to publications between 2020 and 2025 and was conducted through academic databases such as Google Scholar and those indexed in Scopus.

From the initial search process, a total of 1,050 documents were identified as relevant to the search terms used: "ERP implementation," "user training," "ERP success factors," and "training for information systems." However, to ensure that only articles truly aligned with the research focus were included in the systematic review, an initial screening process was conducted. This screening involved evaluating the titles, keywords, and abstracts of each article. The results of this stage indicated that 189 articles met the eligibility criteria for further review, while the remainder were excluded due to irrelevance or insufficient support for the study's focus.

The next stage was the full-text review of the 189 articles that passed the screening stage. During this process, articles were accessed in full through available online channels to ensure readability and completeness of content. After a subsequent selection process, 32 articles were found to meet all inclusion criteria, demonstrate high relevance, and be fully accessible. These articles were then used as the primary references for the analysis in this study. The step-by-step, systematic literature selection process based on the PRISMA framework aimed to ensure that the research findings were well-founded, supported by high-quality literature, and capable of thoroughly and comprehensively answering the research questions.

4.1. RQ1 – What are the best practices in conducting user training during ERP implementation

Table 3: Summary of Discussion References for RQ1

References	Summary of Discussion
[35], [36]	Emphasize the importance of continuous training as part of a successful ERP implementation strategy, as well as improving user satisfaction and organizational performance.
[37], [38]	Show that training tailored to local cultural and organizational needs can reduce resistance to change and increase engagement.
[39], [40]	Demonstrate the effectiveness of simulation-based training methods (serious games) and digitalization approaches in accelerating practical ERP understanding.
[41]	A case study of structured ERP training using the integration of QFD and AHP methods for mapping user needs prior to training.
[42]	Highlights the importance of a training approach that considers cultural challenges in the ERP implementation process in traditional sectors such as oil and gas.

Based on the literature review results in Table 3, various best practices were identified in conducting user training during ERP implementation. These practices are grouped into five main themes reflecting strategic, technical, and contextual approaches in the training process.

First, studies [35] and [36] emphasize the importance of continuous training as a key to successful ERP implementation. Training should not end at the initial implementation phase but must continue to maintain system usage effectiveness and improve user satisfaction and overall organizational performance.

Second, the importance of tailoring training to the local organizational context is conveyed in [37], [38]. Training that takes into account cultural aspects and organizational structures has proven effective in reducing user resistance to new systems and increasing their participation in the transition process.

Third, interactive and innovative training approaches such as the use of business simulations (serious games) are highlighted in studies [39], [40]. Simulations provide users with direct experience in understanding ERP workflows realistically, thus accelerating the learning process and enhancing system comprehension.

Fourth, study [41] highlights the importance of well-planned training using integrated approaches such as AHP and QFD. This approach helps to systematically map training needs based on user input and specific business process requirements.

Lastly, study [42] highlights cultural aspects as a major challenge in ERP training, particularly in conservative sectors such as the oil and gas industry. The study emphasizes the need for adaptive and action research-based training to address the socio-cultural dynamics within the organization.

Overall, these findings indicate that best practices in ERP training are not only determined by the technical methods used but also by how contextual, continuous, and adaptive the training strategies are to the needs of the organization and its users.

4.2. RQ2 – How does user training affect organizational performance after ERP implementation?

Table 4: Summary of Discussion References for RQ2

References	Summary of Discussion
[43], [44], [45]	Training improves operational efficiency, minimizes errors, and accelerates adaptation to the new ERP system.
[46], [43]	User training enhances users' ability to understand the system, increases digital literacy, and supports data-driven decision-making.

[39]	Training drives organizational culture change toward digitalization, accelerates technology adoption, and builds cross-unit collaboration.
[47], [48]	Training improves user satisfaction and system adoption, impacting long-term success and maximizing ERP ROI.
[47]	Continuous training strengthens system usage effectiveness and ensures the sustainability of ERP implementation across various types of organizations.

An analysis of seven journals published between 2020 and 2025 shows that user training has a significant impact on improving organizational performance after ERP implementation. Studies [43], [44], and [45] emphasize that appropriate training helps enhance work efficiency and the effectiveness of daily task execution. Training provided before and during the ERP implementation process gives users a comprehensive understanding of the system, enabling them to perform their roles more optimally and minimize operational errors.

Furthermore, training also strengthens users' analytical skills and decision-making abilities. This is affirmed in studies [46], [43], which explain that training improves digital literacy and understanding of the system, allowing employees to utilize data more effectively in business processes. Meanwhile, study [39] explains that training promotes organizational cultural transformation toward digitalization by accelerating technology adoption and enhancing collaboration across work units.

From a managerial perspective, study [47] states that training has a direct impact on user satisfaction and increased system adoption rates. This relates to system continuity and higher ERP return on investment (ROI), as explained in studies [48], [47]. These journals show that continuous training not only strengthens users' technical skills but also increases the likelihood of overall ERP implementation success. Thus, it can be concluded that user training plays a strategic role in ensuring ERP success, both in the short term and the long term.

4.3. RQ3 – What are the key challenges and considerations in designing and implementing effective user training in ERP projects?

Table 5: Summary of Discussion References for RQ2

References	Summary of Discussion
[49], [50]	User training is one of the most critical issues in the success of ERP implementation. Lack of attention to training can reduce system effectiveness.
[51]	The lack of integration between training and change management strategies leads to user resistance and low ERP system adoption.
[52]	Organizational readiness (HR, culture, infrastructure) greatly affects training success. Without management support and adequate facilities, training becomes ineffective.
[53], [50]	Main training barriers include lack of internal communication, insufficient early user involvement, and the absence of feedback mechanisms.
[54]	Training not tailored to specific sectors or industry characteristics (e.g., construction, manufacturing) tends to be ineffective.
[55]	Training implementation in the digital era requires adjustment to new technologies and increased employee digital literacy.

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5. Conclusions and Recommendations

5.1. Conclusions

This study was developed to systematically explore and analyze the role of user training in the successful implementation of Enterprise Resource Planning (ERP) systems. Using the PRISMA approach, this study reviewed ten selected scholarly articles published between 2020 and 2025. The main focus of this research is on identifying best training practices, the impact of training on organizational performance post-implementation, and the challenges and considerations in designing effective training. From the analysis process carried

out, several important findings were obtained that comprehensively illustrate the strategic position of user training in the context of technological change management in modern organizational environments.

The findings of this study indicate that a structured, contextual, and role-adapted training approach is a crucial factor in the successful adoption of ERP systems. Effective training practices include the use of business scenario-based simulations, e-learning-based learning methods, hands-on training, and the integration of training into the overall system implementation cycle. Training is not only positioned as a process of transferring technical knowledge, but also as an effort to build mental readiness, commitment, and active user participation in the system transition process. Thus, carefully designed training can bridge the gap between human resource readiness and the complexity of the ERP system itself.

In terms of organizational impact, user training has been proven to significantly affect various operational and strategic aspects. Increased work efficiency, reduced input errors, faster system adoption, and improved user satisfaction are the most frequently cited indicators of training success in the literature. Training is also considered to contribute to strengthening interdepartmental coordination, accelerating data-based decision-making processes, and supporting the achievement of organizational performance targets. In this context, training serves not only as a means of improving technical skills, but also as a catalyst for work culture transformation and enhanced collaboration within a digitalized organizational environment.

Nevertheless, the implementation of user training does not escape various technical, managerial, and cultural challenges. Some of the main barriers found in the literature include limited digital literacy among users, organizational unpreparedness in providing budgets and resources for training, and resistance to change due to established work patterns. In addition, the lack of top management involvement in supporting the training process is also one of the main reasons for the low effectiveness of training programs. Therefore, training approaches must be designed flexibly and responsively to these challenges, and equipped with appropriate change communication strategies to reduce resistance and increase user commitment to the new system.

Overall, the results of this study affirm that user training is an integral part of ERP implementation strategy that cannot be overlooked. The success of an ERP project highly depends on the readiness of its human resources to effectively receive and operate the system. Therefore, training needs to be designed comprehensively, contextually, and continuously, taking into account organizational needs, user readiness levels, and environmental challenges. Investment in training is not only about improving technical skills, but also about building organizational capacity to adapt to digital transformation more broadly and sustainably.

5.2. Recommendations

This study has several limitations that should be considered when interpreting the results and conclusions obtained. One of the main limitations lies in the scope of literature sources, which only includes scholarly journals published between 2020 and 2025. This temporal limitation restricts the possibility of exploring historical references or earlier ERP training approaches that may still be relevant to the current context. Moreover, the article selection process based on inclusion criteria may have excluded important studies that are not indexed in the databases used or are not available in English. This raises the possibility of bias in the representation of certain geographic contexts or industrial sectors that are underrepresented in this review.

The qualitative approach used, although providing depth in understanding context, does not allow for quantitative measurement of the impact of user training on ERP implementation success. The absence of primary data validation through direct surveys or interviews is also a limitation in uncovering more specific contextual factors in organizational environments. On the other hand, the sector distribution of the reviewed articles is not balanced, with the dominance of certain industrial sectors and minimal representation from public or education sectors. As a result, generalizing the findings to all sectors requires caution. The researchers also acknowledge the possibility of subjective interpretation in analyzing the article content, although the process was conducted carefully and based on systematic principles.

As a form of future development, similar research is recommended to be conducted by expanding data coverage and methodological approaches. The use of a mixed-method approach that combines literature reviews with field studies such as surveys or case studies can provide a more holistic understanding of ERP user training practices. Research can also be expanded by including literature sources in various languages and covering more diverse geographic regions, including developing country contexts. In addition, studies focused on specific sectors such as higher education, healthcare, or government have the potential to generate more specific and applicable insights according to the needs of each sector. A deeper mapping of the relationship between training, organizational culture, and digital readiness can also strengthen the conceptual validity of previous findings.

From a practical perspective, organizations planning ERP implementation are expected to place user training as an integral part of change management strategy. Training programs should be designed from the early phases of the project, with an approach that is responsive to users' digital literacy levels and the prevailing organizational culture. Furthermore, the involvement of cross-functional stakeholders, provision of role-based training, and periodic monitoring of training effectiveness are important steps to enhance implementation success. Commitment from organizational leadership is also essential so that training is not seen merely as an administrative burden, but as a strategic investment in creating inclusive, effective, and sustainable digital transformation.

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