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Role of document management system for business processes optimization

The automation of work processes and seamless integration with various business services highlight the essential role of digital document management systems (DMS) in enhancing organizational flexibility, productivity, and adaptability. DMS serve as centralized repositories that streamline, automate, and interconnect business processes, thereby facilitating effective document management. The integration of DMS with Enterprise Resource Planning (ERP) systems provides a comprehensive solution for optimizing business workflows, addressing the needs for both operational efficiency and strategic management. The research paper delineates a business model for the life cycle management of electronic documents and records, focusing on the integration of processes such as document creation, management, approval, and secure distribution. This integrated approach enhances organizational structure, optimizes processes, and bolsters security, leading to significant cost reductions and increased work efficiency. The model emphasizes the importance of streamlined and automated document workflows in reducing manual errors and operational bottlenecks. Key features of DMS include advanced mechanisms for digitizing physical documents, ensuring that all data is captured accurately and efficiently. Centralized storage with version control allows for easy retrieval and management of documents, ensuring that the latest versions are always accessible. Additionally, advanced search and accessibility features enable quick and efficient document retrieval, which is crucial for maintaining high productivity levels. The study underscores the pivotal role of DMS in modern enterprises, advocating their implementation as a strategic move to drive operational excellence and competitive advantage. By integrating DMS with ERP systems, businesses can achieve a cohesive and efficient operational environment that supports both day-to-day activities and long-term strategic goals. This comprehensive approach to document management not only optimizes efficiency and reduces errors but also enhances the overall agility and responsiveness of the organization in a rapidly changing economic environment.

Keywords: document flow; accounting; digitalization; planning, control.

Problem statement. Despite the transformative potential of digital document management systems (DMS) and their integration with enterprise resource planning (ERP) systems, many enterprises face significant challenges in fully leveraging these technologies. The implementation of Document Management Systems (DMS) alone offers systematic solutions for collecting, storing, retrieving, and managing digital documents, which reduces risks and inefficiencies associated with manual document processing. These systems enable businesses to smoothly transition into the digital era by providing a structured approach to document management throughout the document lifecycle. However, the integration of DMS with ERP systems, which is intended to provide a comprehensive solution for managing both documents and business processes, remains problematic for many organizations.

A significant challenge is the complexity involved in merging DMS functionalities with existing ERP frameworks, which often leads to fragmented workflows and operational inefficiencies. This disjointed integration can result in data silos, duplicated efforts, and a lack of real-time information flow across the organization. Moreover, the technical and organizational barriers to integration can hinder the optimization of business processes, preventing enterprises from achieving the full benefits of digital transformation.

This research aims to address these critical issues by exploring effective strategies for optimizing the integration of DMS with ERP systems. The goal is to enhance organizational efficiency, reduce operational costs, and maximize the benefits of digital transformation initiatives. The study will investigate the current barriers to successful integration, including technological, organizational, and process-related challenges, and will propose solutions to overcome these hurdles. By identifying best practices and developing a robust integration framework, this research seeks to provide actionable insights for businesses looking to fully exploit the capabilities of DMS and ERP systems. Ultimately, the objective is to support enterprises in creating a more cohesive, efficient, and responsive operational environment that leverages advanced technologies to drive continuous improvement and competitive advantage in the digital age.

Analysis of research and publications. Managers of information systems constantly struggle with the problem of effectively managing the rapid emergence of new technologies and their implementation to meet the changing needs that arise in the activities of enterprises at various levels [4]. Modern problems of effective management and their solutions are, in most cases, related to establishing a digital management system. The main goal of digitization is to eliminate repetitive tasks in the enterprise, which allows employees to focus on more

significant operational duties [1]. Such a transformation aims to increase efficiency, productivity, and profitability while reducing business costs [3, 5]. Thanks to digitizing processes, companies can explore new opportunities and gain a competitive advantage over other institutions [2]. In his work, N.Kostyshyn [9] emphasizes that introducing IT tools and technologies to solve the shortcomings of the existing control-analytical and accounting system will contribute to the effective development of accounting in the conditions of digital transformation of socio-economic relations.

In the work of A.Kostyakova [10], the normative and legal regulation of the processes of working with electronic documents is considered in detail, and the shortcomings and problems that arise during the implementation of electronic document circulation are highlighted. The main changes in documentation, the consideration of which is presented in the work of O.Malyshkin [11], are defined as a critical element of the accounting method in the conditions of the digital transformation of accounting.

Other studies, in particular, include the works of Yu.Kozlovskiy, I.Yaremko [8] focuses on the formation of professional competence of future specialists in the field of accounting and auditing.

The analysis of N.L. Shyshkova [12] profoundly reveals the essence and areas of application of IT tools and technologies in modern accounting, which contribute to the transition of accounting processes to a digital format and the modernization of information processing and transmission concepts.

The purpose of the article is to provide an in-depth study of the multi-faceted benefits of implementing digital document management systems and how integrating these systems with enterprise resource planning solutions increases enterprise efficiency.

Presentation of the main material. The process of transitioning workflows from physical to digital documents is distinguished by its ability to facilitate efficient scanning and digitization processes. This transformative feature does not only minimize the use of traditional paper methods but also significantly speeds up document processing. Using optical character recognition (OCR) and advanced scanning technologies, these systems ensure accurate text and graphic content representation while preserving the original document's integrity.

Integrating automated document capture tools allows businesses to quickly convert documents into digital formats, including invoices, contracts, and receipts. This feature reduces the effort involved in manual data entry and the risk of errors inherent in manual transcription processes. In addition to document capture capabilities, centralized repositories are created for storage in digital document management systems. These repositories serve as secure and organized repositories for storing digitized documents. An essential aspect of this storage infrastructure is the implementation of version control mechanisms, which play a crucial role in managing document revisions and updates.

Version control ensures that the most recent iteration of a document is readily available, eliminating the confusion associated with outdated or conflicting versions. This feature is significant in collaborative environments where multiple parties create and edit documents. By maintaining a clear audit trail of changes made to documents over time, version control increases transparency and promotes accountability in the document management ecosystem.

In addition, the centralized repository acts as a centralized hub for document retrieval, facilitating easy access and collaboration. This centralized approach eliminates the chaos of decentralized storage solutions, where documents can be scattered across different servers or file-sharing platforms. This allows teams to collaborate on projects seamlessly, receive documents quickly, and contribute to a more streamlined and efficient workflow.

One of the defining strengths of digital document management systems is their advanced search capabilities, designed to enable users to find documents quickly and accurately. Traditional manual search methods are often time-consuming and error-prone, resulting in inefficient access to critical information. Digital document management systems solve this problem by offering sophisticated search algorithms and indexing mechanisms. These systems use metadata, tags, and full-text search capabilities that allow users to enter specific keywords, phrases, or document attributes. The result is an accelerated and accurate search process, significantly reducing the time and effort traditionally associated with manual searches. In addition, advanced search functions help improve information retrieval, allowing users to find the documents they need in large repositories quickly.

Fine-grained access control in digital document management systems is fundamental to ensuring organizational documents' security, confidentiality, and compliance. Fine-grained access control enables administrators to define and enforce specific access levels for individuals or groups within the enterprise. For example, confidential financial documents may be accessible only to authorized personnel, while broader project documents may be accessible to a wider group.

In addition, digital document management systems often include audit and activity logs, providing a detailed record of who accessed a document, when, and what actions were taken. This transparency helps with compliance reporting and serves as a deterrent against unauthorized access or potential security breaches.

Implementing granular access controls ensures that companies adhere to strict compliance requirements in the context of new data protection regulations such as GDPR [2]. This proactive approach reduces legal risks and

builds trust between customers, partners, and stakeholders by demonstrating a commitment to protecting confidential information.

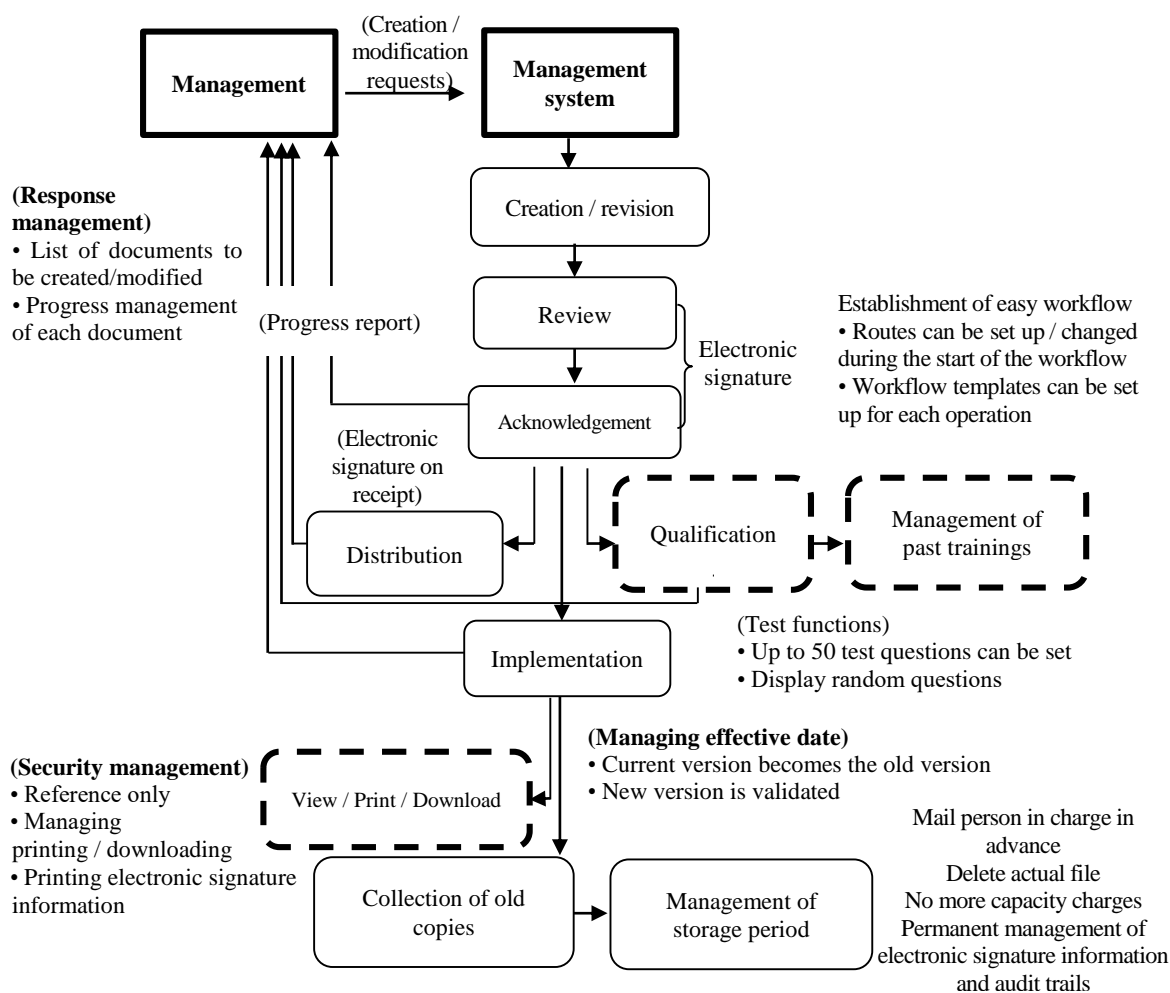
Digital document management systems are distinguished by their ability to customize and automate processes, which aims to increase efficiency and reduce manual intervention. Automating routine tasks related to document processing speeds up processes and minimizes the possibility of errors that can occur due to manual data entry. Digitization of document flow allows enterprises to plan and automate entire workflows with documents, from creation and approval to archiving. By defining rules and parameters, these systems ensure that documents move smoothly through each stage of their lifecycle without needing constant manual control.

Automatic notifications and reminders inform stakeholders of pending actions or deadlines, promoting accountability and timely response. This feature dramatically reduces the risk of missed assignments or missed deadlines.

Integration with other business applications is critical to maximize the impact of digital document management systems. Seamless connectivity with enterprise resource planning (ERP) systems, customer relationship management (CRM) software, and other systems create a seamless and streamlined workflow ecosystem.

Integrated systems provide a unified dashboard to understand document-oriented processes and overall business operations comprehensively. This centralized view enhances reporting capabilities, facilitating data-driven decision-making. Integration with collaboration tools and communication platforms ensures that document-related discussions and actions are seamlessly integrated into wider organizational communication channels. This integration helps improve cooperation and knowledge sharing.

Nomura Research Institute offers its management model to solve the challenges of the modern document management system (fig. 1).



Source: [2]

Fig. 1. Business model of the electronic document management system

Figure 1 displays a structured business model for the life cycle management system of electronic documents and records. By integrating document creation, document flow management, approval processes, secure distribution, and user management, the system is characterized by improved organization, streamlined processes, and increased security. Such a comprehensive solution enables companies to effectively manage electronic document flow and records throughout the life cycle of a particular business process or economic activity, which can potentially lead to cost reduction and increased work efficiency.

Digital document management systems significantly contribute to organizational flexibility, productivity, and enterprise adaptability by enabling workflow automation and facilitating integration with other business services. These features emphasize the role of systems' role as repositories and dynamic means of facilitating optimized, automated, and interconnected business processes.

The following key characteristics of digital document management systems can be identified:

1. Reliable mechanisms for digitizing physical documents, ensuring a smooth transition from paper to digital work processes. A centralized repository with document version control promotes effective collaboration and eliminates risks of information isolation;

2. Document search and availability. The system has advanced search features that enable fast and accurate document searches, reducing the time and effort associated with manual searches. Also, the digital environment allows users to set up detailed control over access to data, ensuring their confidentiality and compliance with regulatory norms;

3. Workflow automation. Automating document-oriented processes has a direct impact on optimizing work efficiency by reducing manual intervention and minimizing errors. Enhancement of this feature is possible through integration with other systems to create a complete and streamlined workflow ecosystem.

Conclusions and prospects for further research. As enterprises continue to digitize their operations, integrating digital document management systems with enterprise resource planning systems is gaining strategic importance. The benefits of increased efficiency, availability, and security are substantial, provided the business effectively addresses issues and implements best practices. Applying these technologies is a step towards modernization and a key factor for sustainable success in today's competitive business environment.

Therefore, the importance of digitalizing business processes should be noted, as it is aimed at reducing repetitive tasks in the organizational sphere and allowing employees to focus on strategic functions. This transition is driven by the primary goals of increasing productivity, efficiency, and financial performance while reducing costs. It is important to note that CIOs must effectively manage the dynamic environment of the latest technologies and successfully integrate them in response to the growing needs of their enterprises.

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Наукові інтереси:

– облік і аудит зобов'язань підприємств.

Орлов І.В.**Роль системи документообігу для оптимізації бізнес-процесів**

Автоматизація робочих процесів і повна інтеграція з різними бізнес-сервісами підкреслюють важливу роль систем управління цифровими документами (DMS) у підвищенні організаційної гнучкості, продуктивності та адаптивності. DMS слугують централізованими сховищами, які оптимізують, автоматизують і пов'язують бізнес-процеси, тим самим сприяючи ефективному управлінню документами. Інтеграція DMS із системами планування ресурсів підприємства (ERP) забезпечує комплексне рішення для оптимізації робочих процесів бізнесу, задовольняючи потреби як в операційній ефективності, так і в стратегічному управлінні. Дослідницька стаття окреслює бізнес-модель для управління життєвим циклом електронних документів і записів, зосереджуючись на інтеграції таких процесів, як створення документів, керування, затвердження та безпечне розповсюдження. Цей комплексний підхід покращує організаційну структуру, оптимізує процеси та підвищує безпеку, що призводить до значного скорочення витрат і підвищення ефективності роботи. Модель підкреслює важливість спрощених і автоматизованих робочих процесів з документами для зменшення кількості помилок вручну та операційних вузьких місць. Ключові особливості DMS включають розширені механізми для оцифровки фізичних документів, гарантуючи точне та ефективне збирання всіх даних. Централізоване сховище з контролем версій дозволяє легко шукати та керувати документами, забезпечуючи постійний доступ до останніх версій. Крім того, розширені функції пошуку та доступності забезпечують швидкий і ефективний пошук документів, що має вирішальне значення для підтримки високого рівня продуктивності. Дослідження підкреслює ключову роль DMS на сучасних підприємствах, пропонуючи їхнє впровадження як стратегічний крок для досягнення операційної досконалості та конкурентної переваги. Інтегруючи DMS із системами ERP, підприємства можуть створити цілісне та ефективне робоче середовище, яке підтримує як повсякденну діяльність, так і довгострокові стратегічні цілі. Цей комплексний підхід до управління документами не тільки оптимізує ефективність і зменшує кількість помилок, але й покращує загальну гнучкість і оперативність організації в економічному середовищі.

Ключові слова: документообіг; бухгалтерський облік; цифровізація; планування; контроль.

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