


**ELECTRONIC DOCUMENT, INFORMATION, AND ARCHIVE MANAGEMENT SYSTEMS
IN ECONOMIC INSTITUTIONS: A DESCRIPTIVE STUDY OF THE ONBASE SYSTEM**

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ARTICLE INFO	ABSTRACT
<p>Article history: Received: March, 01st 2024 Accepted: May, 01st 2024</p>	<p>Objective: The study aims to familiarize readers with the Onbase system for electronic document management. To highlight its key features and operational methods, to elucidate its functionalities.</p>
<p>Keywords: Archives; Documents; Information; Electronic Management; Electronic Documents; OnBase System.</p>	<p>Theoretical Framework: Data were meticulously collected through document and record searches related to the Onbase system by accessing Hyland's official website, the system's designer, and various online platforms that provide discussions about the system.</p>
	<p>Method: We employed the descriptive method based on analysis to elucidate the operational methods of the Onbase document management system and to accentuate its components and distinctive features.</p> <p>Results and Discussion: The study has conclusively demonstrated that the OnBase system facilitates: Efficient management of an extensive volume of documents, files, and archives, the system strategically supports the digitization of documents and archives, as well as the overall digitization of business processes; these capabilities ensure reliable document access within the institution and support remote work, thereby redefining modern business and administrative operations.</p> <p>Research Implications: The implementation of an Electronic Document Management (EDM) system is crucial for institutions aiming to advance their digital transformation. These systems render information instantly available, thereby facilitating the daily operations of employees through the use of an assortment of digital tools and methods for creating, digitizing, organizing, indexing, classifying, searching, and archiving documents. This structured approach to information management via the OnBase system contributes significantly to the efficiency of administration within institutions. In the study, we presented a successful experience of the Marine Studies Laboratory and the Algerian Total Company in adopting the OnBase system.</p> <p>Originality/Value: This study will contribute to the literature by enhancing our understanding of the use, key features, and functionality of document management, information management, and archival systems. This information will be valuable for individuals interested in improving document and information management systems in economic institutions. It may contribute to making better decisions and enhancing efficiency and effectiveness in document, information, and archival management.</p> <p>Doi: https://doi.org/10.26668/businessreview/2024.v9i6.4755</p>

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SISTEMAS ELETRÔNICOS DE GERENCIAMENTO DE DOCUMENTOS, INFORMAÇÕES E ARQUIVOS EM INSTITUIÇÕES ECONÔMICAS: UM ESTUDO DESCRITIVO DO SISTEMA ONBASE**RESUMO**

Objetivo: O estudo visa familiarizar os leitores com o sistema Onbase de gerenciamento eletrônico de documentos. Destacar seus principais recursos e métodos operacionais e elucidar suas funcionalidades.

Estrutura Teórica: Os dados foram coletados meticulosamente por meio de pesquisas de documentos e registros relacionados ao sistema Onbase, acessando o site oficial da Hyland, o designer do sistema e várias plataformas on-line que oferecem discussões sobre o sistema.

Método: Empregamos o método descritivo baseado em análise para elucidar os métodos operacionais do sistema de gerenciamento de documentos Onbase e para acentuar seus componentes e características distintivas.

Resultados e Discussão: O estudo demonstrou de forma conclusiva que o sistema OnBase facilita:

O sistema apoia estrategicamente a digitalização de documentos e arquivos, bem como a digitalização geral dos processos de negócios; esses recursos garantem o acesso confiável a documentos dentro da instituição e apoiam o trabalho remoto, redefinindo, assim, as operações comerciais e administrativas modernas.

Implicações para a Pesquisa: A implementação de um sistema de Gerenciamento Eletrônico de Documentos (GED) é fundamental para as instituições que desejam avançar em sua transformação digital. Esses sistemas tornam as informações disponíveis instantaneamente, facilitando assim as operações diárias dos funcionários por meio do uso de uma variedade de ferramentas e métodos digitais para criar, digitalizar, organizar, indexar, classificar, pesquisar e arquivar documentos. Essa abordagem estruturada do gerenciamento de informações por meio do sistema OnBase contribui significativamente para a eficiência da administração nas instituições. No estudo, apresentamos uma experiência bem-sucedida do Marine Studies Laboratory e da Algerian Total Company na adoção do sistema OnBase.

Originalidade/Valor: Este estudo contribuirá para a literatura ao aprimorar nosso entendimento sobre o uso, os principais recursos e a funcionalidade dos sistemas de gerenciamento de documentos, gerenciamento de informações e arquivamento. Essas informações serão valiosas para pessoas interessadas em aprimorar os sistemas de gerenciamento de documentos e informações em instituições econômicas. Elas podem contribuir para a tomada de melhores decisões e para o aumento da eficiência e da eficácia no gerenciamento de documentos, informações e arquivos.

Palavras-chave: Arquivos, Documentos, Informações, Gerenciamento Eletrônico, Documentos Eletrônicos, Sistema OnBase.

SISTEMAS DE GESTIÓN ELECTRÓNICA DE DOCUMENTOS, INFORMACIÓN Y ARCHIVOS EN INSTITUCIONES ECONÓMICAS: UN ESTUDIO DESCRIPTIVO DEL SISTEMA ONBASE.**RESUMEN**

Objetivo: El estudio pretende familiarizar a los lectores con el sistema Onbase de gestión electrónica de documentos. Destacar sus principales características y métodos operativos, y dilucidar sus funcionalidades.

Marco Teórico: Los datos se recopilieron meticulosamente mediante búsquedas de documentos y registros relacionados con el sistema Onbase accediendo al sitio web oficial de Hyland, al diseñador del sistema y a diversas plataformas en línea que ofrecen debates sobre el sistema.

Método: Se empleó el método descriptivo basado en el análisis para dilucidar los métodos operativos del sistema de gestión documental Onbase y acentuar sus componentes y rasgos distintivos.

Resultados y Discusión: El estudio ha demostrado de forma concluyente que el sistema OnBase facilita:

La gestión eficiente de un amplio volumen de documentos, expedientes y archivos, el sistema apoia estratégicamente la digitalización de documentos y archivos, así como la digitalización global de los procesos empresariales; estas capacidades garantizan un acceso fiable a los documentos dentro de la institución y apoyan el trabajo a distancia, redefiniendo así las operaciones empresariales y administrativas modernas.

Implicaciones de la Investigación: La implantación de un sistema de gestión electrónica de documentos (GED) es crucial para las instituciones que pretenden avanzar en su transformación digital. Estos sistemas hacen que la información esté disponible al instante, facilitando así las operaciones diarias de los empleados mediante el uso de una variedad de herramientas y métodos digitales para crear, digitalizar, organizar, indexar, clasificar, buscar y archivar documentos. Este enfoque estructurado de la gestión de la información a través del sistema OnBase contribuye significativamente a la eficiencia de la administración en las instituciones. En el estudio presentamos una experiencia exitosa del Laboratorio de Estudios Marinos y de la Compañía Total Argelina en la adopción del sistema OnBase.

Originalidad/Valor: Este estudio contribuirá a la bibliografía al mejorar nuestra comprensión del uso, las características clave y la funcionalidad de los sistemas de gestión de documentos, gestión de la información y archivo. Esta información será valiosa para las personas interesadas en mejorar los sistemas de gestión de documentos e información en las instituciones económicas. Puede contribuir a tomar mejores decisiones y a aumentar la eficiencia y la eficacia en la gestión de documentos, información y archivos.

Palabras clave: Archivos, Documentos, Información, Gestión electrónica, Documentos Electrónicos, Sistema OnBase.

1 INTRODUCTION

Institutions across various sectors are increasingly embracing electronic systems for managing documents, information, and archives due to their proven effectiveness in handling electronic documents and information. These systems have established their prominence in the industry by offering multifaceted functionalities, with the Onbase system standing out as one of the most significant and widely adopted by global corporations and institutions.

It encompasses all functions pertinent to the electronic management of documents, information, and archives. In this study, we aim to address the following questions:

- what is the Onbase document management system?
- what are its key features and advantages?
- what are its primary functions?
- how does it operate?
- does this system support the integration of digitized archival documents?

1.1 STUDY OBJECTIVES

- to familiarize readers with the Onbase system for electronic document management;
- to highlight its key features and operational methods;
- to elucidate its functionalities.

1.2 RESEARCH METHODOLOGY

We employed the descriptive method based on analysis to elucidate the operational methods of the Onbase document management system and to accentuate its components and distinctive features.

1.3 DATA COLLECTION TOOLS

Data were meticulously collected through document and record searches related to the Onbase system by accessing Hyland's official website, the system's designer, and various online platforms that provide discussions about the system.

2 THE ELECTRONIC DOCUMENT, INFORMATION, AND ARCHIVE MANAGEMENT SYSTEM (DEFINITION, ADVANTAGES, OPERATIONAL METHOD)

The electronic document management system is acknowledged as "a set of interconnected components that collect (input), process, store, and disseminate (output) data and information, providing corrective feedback as a component that aids institutions in achieving their goals." (Oulad Hosseini, 2021, p. 40).

It is also characterized as an organized interaction among a suite of human, mechanical, and software resources aimed at achieving specific objectives through the collection, processing, and transformation of data into information retrieved when needed. This process is executed through several steps:

- collecting data from internal and external sources;
- verifying the accuracy of data;
- organizing data methodically;
- storing data securely;
- processing data through computational and logical operations;
- retrieving data as pertinent information;
- transferring and reproducing information efficiently. (Sheikhani, 2020, p. 121).

2.1 DEFINITION OF ELECTRONIC MANAGEMENT OF DOCUMENTS, INFORMATION, AND ARCHIVES

This can be delineated as a suite of technologies utilized in managing and controlling the flow of documents produced, circulated, and exchanged within institutions. The electronic management of information and documents involves a set of tools and techniques that facilitate the organization, management, and retrieval of documents through a series of computer

applications integral to the routine activities of an institution. Consequently, an archive employee, for instance, can access document records in an exceptionally brief time span.

2.2 HOW THE ELECTRONIC DOCUMENT, INFORMATION, AND ARCHIVE MANAGEMENT SYSTEM OPERATES:

The electronic management of documents, information, and archives represents a pivotal information technology solution that supports all facets of document archiving and management. We delineate the operation of the system through the following integral processes:

- creation (or dematerialization - the process of digitization);
- classification (the formation of files);
- indexing (the association of keywords for easier retrieval);
- searching, modifying, consulting, and sharing (permitted according to specified usage rights);
- control (management of usage rights and the implementation of security codes);
- archiving and storage (ensuring quick access and proper preservation of documents).

2.3 ADVANTAGES

The substantial costs associated with managing printed documents and stored archives drive many institutions to adopt the electronic document management system. Over time, this system contributes to a significant reduction in paper usage. The advantages of the electronic document management system encompass:

- immediate and anytime availability of information for all users, irrespective of their geographic location;
- minimization of the circulation of paper documents, which helps prevent data loss;
- compilation of all published documents within the organization into a singular computerized file;
- provision of access to the most current versions of documents;
- prevention of document proliferation to streamline updates;
- secure storage and access protocols for sensitive documents and files. (SG Software, 2020)

3 BENEFITS OF USING THE ELECTRONIC DOCUMENT, INFORMATION, AND ARCHIVE MANAGEMENT SYSTEM IN ECONOMIC INSTITUTIONS

The implementation of an Electronic Document Management (EDM) system is crucial for institutions aiming to advance their digital transformation. These systems render information instantly available, thereby facilitating the daily operations of employees through the use of an assortment of digital tools and methods for creating, digitizing, organizing, indexing, classifying, searching, and archiving documents. This structured approach to information management via the EDM system contributes significantly to the efficiency of administration within institutions.

3.1 EFFICIENCY

According to research by the International Data Corporation (IDC), employees in organizations spend an average of 7.40 hours per week searching for information that they fail to locate, and reformatting data from disparate sources. However, with an EDM system, the search process is condensed to merely a few seconds.

3.2 COST REDUCTION

Although the initial implementation of an EDM system involves certain costs, it quickly compensates for these through significant time savings. Employees can devote the time saved to more high-value activities. Furthermore, the reduction in daily document processing time, alongside significant cuts in paper usage, frees up physical space, and decreases costs associated with consumables like ink, paper, and electricity.

3.3 COLLABORATION AND DOCUMENT SHARING

Many institutions encounter the challenge of document and copy proliferation across departments and offices. Storing documents on a unified platform allows multiple individuals to collaborate on the same documents simultaneously, enhancing the efficiency of exchange processes among employees.

3.4 INFORMATION SECURITY

Paper documents pose a significant risk factor for information leaks within institutions. By storing data digitally on an EDM system, the necessity for printing is eliminated, significantly reducing the risks of information leaks or loss. The system also ensures comprehensive control over information access, as any action on digital documents is governed by strict access rights.

3.5 ACCESSIBILITY

With an EDM system, all institutional information becomes accessible via smartphones, tablets, or computers, both inside and outside the main office premises, guaranteeing secure and flexible access.

4 CHALLENGES OF THE ELECTRONIC DOCUMENT, INFORMATION, AND ARCHIVE MANAGEMENT SYSTEM

Throughout their operational lifespans, institutions accumulate an extensive array of documents. The management and preservation of these documents are not only crucial for daily operations but also respond to various legal imperatives, such as the retention of ownership deeds, contracts, and archival materials detailing the history and activities of the institution.

For example, such systems enable the swift provision of critical documents during taxing periods such as tax assessments, administrative oversight, audits, or legal challenges. Moreover, these systems prove invaluable in facilitating the resumption of operations following disruptive events such as fires or floods. (SG software, 2020)

The transition from traditional paper-based management to a digital or electronic document management framework can significantly economize time and costs for any institution, as the EDM system allows for the storage of diverse file types in a centralized repository that is accessible anytime, anywhere. (SG software, 2022)

5 ABOUT HYLAND, DESIGNER OF THE ONBASE SYSTEM

Hyland Software is a systems and software design company with a core mission to help institutions achieve optimal use of systems in managing documents and information. Based in Cleveland, Ohio, USA, Hyland Software has 20 years of experience in systems design and serves clients from North and Latin America, Europe, Asia-Pacific, and Africa.

On March 31, 2014, the company rebranded itself as OnBase by Hyland. Founded in 1991 by Packy Hyland Jr., who met with members of Necedah Bank to discuss data processing and how electronic information technology could reduce printing costs by storing daily reports directly on optical disks. Packy Hyland developed the first version of OnBase for Necedah Bank, which became Hyland Software's first client.

Initially created for a bank, the majority of Hyland Software's clients were in the banking industry. OnBase by Hyland Software integrates document management, business process automation, and records management. In 2014, 2015, and 2016, the company was ranked among Fortune's top 100 companies to work for, climbing to 48th position in 2016. (Hyland Software, 2023)

Figure 1

The image illustrates the logo of Hyland Company.



6 DEFINING THE ONBASE ELECTRONIC DOCUMENT MANAGEMENT SYSTEM (ITS FEATURES AND ADVANTAGES)

OnBase, the flagship product of Hyland, is a robust electronic document management system that centralizes essential business content in a secure location, thereby boosting productivity by streamlining processes and efficiently managing business content. It also interfaces seamlessly with other applications, providing critical information through familiar user interfaces, which enables employees to make faster, more informed decisions.

OnBase has transformed the operational dynamics of thousands of institutions worldwide by equipping them with the necessary tools to operate efficiently and swiftly. Digital acquisition in the OnBase system can be achieved either through the scanning of paper documents using Optical Character Recognition (OCR) or through electronic means, allowing for the storage or transmission of information across relevant systems.

6.1 FEATURES OF THE ONBASE SYSTEM

OnBase consolidates all vital business content into a unique, secure platform, effectively integrating this content throughout various business processes. It stands out as an interoperable solution compatible with a wide range of tools, including capture software, business applications, and hardware devices such as scanners and storage media, characterized by its notable flexibility.

6.2 ADVANTAGES OF THE ONBASE SYSTEM

The general advantages of any electronic document management system encompass the digitization of initially paper-based documents, their processing, indexing, and subsequent preservation and storage to ensure rapid access and utilization. (Digital Archiving, 2023) Specifically, the OnBase system offers:

- suitability for various types of institutions;
- complete control over secure access to documents;
- simplicity in installation and maintenance;
- reduction in paper consumption;
- automation of the document lifecycle;

- secure archiving of institutional data;
- efficient document tracking and audit management;
- security through centralized execution of institutional security policies;
- protection against disasters by maintaining electronic document copies across multiple servers in diverse locations (ONBASE by Hyland, 2023);
- minimization of risks through the secure storage of information in compliance with relevant regulations;
- integration of process, document, and data management into a singular system, enabling seamless information flow across the organization;
- reduction in the time spent searching for documents and information;
- decrease in operating costs;
- enhancement in operational speed;
- boost in productivity through immediate access to content and processes from any location;
- elimination of costs associated with printing, shipping, and storing paper through digital acquisition. (ONBASE, 2023).

7 BENEFITS OF ADOPTING THE ONBASE SYSTEM IN ECONOMIC INSTITUTIONS

7.1 ONBASE AS AN IDEAL ECM TOOL FOR REMOTE WORK

In the economic landscape reshaped by the global health crisis caused by COVID-19, numerous institutions have transitioned to remote work and novel work methodologies. Remote work, a modern business paradigm, enables employees to operate from their homes, branch offices, or co-working spaces.

This approach presents numerous advantages for employees, including enhanced efficiency, greater autonomy, and reduced stress due to external factors such as transportation issues and traffic congestion. Additionally, it provides a more conducive work environment characterized by better focus, quieter surroundings, and minimal disruptions. Importantly, it also offers significant benefits to their organizations by enabling performance evaluations based on outcomes and management by objectives rather than by physical presence in the workplace.

For this reason, technologies that digitize document workflows and manage content have become essential and play a crucial role in the remote work dynamic during this period of widespread remote work adoption. (ECM ONBASE, 2020)

7.2 WHY ONBASE?

- OnBase's unified platform design facilitates effortless configuration;
- business applications like dynamic case management and workflow are readily configurable to bolster enterprise automation processes;
- accessibility from any location—whether hosted in the cloud or on-premises;
- continuous updates: OnBase is persistently updated to ensure that your technology stays in step with technological trends and evolving user needs;
- reporting: OnBase delivers real-time insights, enabling ongoing performance assessment of the system. (Keymark, 2023).

Document management tackles these challenges by enhancing consistency across all documents in the system. It streamlines processes and ensures that only authorized personnel can create, edit, review, and approve controlled documents, potentially achieving compliance with the ISO-9001 quality standard. (SG software, 2023)

- reduction in operational costs;
- elimination of costs related to printing, shipping, and physical document storage through document dematerialization;
- boost in productivity due to instant access to content and processing capabilities from anywhere, even via mobile devices;
- simplified implementation of security policies and access to historical activity logs in the system;
- facilitated preparation of reports and execution of audits on available and missing information. (ONBASE by Hyland, 2023);
- the OnBase system facilitates the creation, scanning, editing, distribution, storage, and deletion of documents. (SG software, 2022).

8 SHOWCASING THE EXPERIENCE OF THE MARINE STUDIES LABORATORY AND TOTAL ALGERIA IN ADOPTING THE ONBASE SYSTEM

The Marine Studies Laboratory in Algiers (LEM) selected the OnBase system to optimize the management of its extensive documentary base and to modernize its operational approaches.

Established in 1979, with additional branches in the eastern and western parts of the country, the laboratory is involved in various activities related to maritime and port infrastructure, including engineering, laboratory simulations, environmental studies, and project management assistance.

The Marine Studies Laboratory faces the challenge of managing and preserving an ever-increasing volume of documents generated during its operations. Over time, as the complexity of data search and usage escalated, the necessity for an electronic document management system became evident to automate processes and bolster internal communication across the laboratory's divisions.

Consequently, in 2017, the decision was made to implement the electronic document management system. The OnBase solution was particularly persuasive in its ability to address specific requirements, offering functionalities critical for ensuring traceability, security, and confidentiality of the processed data. The laboratory sought a versatile solution that provided centralized and efficient document management, enhanced operational processes, and accelerated decision-making.

A pilot project involving the quality management, documentation service, and finance and accounting departments was initiated. This project significantly improved information visibility and automated various business processes. The solution was then progressively rolled out to cater to the diverse needs of the laboratory's departments.

As a result, numerous processes within LEM were automated, including workflows for message processing and monitoring, consultations, and tender invitations, as well as the management of internal files (invoices and documents). LEM handles over 60 files and up to 100 documents daily.

The OnBase electronic document management system substantially reduces the time and effort required to search for documents, make decisions, or archive data. Within a 30-month period, from system configuration to user training, the OnBase system markedly enhanced information gathering and the creation of new organizational knowledge.

Concurrently, the laboratory developed technical innovations and enhanced production processes through workflow automation, ensuring complete visibility of operations for real-time monitoring and rapid decision-making. The OnBase system was also adopted by Total Algeria.

Facing the need for a robust archiving solution to manage a vast array of documents, Total Algeria implemented the OnBase system. They digitized a substantial volume of critical corporate documents and archives, organizing and indexing them for streamlined retrieval and reference. This implementation, carried out by local integration firms, took place at the end of 2019. (Gd expert, 2023)

9 ANALYTICAL AND DISCUSSION OF THE WORKING METHODOLOGY WITH THE ONBASE SYSTEM

1. Advanced Capture employs automatic data extraction in OnBase capture solutions. Utilizing predefined forms and rules, it swiftly classifies and indexes a large volume of documents with minimal human intervention. Automated document indexing alleviates the burden of manually indexing extensive document volumes.

Processing with Advanced Capture is faster and more accurate compared to manual data entry. Advanced Capture leverages OmniPage's OCR SDK engine to automate document indexing. OCR templates are carefully configured with specified fields for document classification and keyword assignment.

Furthermore, Advanced Capture also utilizes Optical Character Recognition (OCR), Optical Mark Recognition (OMR), logo or image recognition, and signature detection to capture information. It includes Intelligent Character Recognition (ICR) and barcode recognition as well.

2. Application Enabler serves as a conduit linking data from various business applications to the documents, content, and processes associated with this data. Users have the option to view documents searched in real-time and seamlessly from the connected screen or to access these documents and processes with a mere mouse click or keyboard press.

It significantly boosts user productivity by eliminating the need to navigate through multiple screens and applications, and by automating manual tasks. Additionally, it enhances data accuracy and reduces repetitive data entry by capturing data directly from the business application screen. This functionality also expedites and enriches the decision-making process by providing instant access to necessary documents.

3. Document Import Processor (DIP) in OnBase enables the acquisition, classification, and indexing of large volumes of documents automatically, regardless of the electronic file type. Commonly used for processing documents from external scanning services or traditional applications or third-party capture systems in OnBase, thanks to its extensive configurability and flexible programming options, DIP allows the import of any index file in text format and performs fully automatic processing during off-peak hours. It operates automatic import and indexing of large volumes of documents produced by other systems.

A business system (for example, an external scanning service, an existing system, or a capture system) creates documents containing an index file and stores them in a specified location on the network. OnBaseScheduler, programmed to operate during off-peak hours to optimize system performance, imports these documents and the associated index values directly into OnBase through the Document Import Processor (DIP), making them immediately available for retrieval.

4. Electronic document management services module in Onbase controls and tracks changes to documents stored in OnBase through its review and version management. This ensures the integrity of documents, protecting them from any risk of editing conflicts in the event of simultaneous editing by multiple users.

Institutions can manage changes to corporate documents in a central repository and provide offline synchronization for their remote users, ensuring that all users always have access to the latest version of each document. It manages and monitors documents requiring changes in a single central repository, ensuring security when viewing and editing drafts and final documents, in addition to controlling changes to documents by accessing the complete history of the document.

5. Microsoft Outlook Integration Module (2007, 2010, 2013), the integration module for Microsoft Outlook allows any user within Outlook to interact directly with OnBase content and workflows from the familiar Outlook interface. This integration offers several methods to import email messages and attachments as documents, such as drag-and-drop into an Outlook folder with automatic indexing by assigning message fields. Users can also directly extract documents from the OnBase system within Outlook, facilitating the adoption of new programs and reducing training costs.

Microsoft Outlook allows linking email messages to corresponding business transactions, managing only one version of the email and attachment on the OnBase system, instantly accessible to any OnBase user, regardless of the primary interface. Additionally, through their

familiar Microsoft Outlook interface, users can directly interact with OnBase's document search features and workflows, according to the OnBase system access level of each user.

6. The OnBase Mobile Access module for Android provides users with easy access to OnBase documents and operations while on the move or outside the office from any Android device. Institutions can reduce processing times while simultaneously increasing productivity by providing decision-makers with continual access to OnBase.

7. OnBase's Mobile Access module for iPhone offers users easy access to OnBase documents and operations whether they are on-site or out of the office. Institutions can decrease processing times and simultaneously boost productivity by providing decision-makers with continual access to the OnBase system.

8. OnBase Physical Records Management (PRM) Module, the PRM module enables institutions to track, locate, and view physical records in electronic form within the OnBase system. Physical assets are managed alongside electronic records and documents using OnBase as a single interface, regardless of the location or format of these records.

9. OnBase Report Services provide businesses with detailed and specific information about the status of their systems and business activities. Report Services are easily deployed with over 140 pre-configured reports for evaluating the repositories and activities managed by OnBase.

Companies can also create custom reports based on their specific business needs. Long-term use enables businesses to analyze trends, share performance information across the organization, and make proactive, informed decisions using report data.

With OnBase Report Services, users can generate reports on systems and business activities in real time. Report Services are run through an application server.

Data can be presented to the user in various formats: tables, bar charts, pie charts. These reports can then be exported in XML, HTML, Excel formats, or saved as PDF, JPEG, or TIFF. The "Report Services" application is based on Microsoft's .NET platform and deployed via ClickOnce technology, ensuring full automatic deployment and central management across the organization's intranet and internet.

10. The Unity Client is part of the new generation of OnBase desktop applications and closely resembles Microsoft Office products from 2007 and 2010. Thanks to user-friendly toolbars and tabs and easily accessible features, users can navigate quickly without difficulty in performing their daily tasks, with little to no prior training required.

Unity Client also allows users to customize interfaces for immediate access to the forms and functions they most frequently use. Installation and management processes are also very

simple. Deployment options use ClickOnce technology for rapid execution both on-premises and in hosted environments.

In addition to creating a user experience, these modern technologies provide an efficient and scalable architecture that can meet all business requirements.

11. The OnBase Web Server provides users with secure online access to corporate data and documents, enabling real-time interactions with business processes anytime, anywhere. The OnBase Web Server enhances collaboration and relationships between the organization, its clients, external partners, and remote workers. Web browsers act as secure clients for the internet or intranet, connecting to the centrally managed OnBase Web Server.

Standard web browsers act as secure web clients for the centrally managed web server. The architecture separates the web server from the application server, enhancing the product's performance, scalability, and security.

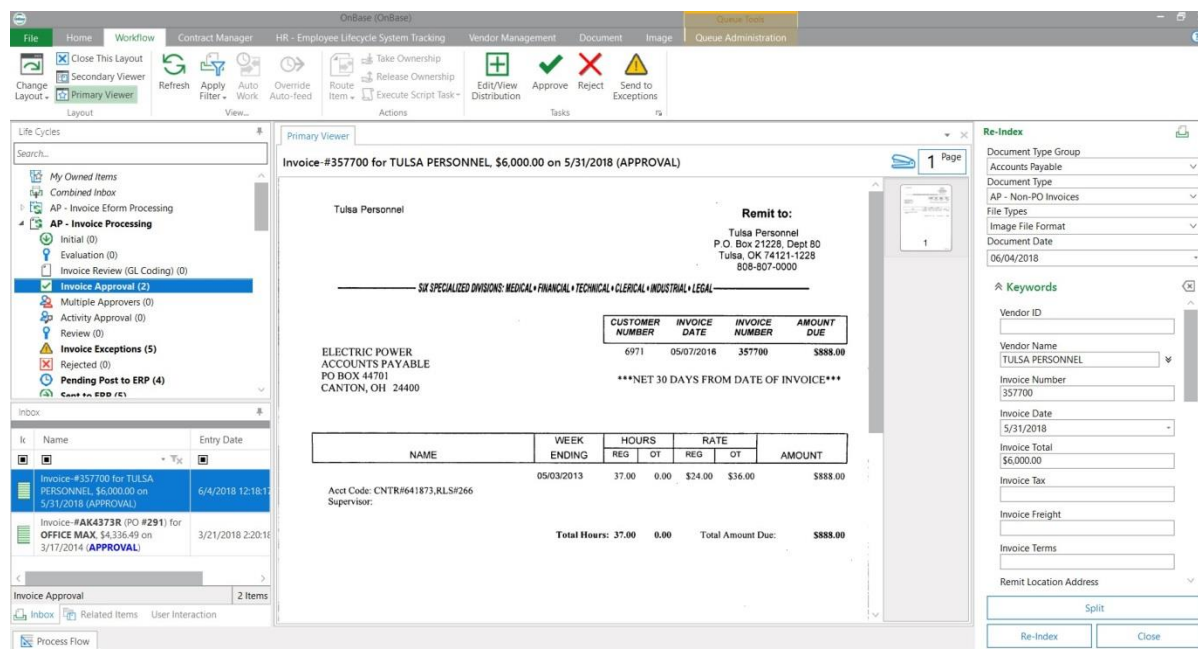
12. Workflow is a system for routing electronic documents and managing content transactions, allowing institutions to operate their business processes more quickly and efficiently. Workflow provides a balanced set of rules and procedures that are point-and-click, enabling rapid automation of business processes without specific programming.

Workflow enables institutions to shorten the time required to process a document, increase employee productivity, and improve mechanisms for entering, storing, and retrieving data, using a simple and flexible user interface. It provides ease of processing business transactions by presenting the user simultaneously with all relevant documents.

All types of documents can be processed regardless of file format, and all WorkView data and managed folders in records management are included within the workflow. Document routing (and associated data and documents) is predefined, ensuring process consistency. Workflow life cycles display the status of documents and processes in real time and retain archives of completed actions for reporting purposes.

Figure 2

An image illustrating the Workflow interface in the OnBase system.



10 STUDY RESULTS

The study has conclusively demonstrated that the OnBase system facilitates:

- efficient management of an extensive volume of documents, files, and archives;
- rapid and dependable access to documents, available both locally and remotely;
- seamless information exchange among diverse collaborating parties;
- enhanced security for data and information;
- improved traceability and streamlining of document verification cycles through the implementation of workflow systems (process management);
- these capabilities ensure reliable document access within the institution and support remote work, thereby redefining modern business and administrative operations;
- the system strategically supports the digitization of documents and archives, as well as the overall digitization of business processes.

11 CONCLUSION

The OnBase system stands as a robust multifunctional platform for the electronic management of documents, information, and archives, offering extensive solutions for a variety

of economic entities and major corporations. It is particularly effective in managing the production, preservation, and storage of electronic documents. The system provides a holistic solution for file and information management that encompasses creation, retention, indexing, storage, retrieval, organization, and destruction.

Primarily designed for operation within an electronic framework, OnBase enables efficient handling of unstructured information and documents from a singular, easily accessible location. It uniquely allows for the concurrent opening of multiple documents and files. The program supports multiple languages, including English and Arabic, and integrates seamlessly with various local systems such as LDAP, ACTIVE DIRECTORY, WINDOWS, SAP, and other Enterprise Resource Planning (ERP) systems, as well as with online service providers.

OnBase is well-recognized within the software industry and adheres to international standards such as ISO 9001, ISO 20000, ISO 27001, and ISO 13298. Its architectural design is crafted to maximize the utilization of information within the communication networks of institutions, facilitating ease of document access and the capability for ongoing updates.

REFERENCES

- Digital Archiving. (2023). *Electronic Document Management (GED)*. (online). Visited on: 23/06/2023. Available at: <https://www.archivage-numerique.fr/ged>
- Gd expert. (2023). *Client Case: Marine Studies Laboratory (LEM) Chose OnBase*. (online). Visited on: 12/06/2023. Available at: <https://www.gdexpert.net/lem/> <https://www.gdexpert.net/total-algerie/>
- Hyland (2023). *About Hyland Software*. (online). Visited on: 08/07/2023. Available at: <https://www.onbase.com/fr-FR/a-propos>
- Keymark, (2023). *Automating Your Business Processes With OnBase Software*. (online). Visited on: 06/06/2023. Available at: <https://www.keymarkinc.com/onbase-software/>
- ONBASE by Hyland (2023). What can onbase do for you? (online). Visited on: 05/06/2023. Available at: https://www.salon-ecom.com/public/exposants_files/FR_Product_Brochure_A4.pdf
- ONBASE, (2020). *ECM ONBASE: An Ideal Tool to Ensure Remote Work. 2021*. (online). Visited on: 24/12/2022. Available at: <https://www.sg-software.dz/Articles/ECM-ONBASE-:-Un-outil-id%C3%A9al-pour-assurer-le-t%C3%A9l%C3%A9travail>
- OnBase, (2023). *One Platform, Unlimited Potential*. (online). Visited on: 07/06/2023. Available at: <https://www.marconet.com/enterprise-content-management/onbase-by-hyland>
- Oulad Hosseini, Y. (2021). *Information Systems for Archives and Their Role in Providing Electronic Information Services in Economic Institutions: A Field Study at the General*

Directorate of Sonatrach. (Ph.D. thesis). Third Cycle: Library and Documentation Science. Supervised by: Prof. Dr. Kamal Boukrzaza. Algeria: Abdelhamid Mehri University Constantine 2.

SG software. (2020). *What is GED (Electronic Document Management)?* (online). Visited on: 24/06/2023. Available at: [https://www.sg-software.dz/Articles/Qu%E2%80%99est-ce-que-la-GED-\(gestion-%C3%A9lectronique-de-documents\)](https://www.sg-software.dz/Articles/Qu%E2%80%99est-ce-que-la-GED-(gestion-%C3%A9lectronique-de-documents))

SG software. (2020). *Why GED? The 05 Added Values*. (online). Visited on: 24/06/2023. Available at: [https://www.sg-software.dz/Articles/Pourquoi-la-GED---\(les-valeurs-ajout%C3%A9es\)](https://www.sg-software.dz/Articles/Pourquoi-la-GED---(les-valeurs-ajout%C3%A9es))

SG software. (2022). *Electronic Document Management and Archiving: What's the Difference?* (online). Visited on: 15/06/2022. Available at: <https://www.sg-software.dz/Articles/GED-et-archivage-%C3%A9lectronique--quelle-diff%C3%A9rences-->

SG software. (2022). *Transitioning from Paper to Electronic Document Management*. (online). Visited on: 25/06/2023. Available at: <https://www.sg-software.dz/Articles/Passer-d%E2%80%99une-organisation-documentaire-papier-%C3%A0-la-gestion-%C3%A9lectronique-des-documents>

SG software. (2023). *The Importance of a GED Solution in ISO-9001 Compliance*. 2021. (online). Visited on: 24/06/2023. Available at: <https://www.sg-software.dz/Articles/L'importance-d'une-solution-GED-dans-la-conformit%C3%A9-ISO-9001>

Sheikhani, S. (2020). *Information Sources and Media Documentation*. Syria: Publications of the Syrian Virtual University.