

Building a digital platform and repository for the General Union of Arab Writers: a planning study

Research – English Summary

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Abstract

The intellectual and literary production of a nation is considered a civilized measure of the extent of the advancement of that nation, including the human knowledge and intellectual creations that this of its societies, and on the other hand, the progress and advancement of that nation's societies It is measured by the extent of the culture, awareness and attendance.

Hence the role and importance of information sciences, libraries and this study comes as a modest contribution and a point in the sea of this science that monitors and focuses its objectives on anyone and knowledge to all groups of Arab society, and to benefit These applications include measuring levels of Arab creativity and innovation on the one hand, and measuring levels of Arab reading and literacy on the other hand.

Keywords

Digital repositories, institutional repositories, AI, Arab countries

1. Introduction and Context: The Era of Information and Digital Transformation The study emphasizes the current "era of information" and the societal shift towards digital presence. This necessitates information institutions to enhance their digital footprint and adopt digital tools and technologies for managing and disseminating content. The rise of AI supports the open access movement, leading to the emergence of digital extensions for information institutions such as digital repositories, libraries, and archives.

2. Core Objective: A Unified Platform for the General Union of Arab Writers and Authors The primary goal of this study is to propose a methodology for building a unified Arab platform and digital repository for the General Union of Arab Writers and Authors. This platform will serve to:

- **Collect and Preserve:** Gather and preserve the history of the Union and its intellectual output.
- **Document and Make Available:** Document and provide access to all intellectual publications originating from the Union and its members across Arab countries.
- **Leverage AI:** Utilize modern technologies, including AI, to manage digital repositories, enhance content retrieval, and support open access.

3. Significance of the Study and Project The project is significant due to its focus on building digital platforms and repositories for research institutions, which are crucial for managing, preserving, and disseminating information. It aims to:

- **Enhance Digital Presence:** Strengthen the role of information institutions in educating and culturally enriching societies.
- **Preserve Heritage:** Safeguard the history and heritage of a prominent Arab literary organization.
- **Integrate AI:** Incorporate advanced AI applications to align with the Union's cognitive and documentary content, maximizing the use of smart technologies for diverse content retrieval, analysis, and promoting scientific communication.

4. Problem Statement: Current Digital Landscape Challenges The study identifies a critical need for a unified and effective digital platform to preserve and document the intellectual output and history of the General Union of Arab Writers and Authors. Key issues include:

- **Lack of Unified Platform:** Absence of a single digital platform to encompass all types of intellectual and informational output.
- **Inefficient Management:** Current challenges in organizing and documenting intellectual production.
- **Limited Access:** Difficulty in providing advanced digital services to members and beneficiaries, hindering alignment with modern technological advancements.

5. Proposed Solution and Methodology The study proposes a detailed scientific methodology for building the platform, including an application model. It advocates for:

- **Open-Source Software:** Utilizing DSpace, an open-source digital repository system, in its latest versions.
- **International Standards:** Adhering to international standards for metadata schemas (e.g., Dublin Core) for describing digital content.

- **AI Integration:** Integrating AI technologies, specifically the Zinki engine (for smart content recognition) and Saber system (for smart content retrieval). This aims to create an integrated smart platform capable of intelligent content retrieval.

6. Current State Analysis of Digital Presence The study conducted an assessment of the current digital presence of the Union's member organizations across Arab countries, revealing several key findings:

- **Documentation Aspects:** Most member organizations (18 out of 18 surveyed) primarily use Dublin Core for documenting intellectual materials and personalities, focusing on basic descriptive levels.
- There is a lack of advanced standardized linking (e.g., ORCID for authors, linking roles to individuals), indicating a traditional approach to content organization.
- **Digital Information Services and Provision:** Out of 18 member unions, only 10 have an active website, and only 2 possess a digital repository.
- The existing repositories are mainly for displaying book data, topics, and prices for purchase, lacking the functional requirements of standardized academic digital repositories.
- The dominant content types are books (35%), followed by periodicals (23%), with smaller percentages for images, meeting minutes, articles, news, administrative documents, audio-visual materials, and conference proceedings.
- **Search and Retrieval Methods:** 10 out of 18 unions offer basic search capabilities.
- None of the surveyed unions provide advanced search features or semantic search (AI-powered, question-answering capabilities). This highlights the need for developing smart search engines.
- Only 3 unions offer full-text access for some content, while 10 provide partial access, indicating a need for clear content access and publishing policies.
- **Information Measurement and Feedback:** "Comments" and "views" are the most common feedback mechanisms.
- "Likes," "downloads," and RSS feeds are less prevalent or entirely absent in many unions. This signifies a general lack of sophisticated data collection and analysis regarding user behavior and content utilization.
- **Information Resource Management and Intellectual Property:** While there is an acknowledged focus on intellectual property and copyright protection, the practical implementation varies significantly.
- Most unions lack clear policies for content ingestion processes, long-term preservation, and detailed metadata management beyond basic descriptions.

7. Vision for the Proposed Digital Repository The proposed digital repository for the General Union of Arab Writers and Authors aims to be the primary destination for Arab writers and authors to publish their work, preserving their rights and making their intellectual output widely accessible. This includes:

- **Open Access:** Providing open access to all forms of intellectual and creative output from the Union and its member states.
- **Global Reach:** Expanding the reach and use of content, creating a global vision for Arab intellectual production.

- **Author Rights Protection:** Safeguarding author rights through standardized descriptive metadata and integration with international authoritative databases (e.g., ORCID, DOI).
- **Comprehensive Documentation:** Systematically documenting the history and literary legacy of the 18 member unions and associations, adhering to international standards and intellectual property laws.

8. Implementation Stages for the Standardized Unified Platform The establishment of the platform involves three main stages:

- **A. Planning Stage:**
- **Infrastructure Preparation:** Setting up data centers, storage servers, backup systems, and server management software.
- **Software Integration:** Implementing DSpace for repository management, Zinki Engine OCR/ICR for intelligent content recognition, and Saber for smart search.
- **Sub-Union Requirements Analysis:** Studying and defining the specific content and documentation needs of each member union to create a hierarchical content structure.
- **Digital Content Organization:** Digitizing traditional materials, organizing physical content, and creating standardized descriptive records (metadata) for authors and content, including ORCID integration.
- **B. Application Stage:**
- **Hierarchical Structure Implementation:** Translating the planned hierarchical content structure into the DSpace system, creating "Communities" and "Sub-Communities" for each union and managing user permissions.
- **Standardized Metadata Creation:** Generating descriptive metadata and biographical records for individuals and organizations within the Union, linking them to their intellectual output and authoritative databases.
- **Digital Content Management:** Uploading digitized content, creating metadata, and managing relationships between content and its sources (authors, roles, locations) according to standardized and technical guidelines.
- **AI-Powered Search Enhancement:** Processing all digital content through the Zinki AI engine to convert textual, visual, and audio content into searchable data. This will enable:
 - Searching for specific words or phrases within content.
 - Semantic search (question-answering).
 - Extracting information from personal images.
 - Providing smart analyses and statistics for keywords and phrases.
- **C. Post-Application Stage:**
- **Continuous Evaluation:** Regularly analyzing platform performance, efficiency, and identifying areas for improvement.
- **Technical Support:** Providing ongoing technical support to users.
- **Software Updates:** Ensuring regular updates and compatibility with new technologies.

- **User Training:** Offering continuous training programs for users.
- **Policy Development:** Reviewing and updating policies related to archiving, data protection, and information access.
- **Financial Sustainability:** Securing sustainable funding to support platform continuity and expansion.
- **Feedback Integration:** Collecting and incorporating user feedback to improve the platform and its services.

9. Organizational Work Methodology A clear organizational methodology is proposed to ensure the platform's effectiveness and sustainability. This includes:

- **Defined Roles and Responsibilities:** Establishing a robust administrative structure with clear roles for different administrative levels and specialized work teams.
- **Coordination and Transparency:** Ensuring continuous coordination and transparency in work performance.
- **Communication Mechanisms:** Defining communication mechanisms and an organizational structure to facilitate smooth workflow and interaction among all components.

10. Key Figures and Organizations:

- **General Union of Arab Writers and Authors:** The central entity for which the platform is being built, comprising 18 member unions/associations across Arab countries.
- **DSpace:** The open-source software chosen for digital repository management.
- **Zinki AI Company:** Responsible for the Zinki engine (smart content recognition) and Saber system (AI-powered smart search).
- **Dublin Core:** The metadata standard used for descriptive data.
- **ORCID:** Open Researcher and Contributor ID, a unique identifier for authors.

11. Conclusion and Recommendations The study concludes that the proposed platform's creation relies on precise scientific methodologies and practical applications, leveraging open-source software and AI. It emphasizes protecting intellectual property rights and ensuring a sustainable environment for authors' creative output.

Key recommendations include:

- **Stakeholder Support:** Urging concerned entities to adopt the idea and provide necessary financial, technical, and technological support.
- **Communication Enhancement:** Developing internal and external communication mechanisms.
- **Continuous Evaluation:** Establishing regular evaluation mechanisms for platform performance.
- **Sustainable Support:** Ensuring continuous financial and technical support.
- **Staff Training:** Providing ongoing training programs for the work team.
- **Collaboration:** Encouraging continuous cooperation with literary unions and related entities.

The ultimate goal is to build an integrated platform that facilitates interaction with intellectual and creative outputs from various Arab literary and cultural communities, fostering cooperation and the exchange of experiences among different regions.