

Digital information services in university libraries: A Field Study at the Central Library of Badji Mokhtar University of Annaba

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Abstract:

This study aims to identify the digital services provided by the Central Library of the Badji Mokhtar University of Annaba on its website, available on the official website of the University. The study used a descriptive analytical method to address the research questions. The findings revealed a significant interest of the library staff in understanding the needs of their user community by offering new and advanced information services through their website, including remote reception and consultation services, online library registration, online user needs assessment, digital reference services, user training, news awareness services, searching the public library catalogue (OPAC), and accessing theses and dissertations through the national theses and dissertations portal (PNST), as well as searching national and international databases (SNDL), among others. It is worth noting that the library under study does not provide lending services or selective dissemination of information, despite their importance to users, due to the availability of other services such as the Digital Library and the Digital Repository, accessible on the library's website.

Keywords: information services, modern services, digital services, university libraries, digital space, field study, central library, Badji Mokhtar University Annaba, Algeria.

1. Methodological Aspect of the Study

1.1 Problem Statement

University libraries are considered one of the essential structures that universities rely on to enhance and improve the pedagogical and scientific research aspects. In line with the vision and directives of the higher education sector regarding the digitization project and its new guidelines toward the digitalization of university libraries, the establishment of new library services that align with modern developments and technologies in the field of libraries has become an imperative, particularly as universities shift toward the application of the fourth generation known as "University 4.0."

Since the success of university libraries is measured by the modern services they provide to the academic community, with their quality linked to user satisfaction, and given the diverse needs and requirements of students, researchers, and faculty members, who are increasingly oriented toward the digital space in various activities and services, the employment of technology and modern systems has contributed to the modernization of university libraries. This shift has led to the introduction of numerous modern information services, including online user needs assessments, searching library catalogs online, online lending and reservation management, digital reference services, current awareness services, selective dissemination of information, as well as access to digital resources, databases, digital libraries, and digital platforms like Dspace. The aim is to enhance and improve their position and to meet the needs of users by providing the required information at the right time and place.

The Central Library of Badji Mokhtar University in Annaba, in an effort to develop and improve the services offered to its users, has turned to the use of modern technologies, especially the Internet. As a result, a website was created to provide its services to the user community online. Based on the above, the problem statement of the study is as follows: “What are the modern services of university libraries in the digital space in the library under study, and what types of modern digital services are available on the website of the Central Library of Badji Mokhtar University of Annaba - Algeria?”.

1.2 Hypotheses

In order to address the above problem statement, we have formulated the following hypotheses:

- In order to meet the information needs of the academic community, the library under study aims to improve and develop its services by offering modern, advanced and high quality digital services.
- The library under study uses its website as an electronic research tool to provide services to its users.
- The digital information services available on the library’s website include online catalogue searching, digital reference services, current awareness services, selective dissemination of information, remote user needs assessment, digital library services, digital repository, databases and document delivery of digital resources, among others.

1.3 Importance of the Study

The main importance of this research paper lies in its focus on the digital services provided by the Central Library of Badji Mokhtar University of Annaba to the academic community it serves. It aims to explore the digital services available through its website to assess the current state of modern digital information services on the web.

1.4 Objectives of the Study

The study aims to achieve a set of objectives summarized as follows:

- To identify the modern digital services of the university library under study on its website to meet the needs of its users.
- To understand the essential and necessary digital services provided by the Central Library of Badji Mokhtar University of Annaba.
- To assess the quality of the services provided by the library under study and their compliance with international standards (ISO 11620).

1.5 Previous Studies

Several studies have addressed the topic of university library websites and digital information services, including analytical and evaluative studies of library websites and an overview of the reality of those services provided remotely. Two studies focusing on digital information services are highlighted as follows:

First study:

By researcher Rawaa Salah al-Din Ziyada, entitled “Digital Information Services Available on University Library Websites: The Case of the Central Library of Mosul University” (2023). The aim of this study is to identify the essential digital information services that should be offered on university library websites, as well as to assess the current status of the digital information services available at the Central Library of the University of Mosul and their compliance with international standards in this field. After studying and analysing the digital information services, it was found that the website of the Central Library of the University of Mosul focuses on certain services, while other essential services such as online catalogue searching, selective information dissemination and borrowing, among others, are missing. The study recommends the activation of these necessary services to meet user needs¹.

Second study:

By researchers Naïma Qamh and Badr al-Din Atiya, entitled “Information Services via University Library Websites: A comparative study between the websites of Prince Abdel Qader University of Islamic Sciences and the University of Algiers 1” (2016). The aim of this study is to identify the information services available on the websites of the Prince Abdel Qader University of Islamic Sciences and the University of Algiers 1, and to compare them according to specific criteria in order to assess the state of information services for each website. The overall results of the study indicated a significant weakness in the provision of essential and

necessary information services on the two library websites under study, due to a lack of technical support and inadequate training of the staff supervising the sitesⁱⁱ.

1.6 Sample of the study

The sample of the study consisted of the central library of Badji Mokhtar University of Annaba, specifically the library's website available on the official website of the University of Annaba.

1.7 Methodology of the study

The study was based on a descriptive method, collecting data and information from different sources and analysing them in the light of the data obtained from the field study.

1.8 Data Collection Tools

In order to achieve this study and collect data related to its field aspect, we used interviews and observations as tools to obtain information related to the research topic.

1.8.1 Interview

In order to achieve the objectives of the study and answer its questions, we conducted an interview with the Director of the Central Library of Badji Mokhtar University of Annaba. She provided us with relevant information about the research topic and gave a detailed explanation of the digital services offered by the library. She also directed us to the official website of the library to get an accurate and detailed understanding of these available services.

1.8.2 Observation

Direct observation was used to collect data by browsing the library's web page on the official website of Badji Mokhtar University - Annaba.

1.9 Limitations of the Study

1.9.1 Temporal Limitations

The digital information services available on the library's website under study during 2024 when this research was conducted, with the study applied from November 10 to November 24, 2024.

1.9.2 Geographical Limitations

The geographical scope of the study is represented by the "Central Library of Badji Mokhtar University of Annaba."

1.9.3 Human Limitations

The human aspect of this study is represented by the director of the Central Library of Badji Mokhtar University of Annaba, who provided us with information and detailed explanations about the types of digital services offered to the academic community. She informed us that the online services provided for faculty members, students, and researchers are available on the library's webpage and directed us to the library's official site for a closer and more precise understanding of these services.

1.9.4 Subjective Limitations

The subject of the study encompasses the field study titled "Digital Information Services in University Libraries: A Field Study at the Central Library of Badji Mokhtar University of Annaba."

1.10 Study Terminology

1.10.1 Information Services

Electronic information services in university libraries are a fundamental element in higher education and scientific research, aiming to facilitate access to information quickly and accurately. University libraries strive to assess the effectiveness of their electronic services and how well they meet user needs. According to Hashmat Qasem, they are defined as "the final result obtained by information users, which results from the interaction between the available informational resources and the implementation of certain processes and technical procedures. These services depend on user activity and their information needs, meaning that each information service aims to help users overcome obstacles posed by the vast increase in available information. Examples of these services include searching for intellectual output, current awareness services, selective dissemination of information, scientific translation, and information analysis."ⁱⁱⁱ

1.10.2 ISO 11620 Standard

The ISO 11620 standard in its fourth edition (2023) addresses the information services that university libraries must provide through their websites. These services include searching the library's online catalog, lending services (reservations), digital document delivery, online reference services, user training, current awareness services, selective dissemination of information, and other services^{iv}.

1.10.3 Digital Services

These are primarily service spaces that provide services to user communities. The websites of university libraries hold significant importance for users, serving as the main indicator of a library's success or failure in the modern digital age in which these libraries operate^v.

1.10.4 University Libraries

University libraries are scientific and cultural institutions aimed at serving faculty members, students, university staff, and researchers. They include libraries of faculties, universities, higher institutes, and other libraries affiliated with higher education institutions.

1.10.5 Digital Space

The International Telecommunication Union defines Digital Space as "the physical and non-physical domain consisting of a set of elements, including computers, networks, software, information processing, content, transmission and control data, and the users of all these elements"^{vi}.

1.10.6 University Library Website

This is part of the University's official website, as evidenced by the domain name itself, which includes the University domain followed by a slash and then the abbreviation for the Library. It can be accessed via the link <https://biblio.univ-annaba.dz/>.

2. Field Aspect of the Study

2.1 Establishment of the Central Library of Badji Mokhtar University of Annaba

The field study revolves around the digital information services provided by the Central Library of Badji Mokhtar University of Annaba. Therefore, the library under study is linked to the University of Annaba, which was established by Decree No. 28/75 dated April 29, 1975^{vii}, based on the infrastructure of the Institute of Mines and Minerals in Annaba.

2.2 Administrative Organization of the Central Library of Badji Mokhtar University of Annaba

In accordance with the joint ministerial decision dated August 24, 2004, regarding the administrative organization of the university presidency, the faculty, the institute, and university extensions, particularly Article 21 / Section Three, which outlines its tasks and interests as follows: "The Central Library includes four departments: the Acquisition Department, the Technical Processing Department, the Reference and Bibliographic Research Department, and the Orientation and Information Department."^{viii} Thus, the Central Library of Badji Mokhtar University of Annaba consists of the departments specified in the aforementioned ministerial decision.

According to the Director of the Central Library of Badji Mokhtar University of Annaba, in order to meet the needs of its users and to improve and develop the services offered to the academic community, the library under study has resorted to the use of modern technologies in the management of the library and the provision of remote services. It is noteworthy that the Central Library is currently using the SYNGEB software in its network version and is negotiating with the Center for Scientific and Technical Information Studies and Research (CERIST) to acquire the web-based version of the aforementioned software, which is used to organise and manage the library. The library has created a page on the official website of Badji Mokhtar University of Annaba to present the library and provide digital services. Therefore, the library's information system consists of the following links:

- Official website of the Badji Mokhtar University of Annaba - Algeria: <https://www.univ-annaba.dz/>
- Central Library of Badji Mokhtar University of Annaba on the official website: <https://biblio.univ-annaba.dz/>
- E-mail of the Central Library of Badji Mokhtar University of Annaba: biblio@univ-annaba.dz
- Public online catalogue: [bibliothèque.univ-annaba.dz/opac/](https://biblio.univ-annaba.dz/opac/)

- Digital repository: dspace.univ-annaba.dz/home
- National portal for theses and dissertations: pnst.cerist.dz
- National electronic documentation portal: sndl.cerist.dz
- Algerian collective catalogue: ccd.cerist.dz
- List of Algerian libraries: rbd.cerist.dz
- Digital library

Undoubtedly, modern information and communication technologies have had a significant impact on the reality of library services in general and academic libraries in particular, as well as on the methods and approaches by which they provide services to users. They have contributed to the development of traditional services, and the emergence of direct communication services and disc technologies has played a major role in storage and retrieval operations.

K. Dowlin believes that modern libraries and information centers have an additional opportunity, besides continuing to provide information services to their patrons, which is their ability to expand the provision of important services to large numbers of users, namely:

- Providing complex electronic connections to databases.
- Transmitting electronic conferences, seminars, and various cultural and scientific activities as quickly as possible.
- Offering direct online services to information sources in many locations around the world.
- Training on how to use the library and benefit from its collections.
- Accessing new services that were previously unavailable, such as current awareness services, selective dissemination of information, indexing and abstracting services, bibliographic services, and photocopying and translation services.
- Precision and speed in library and information service procedures.
- The trend of libraries and their shift in policy from a collection acquisition strategy to an accessibility and information provision strategy for users, thereby transforming the role of the library into a positive and influential one in providing diverse information through an online webpage^{ix}.

In order to keep up with the technological advancements in the field of libraries and information and to activate the role of the university library in providing modern and advanced information services, the Central Library of Badji Mokhtar University of Annaba has created a website on the official university website. Through interviewing the director of the library under study and reviewing its website, we found that the website contains two separate sections: the first section is about the central library and is dedicated to the digital services it provides to its users, while the second section is for the digital library, which includes the e-books acquired by the central library to meet users' needs. Tables 1 and 2 below show the digital information services available and not available on the website of the library under study.

Table 1 shows the digital information services available on the website of the Central Library of Badji Mokhtar University of Annaba.

Type of services	Available on the library website
Library Introduction Service	Yes
Online Library Registration	Yes
Online Reception and Guidance	Yes
Digital Reference Service	Yes
Searching the Automated Catalog (Direct Access Search Service)	Yes
Database Searching	Yes
Searching Theses	Yes
Current Awareness and Selective Information Dissemination	Yes
Online User Needs Assessment	Yes
User Training	Yes

Document Delivery (Digital Repository and Digital Library)	Yes
Depositing Educational, Scientific, and Cultural Sources	Yes
Online Submission of Master's, Master's, and Doctoral Theses	Yes

Table 2: Digital Information Services Unavailable on the Website of the Central Library of Badji Mokhtar University of Annaba

Type of service	Not Available on the library website
Selective Dissemination of Information Service	
Borrowing (Reservation)	
Translation	

Analysis of Field Study Data

2.3 Digital Information Services According to ISO 11620

2.3.1 Library Introduction Service

Through the interview and browsing the library's website, it became clear that the site provides an introduction to the library through the library introduction service, which includes several elements: a presentation of the library, the organizational structure, the internal regulations of the library, scientific and cultural activities, guiding documents, statistical data on the documentary collection, and the languages used in the library. It is noteworthy that the site is dominated by the French language, while the languages used by users to search for information are primarily French, followed by Arabic, with the absence of English as a search language. This creates a linguistic barrier, especially for users in technical fields and also in how to contact the library through the "Contact Us" window. In addition to the aforementioned data, the homepage of the Central Library of Badji Mokhtar University of Annaba features faculty libraries, a list of services, catalogs, electronic information resources, remote reference services, databases, a digital repository, a digital library, and a new acquisitions bulletin, among others. This information is essential for users as it allows them to fully benefit from the library's services remotely at any time and from any location.

2.3.2 Online Library Registration Service

The Online Library Registration Service is one of the most important modern digital services that the Library provides to the academic community through its website. Users no longer need to physically visit the library to register and benefit from its services. In this regard, the management of the library under study has provided an online registration form that includes user-related data such as name, surname, e-mail, telephone number, date of birth, category (student, professor, researcher), department, address, a recent photograph, and a work certificate for professors and researchers or a university enrolment certificate for students. This form must be completed by the user and returned to the Library Management to confirm registration for the current academic year and to receive a digital library membership card.

2.3.3 Teleconsultation service

The Reception and Guidance Service is considered one of the essential and necessary services of the University Library. This service consists in guiding the users in the use of the library, assisting them in the process of searching for references and making them available for use. It aims to create all the appropriate conditions for reading and research, and also provides statistics and information about the documentary collection circulating among readers. This service is provided by qualified staff with professional competence in modern technologies that are made available on the library's website, and is equipped with sufficient information to address and guide any enquiry or request for assistance. This service is visible and reflects the true image of the library in terms of measuring the quality of services provided, such as good reception and guidance. According to the director of the library under study and a review of its website, this service is provided to users in a hybrid way - both in person and remotely - as shown in Figure 1 below. According to the director of the

library under study, the staff of the Badji Mokhtar University Library in Annaba have benefited from training courses focused on face-to-face and remote reference services, delivered by experts in the field.

Figure 1: Remote Reception and Guidance Service



2-3-4 Digital Reference Service:

This service is considered one of the most important digital information services provided by the university library to its community, aimed at answering questions and inquiries related to their academic fields. It is noteworthy that the library under study offers this service through an online form that includes the user's name, email, country, city, institution, category, research field, research purpose, and question. The questions posed by users are answered as quickly as possible, as stated by the library director during the interview.

2-3-5 Library Catalog Search Service (Direct Access Search):

This service is a system for retrieving information instantly and directly using a computer. Automated catalogs are among the most important digital research tools for the academic community to obtain information that meets its functional, pedagogical, and research needs. The library has placed its online catalog, available to the public, on the university's official website, in addition to shared catalogs such as the Unified Algerian Catalog (CCDZ) and the National Portal for Thesis Advertising (PNST). From the interview and browsing the library's website, we observed two methods for searching the online catalog: the basic search, which relies on three criteria—title, author, and keywords—and the advanced search, which, in addition to the criteria used in the basic search, allows searching by edition, publication date, publisher, series, ISBN, and ISSN. The library aims to provide high-quality services to meet the informational needs of its users by making the most of its resources.

2-3-6 Database Search:

Among the essential digital information services of the university library is the search in national, Arab, and international databases. This aims to fill the gaps in traditional library collections to meet the increasing needs of users due to the vast intellectual output in various scientific fields. The library's website indicates that this service is provided through the National Documentation Portal (SNDL), which is a digital platform that includes a collection of full-text international databases in English, covering all scientific, technical, humanitarian, social, and literary disciplines taught at Badji Mokhtar University of Annaba. To benefit from this portal's services, users must have an account provided by the library, consisting of a username and password for access. The targeted groups for this service include second-year master's students, postgraduate students, faculty members, and researchers. From the interview with the library director, it was noted that 90% of the databases on the platform are in English, which poses a language barrier for users, given the increasing

global intellectual output in English. Additionally, there is a lack of language education at all educational levels, especially for faculty and students who only master one language—specifically in the fields of humanities and social sciences. Despite recent decisions by authorities to generalize English language training and its use in higher education and research in Algeria, this barrier remains due to the absence of translation services at the library to benefit from its collections.

2.3.7 Search service for university theses

According to Decision No. 153 of 14 May 2012, which aims to establish a central catalogue for dissertations and theses and to define the methods for its provision and use, Article 2 of the aforementioned decision states: “A central catalogue for dissertations and theses will be established at the Centre for Scientific and Technical Information Research, consisting of a catalogue and a database of texts accessible through its website. Professors, permanent researchers and postgraduate students will have access to the contents of the textual database, for which they will receive a personal identification code within the National Electronic Documentation System”^{xx}. To this end, the website of the library under study offers this service in order to benefit from the national intellectual production related to theses and dissertations through the National Thesis Notification Portal (PNST).

2.3.8 Current Awareness Service

The current awareness service is a modern service that has emerged in libraries, particularly academic ones. It represents a new term for familiar activities in library services, involving the review of newly available documents and sources in the library and selecting materials relevant to user needs. These materials are recorded to inform users about their availability in the library. This service arises from users’ need to keep up with the latest developments in their areas of interest and specialization. From the interview with the library director and browsing the library’s website, it is evident that there is significant interest from the library staff in providing the current awareness service.

This service employs various methods to inform users about relevant information, including: information bulletins, a new additions newsletter—which is a regular or irregular publication listing sources and materials that have recently arrived during a specified time period—and bibliographic information about new additions. Additionally, the library organizes exhibitions of books and various documents, whether general or specialized, and participates in information networks such as the Internet, providing users with opportunities to utilize these resources. It is important to note that information networks, especially the Internet, play a crucial role in delivering this service.

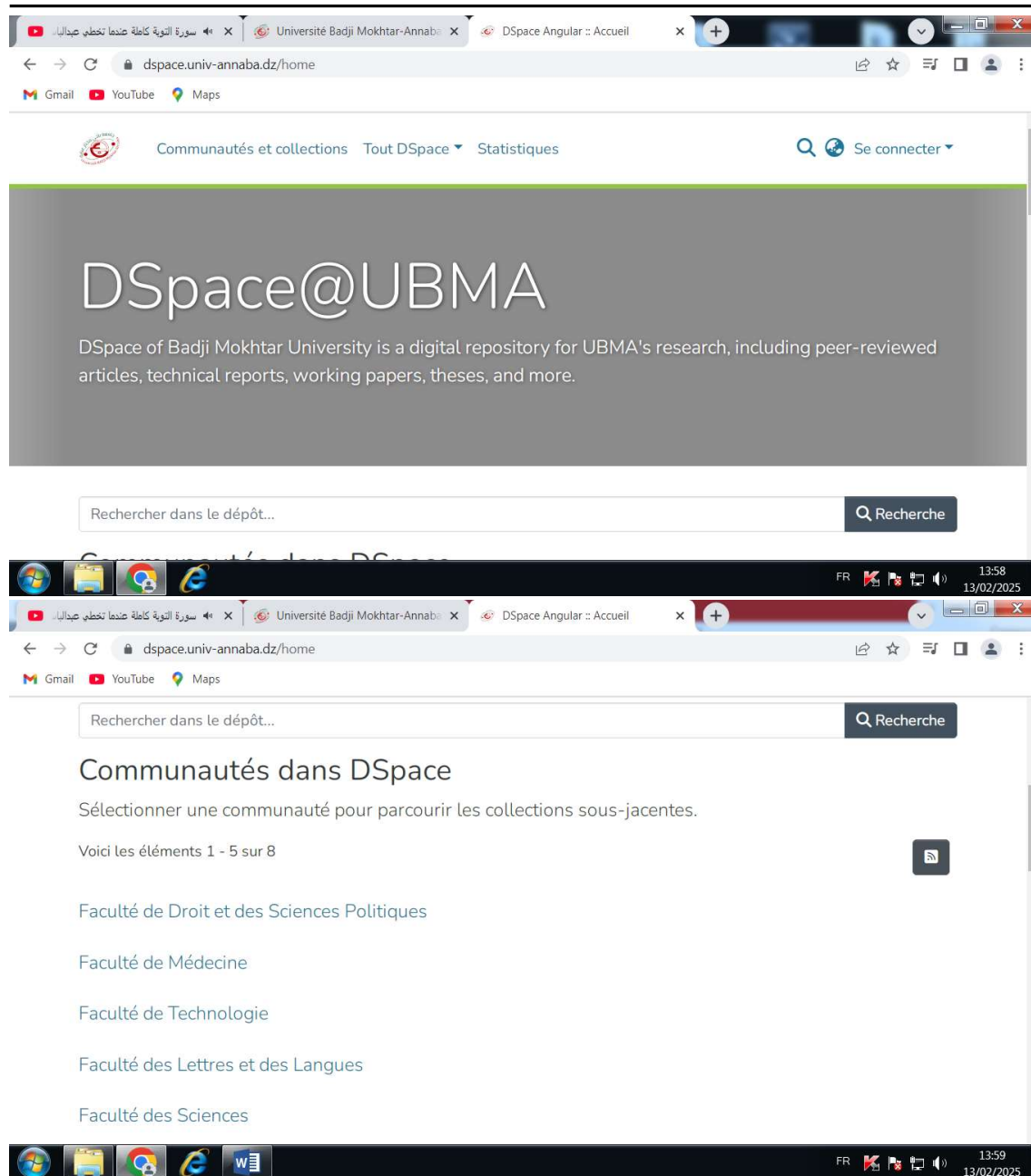
2.3.9 Selective Dissemination of Information Service

Regarding the selective dissemination of information service, it is completely absent due to the lack of an electronic file with user attributes and an e-mail list for the academic community. As far as this service is concerned, according to the director’s explanations, the library provides both a digital repository and a digital library on its website, allowing users to download the information they need online without having to visit the library building.

2.3.10 Loan, reservation, renewal and return services

From the interview with the library director and from browsing the library’s website, it is clear that the loan, reservation, renewal and return service is not available online and that users have to visit the library to benefit from this service. The reason for the unavailability of this service remotely is the large number of users and the lack of qualified human resources in modern technologies. However, the library does offer the digital repository and digital library services, as shown in Figures 2 and 3 below. According to the library director, the staff is currently studying a proposal to update the documentation software used in the library to acquire the latest version of the Syngel Web software, with the aim of digitising all its functions and services.

Figure 2: Digital Repository Service



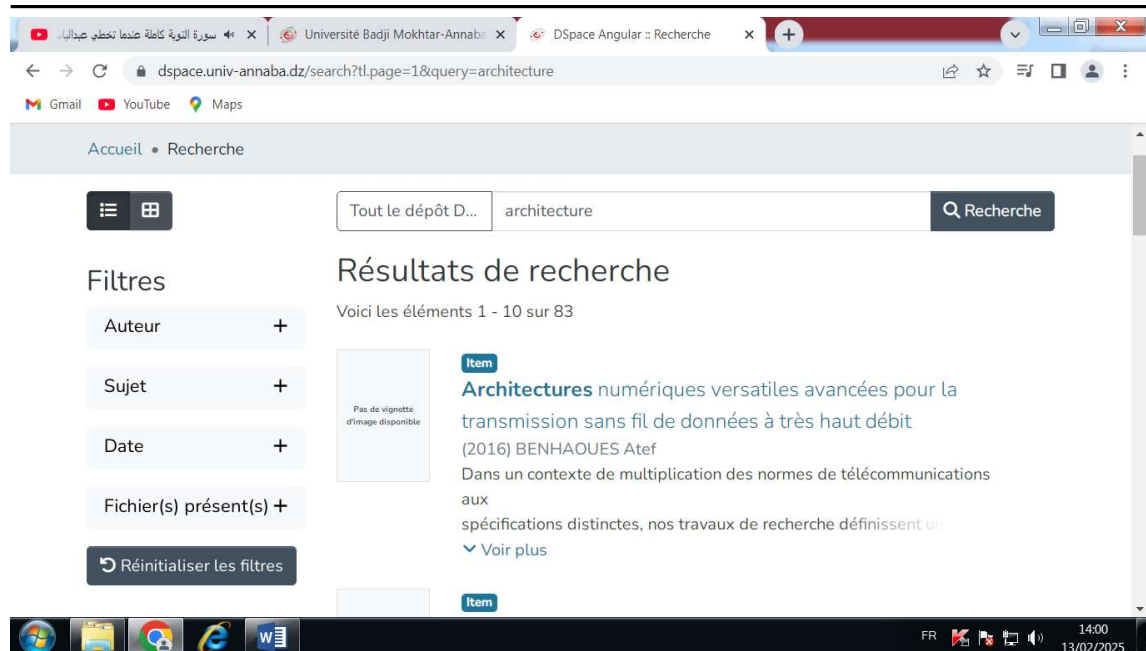
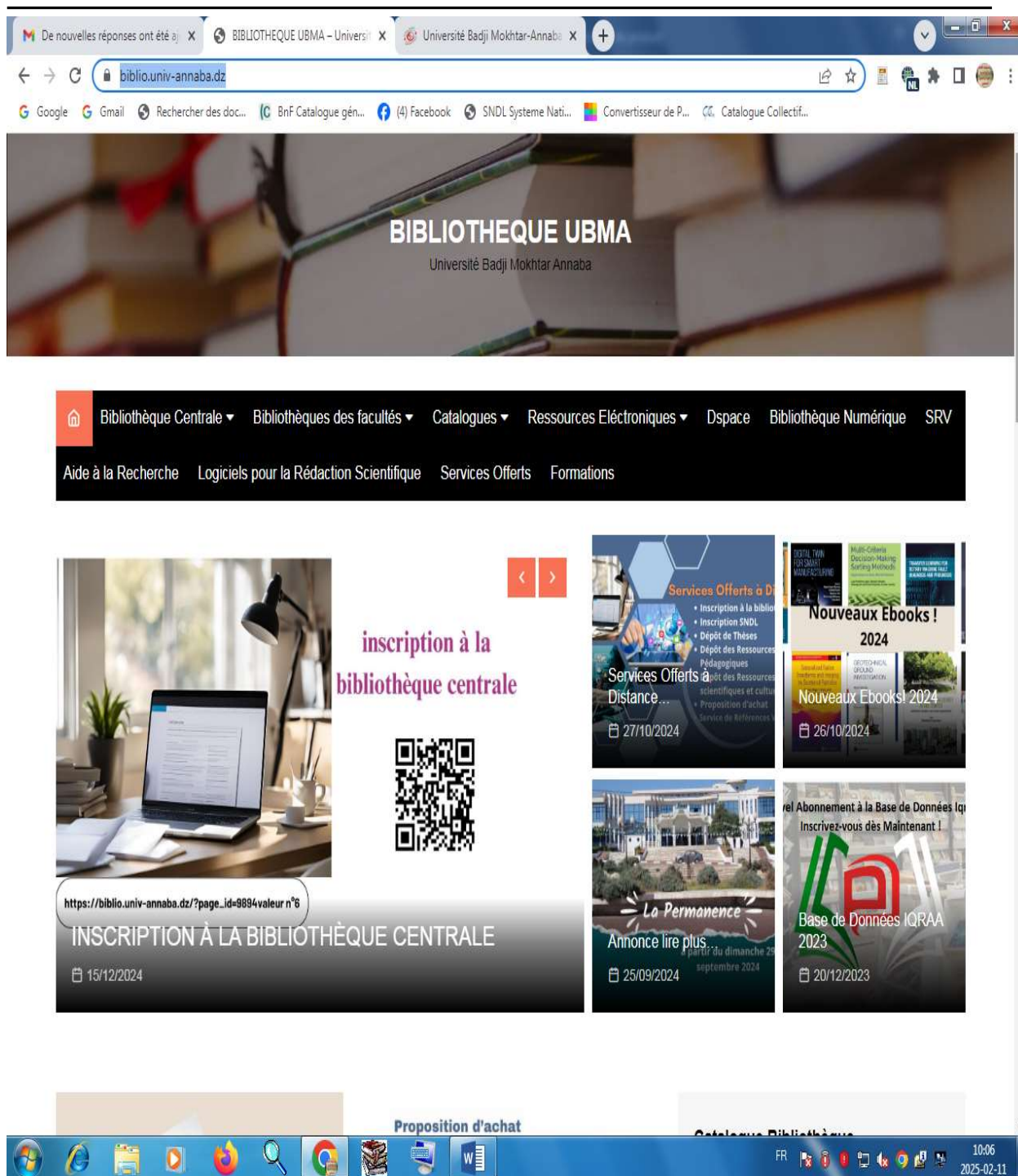


Figure 3: Digital Library Service

The screenshot displays the website of Université Badji Mokhtar-Annaba. The browser's address bar shows 'univ-annaba.dz'. The website's header is red and contains navigation links such as 'Cours en ligne', 'Dspace', 'Formation d'Anglais', 'ENT', 'Bibliothèques', 'WebMail', and 'Se connecter'. A dropdown menu for 'Bibliothèque Numérique UBMA' is visible. The main banner features a hand holding a stylized envelope icon with the text 'Messagerie institutionnelle de l'Université Badji Mokhtar-Annaba' and a 'LIRE PLUS' button. Below the banner, a red button reads 'Visites virtuelles de l'Université Badji Mokhtar Annaba 2024-2025'. The footer of the website shows the URL 'bibliotheque.univ-annaba.dz/ropac/'. The Windows taskbar at the bottom indicates the date as 2025-02-11 and the time as 10:03.



2-3-11 Remote User Needs Assessment Service:

From browsing the library's website, it is observed that to meet the needs of various user categories and develop its collections, the library under study provides this service by placing an electronic form on its site that includes data about the user and the information source to be acquired, which is then sent digitally to the library management for review.

2-3-12 User Training Service:

The user training service is extremely important for the university library due to the large audience it serves compared to other libraries. Consequently, the staff at the library under study offers training courses for faculty members and students at various educational levels (Bachelor's, Master's, PhD) and researchers. The training

focuses on reception and guidance, both in-person and remotely, the use of digital research tools, bibliography management software, database searching, the digital library, and the digital repository.

2-3-13 Document Delivery Service:

Document Delivery Service is one of the essential and necessary services provided by the University Library to meet the needs of users in obtaining full texts for download from various information sources. In this context, the Library's website provides this service in a comprehensive way by searching text databases through the National Documentation Portal, electronic books and journals provided by the Digital Library and Digital Repository, and the Online Catalogue and Shared Catalogues. The library also offers full texts of theses available through the National Portal for Thesis Notification. It is noteworthy that the library distinguishes itself in providing this service by directing users to links that allow them to download the requested information.

2-3-14 Translation service:

Language barriers are one of the greatest obstacles to the dissemination and publication of information sources, and libraries should contribute to solving this problem by providing translation services for important sources needed by many users. Hashmat Qasim defines scientific translation as "the translation of research and specialised scientific works, regardless of their field"^{xi}. This service is mostly limited to specialised libraries and documentation and information centres. Given its critical importance to large libraries in general and university libraries in particular, it has become a core service. This service can be provided by:

- Providing full translations of important and requested foreign sources.
- Producing summaries of these sources in the local language.
- Making translated and published foreign sources available to users and researchers.

General Results of the Study:

After studying and analyzing the digital information services available on the website of the Central Library of Badji Mokhtar University of Annaba, it is clear that the library provides most of the digital services outlined in ISO 11620. These can be summarized in the following points:

1. There is a focus on promotional and introductory aspects of the library. This service is beneficial because the promotional and informational content available on the library's website allows visitors to understand the library and its general policies, as well as its affiliated university.
2. The library management shows considerable interest in the essential services that should be available on the website, such as current awareness services, digital reference services, online library registration, remote reception and guidance, searching the online library catalog and shared catalogs, training users to utilize the library's research tools and resources, thesis and database searches, document delivery, and more, in accordance with the standards set by international specialized bodies in the field of libraries and information.
3. The digital library and digital repository services on the library's website allow for free and remote access to information sources without the need to travel to the library building, especially for those living far from the university.
4. The absence of a selective dissemination of information service and loan services on the university library's website is noted; however, the presence of the digital library and digital repository services enables users to easily access digital information sources to meet their information needs.
5. There is a lack of translation services at the library, despite its importance for researchers. It is worth noting that 90% of the databases available on the national online documentation portal are in English, which poses a language barrier for users in the fields of humanities and social sciences.
6. In addition to the digital services offered by the Central Library of Badji Mokhtar University of Annaba, the library's website provides a service for depositing pedagogical resources related to lectures given by faculty members in all scientific disciplines taught at the university, as well as works from scientific and cultural events organised by the university or the library. Based on the information provided by the Director of the Library and confirmed by browsing the Library's website, it was found that the Library also offers an online submission service for Master's theses and doctoral dissertations.

7. Despite the significant lack of qualified human resources in modern technology, we observed through the interview with the library director and browsing the library's website that the digital services comply with the standards set by the International Federation of Library and Information Associations (IFLA).

Study recommendations

1. Provision of essential digital information services

There is a need to provide essential digital information services that are not currently available on the library website.

2. Activation of the Selective Dissemination of Information Service

This service should be activated by creating user profiles for users and researchers that include sufficient information such as address, academic degree, telephone number, e-mail, job title, specialisation, languages spoken, scientific interests and research projects. Users should also provide a list of subject headings or keywords related to their interests.

3. Activate the translation service

The library should establish a translation service to make better use of its collections and to meet users' needs by training or employing specialised staff in English to remove language barriers faced by the library.

4. Implementation of online lending and interlibrary loan services

This will involve updating the loan system to facilitate the processes of borrowing, reserving, returning and tracking delays and fines. It should also include the generation of statistics and reports on borrowed and unreturned items, lost items, reserved books and lists of suspended or penalised readers. This requirement creates additional work for staff. In order to efficiently activate this service on the library's website and to provide it with a high quality to meet the users' needs, it is recommended to hire qualified staff in modern technologies to handle this essential service which is vital for libraries in general and academic libraries in particular.

References

1. Ziyada, Rawaa Salahuddin. "Digital Information Services Available on University Library Websites: The Case of the Central Library of Mosul University." *Al-Farahidi Journal of Arts*, vol. 15, no. 54 (June 2023), pp. 304-322. [Accessed on: 2024.11.15]. Available online: https://www.researchgate.net/publication/371404162_khdmalmlwmat_alrqmyt_almtaht_ly_mwaq_wyb_almktbat_aljamyt_-_mwq_almktbt_almrkzyt_ljamt_almwsal_anmwdhja(https://www.researchgate.net/publication/371404162_khdmalmlwmat_alrqmyt_almtaht_ly_mwaq_wyb_almktbat_aljamyt_-_mwq_almktbt_almrkzyt_ljamt_almwsal_anmwdhja)
10. Decision No. 153, dated May 14, 2012, concerning the establishment of a central indexing table for theses and dissertations and specifying how it should be supplied and utilized.
11. Qasim, Hashmat. *Information Services: Their Components and Forms*. Cairo: Gharib Library, 1987.
2. Qamouh, Najia, and Atia, Badr Eddin. "Information Services Available via University Library Websites: A Comparative Study Between the Libraries of Prince Abdul Qadir University for Islamic Sciences and the University of Algiers." University of Abdelhamid Mehri - Constantine. [Online]. In: *The Arab Symposium on Libraries and Information Institutions in the Context of Modern Technologies: Roles, Challenges, and Stakes*, Constantine, February 21-22, 2016. [Accessed on: 2024.11.15]. Available at: <https://www.univ-constantine2.dz/instbiblio/wp-content/uploads/sites/7/%d8%b9%d8%b7%d9%8a%d8%a9-%d9%82%d9%85%d9%88%d8%ad-1111.pdf>(<https://www.univ-constantine2.dz/instbiblio/wp-content/uploads/sites/7/%d8%b9%d8%b7%d9%8a%d8%a9-%d9%82%d9%85%d9%88%d8%ad-1111.pdf>)
3. Bdeir, Jamal. *Introduction to the Study of Library and Information Science*. Amman: Dar Al-Hamed, 2007.
4. ISO 11620. *Information and Documentation — Library Performance Indicators*. 4th edition, 2023.
5. Al-Mubarez, Abdullah bin Ibrahim. "Information Services in the Digital Environment." *Information Science*, no. 21, 1429 H.
6. [ITU Report on Climate Change and Telecommunications](https://www.uncclern.org/wp-content/uploads/library/itu10_arb_0.pdf) [Accessed on: 2024.11.15].

7. Official Journal of the People's Democratic Republic of Algeria, No. 35, dated May 2, 1975.
8. Joint Ministerial Decision dated August 24, 2004, concerning the administrative organization of the university presidency, colleges, institutes, and university attachments, particularly Article 21 / Section Three (Official Journal No. 62, dated September 26, 2004).
9. Al-Maliki, Majbal Lazim. Recent Trends in Library and Information Sciences. Amman: Al-Waraq Foundation, 2002.

Natural Form	Abreviation
Catalogue Collectif d'Algérie	CCDZ
Centre de Recherche sur l'Information Scientifique et Technique	CERIST
Digital Space	Dspace
International Federation of Library Associations and Institutions	IFLA
Institut de Métallurgie de Annaba	IMA
International Standard Book Number	ISBN
International Standard Serial Number*	ISSN
International Standardization Organization	ISO
Online Public Access Catalog	OPAC
Prêt Entre Bibliothèques	PEB or PIB
Portail National de Signalisation des Thèses	PNST
Répertoire des Bibliothèques d'Algérie	RBDZ
Système National de Documentation en Ligne	SNDL
Système Normalisé de Gestion de Bibliothèque	SYNGEB

Footnotes:

- i- Ziyada, Rawaa Salahuddin. "Digital Information Services Available on University Library Websites: The Case of the Central Library of Mosul University." *Al-Farahidi Journal of Arts*, vol. 15, no. 54 (June 2023), pp. 304-322. [Accessed on: 2024.11.15]. Available online: https://www.researchgate.net/publication/371404162_khdmata_lmlwmat_alrqmyt_almtaht_ly_mwaq_wyb_almktbat_aljamyt_-mwq_almktbt_almrkzyt_ljamt_almws_lanmwdhja](https://www.researchgate.net/publication/371404162_khdmata_lmlwmat_alrqmyt_almtaht_ly_mwaq_wyb_almktbat_aljamyt_-mwq_almktbt_almrkzyt_ljamt_almws_lanmwdhja)
- ii- Qamouh, Najia, and Atia, Badr Eddin. "Information Services Available via University Library Websites: A Comparative Study Between the Libraries of Prince Abdul Qadir University for Islamic Sciences and the University of Algiers." *University of Abdelhamid Mehri - Constantine*. [Online]. In: *The Arab Symposium on Libraries and Information Institutions in the Context of Modern Technologies: Roles, Challenges, and Stakes*, Constantine, February 21-22, 2016. [Accessed on: 2024.11.15]. Available at: <https://www.univ-constantine2.dz/instbiblio/wp-content/uploads/sites/7/%d8%b9%d8%b7%d9%8a%d8%a9-%d9%82%d9%85%d9%88%d8%ad-1111.pdf>](https://www.univ-constantine2.dz/instbiblio/wp-content/uploads/sites/7/%d8%b9%d8%b7%d9%8a%d8%a9-%d9%82%d9%85%d9%88%d8%ad-1111.pdf)
- iii- Bdeir, Jamal. *Introduction to the Study of Library and Information Science*. Amman: Dar Al-Hamed, 2007, p. 138.
- iv- ISO 11620. *Information and Documentation — Library Performance Indicators*. 4th edition, 2023.
- v- Al-Mubarez, Abdullah bin Ibrahim. "Information Services in the Digital Environment." *Information Science*, no. 21, 1429 H, p. 2.
- vi - [ITU Report on Climate Change and Telecommunications](https://www.unclearn.org/wp-content/uploads/library/itu10_arb_0.pdf) [Accessed on: 2024.11.15].
- vii- Official Journal of the People's Democratic Republic of Algeria, No. 35, dated May 2, 1975, p. 475.
- viii- Joint Ministerial Decision dated August 24, 2004, concerning the administrative organization of the university presidency, colleges, institutes, and university attachments, particularly Article 21 / Section Three (Official Journal No. 62, dated September 26, 2004, pp. 25-26).
- ix- Al-Maliki, Majbal Lazim. *Recent Trends in Library and Information Sciences*. Amman: Al-Waraq Foundation, 2002,

p. 25.

^x- Decision No. 153, dated May 14, 2012, concerning the establishment of a central indexing table for theses and dissertations and specifying how it should be supplied and utilized.

^{xi}- Qasim, Hashmat. Information Services: Their Components and Forms. Cairo: Gharib Library, 1987, p. 218.