

The Role of Online Libraries in Advancing the Study of Uzbek Culture

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Abstract - Online libraries have changed how studies and current issues about Uzbek culture are approached in an unprecedented way. Cultural materials which heretofore were only available in the conventional libraries can now be accessed by both the local and the global patrons through the Internet. Here, the author focuses on the processes and implications of enhancing the research of Uzbek culture in the online environment making use of digital books, articles, photos, audio and video, and other rare sources. These new forms of media have made it possible for scholars, learning communities, and the general populace to access cultural materials that would otherwise require travelling, prohibitive cost, or resources that are not affordable in libraries. In order to do this, this research will examine how internet libraries promote the distribution of books, films, musical and artistic works about Uzbekistan and its people, history, and other areas that define the country in question. For better understanding of this cultural phenomenon, special attention is turned on problems of cultural mantle availability through emerging technologies such as e-libraries/e-resources for traditional libraries' staff members in Uzbekistan. Its supplements with international web resources emphasizes the potential of combining physical and virtual mediums of cultural material promoting the study of culture of Uzbekistan.

Keywords: Uzbek Culture, Online Libraries, Digital Preservation, Cultural Heritage, Digitalization Projects, AI in Digital Libraries

I. INTRODUCTION

The study of a nation's culture is of utmost significance in today's interconnected world. It not only preserves the nation's uniqueness but also fosters mutual comprehension and respect among different people. This, in turn, facilitates progress and development in various aspects. In the age of the internet, online libraries have emerged as invaluable resources for the exploration of cultural heritage (Wafa et al.,

2024). These libraries offer an extensive array of cultural materials such as books, articles, pictures, audio, and video files of different genres (Igwechi Wiche, 2023). This paper discusses the activity of several prominent online libraries, focusing on their role in studying Uzbek culture.

Uzbekistan boasts a rich and diverse cultural heritage, harmoniously blending Eastern and Western traditions (Golijanin et al., 2020). The 12th to 14th centuries witnessed the zenith of Uzbekistan's rich intellectual flowering, during which the great thinker, poet, and scholar Alisher Navoi emerged. His works in the Uzbek tongue are characterized by extraordinary depth and beauty, as well as careful and impactful observation of life. His poetic creativity can be likened to an immense ocean, encompassing a myriad of themes and thoughts.

The creative heritage of Alisher Navoi has been translated into numerous languages and published around the globe. The focus of this paper is on the examination of Uzbek culture, with an emphasis on the study of works created by Navoi and dramatically representing societal struggles in the 52nd chapter of the Khamsa work entitled "Hundred Thousand's Songs (Sudipa et al., 2022). A scene is depicted in which several characters discuss the nature of revered, wise, and mighty princesses in the event of choosing a princess to rule (Llopiz-Guerra et al., 2024). The characters and their traits are highlighted as well as the common thought of the discussion, which never lends itself to resolution.

Article-comments portray the scene and physical appearance of each character involved in the discussion, carefully exhibiting intricate details from cerulean eyes to "the

prettiest" beauty of the whole world. In such manner does the poet deed various praise about a lot of other traits, and the Grand Prince brings elapsing of slight time to converse. Time elapsing in the described chronicle is signified with the "proverbial" phrase "unlikely break of eclipse" as a figure-of-speech, beginning from the pre-dawn moment till the sun was "hovering about the midheaven."

II. HISTORICAL OVERVIEW OF UZBEK CULTURE

The seeds of Uzbek culture have been sown in the land of Uzbekistan since beyond the time of recollection. The ancient Greeks considered this territory as Asia's "Probable Oasis." The great sage Avicenna was born on its soil, and the legendary city of Samarkand rose to glory on the ancient Silk Road. Developed with diverse social and political structures, these majestic cities witnessed the emergence of the world's best scholars, philosophers, poets, and artists, amidst significant architectural feats of human creativity. Nizami, Babur, Alisher Navoi, Ulughbek, Imam Tirmidhi and Hakim Tirdmihi were the prominent icons who shaped the culture in this geography. A great deal of the empire's artistry and intellect flourished in bold strokes on the canvas of architecture, art, philosophy, and multitude works in the Uzbek language, set in the models of "quatrain," "ghazal," and "rubai" poetry styles.

Shared languages (Uzbek, Turkish, Arabic, Farsi, and Russian), religions (Zoroastrianism, Buddhism, Christianity, and Islam), and trades (silk and spice) characterized the local social life and defined agents of aspiration and envy worldwide. Arabization changed the cultural paradigm upon its advent into the thriving civilization during the Umayyad period. The other side of human nature revealed itself in the personality split dilemma regarding the external acceptance of psychological separation and internal detachment from one's reality in oral expressions of magical extempore versification. A similar pattern could be observed in the extreme rationalization and iconophobia of native scholars, whose Parsee, Semitic, and Greek philosophies diverged from the ubiquitous Islamic eclecticism and unifying Sufism.

Persianization marked a new epoch in the embrace of the alien culture, which had taken shape on ancient soil during the divinely induced cosmopolitan Achaemenian Empire. The great "Cyrus Cyinders" on the condescension of conquered people and the storage of the grounds from diverse monarchies in the luscious paradise on earth could hardly go unnoticed. Therefore, the local Bactrian satraps and Khorezmian dynasty of the Early Parthian Empire moved enthusiastically into Ashkhabad-Mary-Baghdad countries. They became familiar with official scrolls and unprecedented constructions that sought to symbolize Heaven on Earth. Mirroring their mesmerizing grandeur, local princely khans covered their palaces with horseshoe arches, pots decorated with floral and geometrical patterns, aqueducts, gardens full of fragrant cypress trees, and ponds being dug in. The awe-inspiring adaptation and renovation of marbled Sahba palaces, monumental arch bridges, caravansaries, and unique ayvan mosques could also be noted.

In the realm of magic and mystery, the famous "Thousand and One Nights," "Laila and Majnun," and "Farhad and Shirin" exotic tales, and approaches in epic adventure miraculous world characterization influenced the varieties of imagination that burst forth in love poems, like "Tog' Sari Yelganda" and "Makhzun and Nigor," tragic histories, like "So'ylar," philosophic (fable) traditions, like "Yusuf and Zulayho," and "Farhod and Shirin," and popular parables, like "Unubek," in which real and imaginary images, legends and sights made for the blending of multi-faceted and multi-plan ideas.

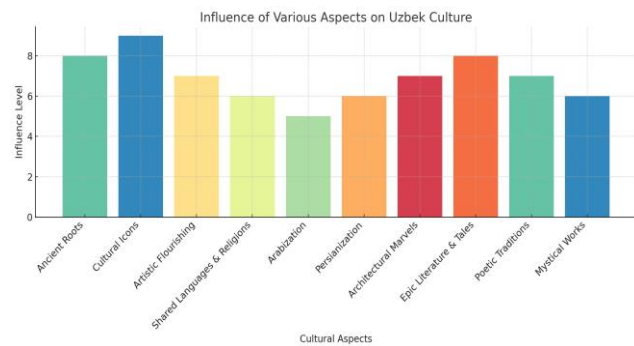


Fig. 1 Influence of Various Aspects on Uzbek Culture

The ancient legacy of Uzbekistan, a region unparalleled in its historical heritage, elaborate original architecture, miniature paintings, sweetness of poetic ghazals, and dazzling mysteries, is still a source of joy for its residents. The great period of the development of the early foreign as well as local traders, scholars, and missionaries on the Silk Road, connecting the East and the West, the spread of the religious beliefs of Zoroastrianism, Tengrism, Buddhism, Christianity, and Islam, the flourishing of agriculture, handicrafts, astronomy, mathematics, and medicine, the rise and demise of considerable empires and dynasties, and wars filled with tragedies and epics are immortalized in the tender works of poets, writers, historians, and artists shows in figure 1.

Undoubtedly, the earliest role played by the geographical position of Central Asia in bringing together different nations, countries, and continents before a great number of centuries was one of the foremost factors in the formation and development of the originally diverse social, political, and economic historical conditions, which determined the formation of national cultures. The investigation of these ancient roots and influences is still a target for the trailblazers of such history, sociology, ethnology, and culture in the three special regions.

Hence, the establishment of substantial international academic institutions at the turn of the century is indeed a matter of pride. The academic endeavors directed toward the in-depth investigation of the ancient roots and influences of Uzbek culture, as subjects embracing the three neighboring states of Kazakhstan, Kyrgyzstan, and Tajikistan in regional and countrywide bases are comparable to marvels of miracles.

Uzbek culture constitutes a unique mix of cultural traditions, languages, and family that have been characteristic of the Uzbek people. Islam has greatly influenced Uzbek culture, lifestyle, and daily activities. Despite Western notions of an Islamic state differing from Islamic perceptions, states like Turkey, Indonesia, and Pakistan are categorized as Islamic states. However, there are also countries that are based on legal systems of Islam but are on the margins, including Egypt, Saudi Arabia, Iran, and several states in Central Asia, such as Uzbekistan, Tajikistan, and Turkmenistan. Each of these countries has its own cultural traditions, which is essential in the modern world since globalization has minimized cultural differences.

Uzbek culture, located in the heart of Central Asia, key European and Asian crossroads, has had many effects from neighboring cultures and civilization since ancient time. Parthians, Seleucids, Sassanians had influenced and absorbed the local cultural heritage on the rise of nomadic Uzbeks in the Late Middle Ages. Thereafter, Uzbekistan's modern territory was unified into a single state, which controlled the Silk Road and achieved tremendous progress in its economy, science, and culture. The modern Uzbek people and its language have begun to form in this era. In the 16th century, the Uzbeks converted to Sunni Islam, receiving the Arabic script and the cultural prestige of the Islamic civilization.

However, Islam's cultural influence in Uzbekistan was revived and significantly grown again since the 18th century Western expansion. The Russian Empire conquered Turkistan in the second half of the 19th century and established the Turkistan Governor-Generalship. This process of cultural othering raised the issue of cultural identity among the Uzbeks. The beginning of the modern Uzbek culture, the New Uzbeks, was with the rise of a secular reformist literary movement in the early 20th century. Late Imperial Russia and the Bolshevik regime inspired a secular Uzbeks' national awakening, whose achievements in the 1920s and 1930s were unprecedented and astonishing. However, despite much cultural effort and advancement, in the 1940s they failed to build a Soviet socialist Uzbek identity and national culture in the mold of the Russian model. The late-Soviet era was a state-run and dependent cultural system on the center, producing a simulacra of Uzbek culture.

III. CHALLENGES IN ACCESSING TRADITIONAL LIBRARIES

Access to traditional libraries in Uzbekistan poses a variety of challenges that greatly affect researchers, students, and the general public seeking knowledge. A particular issue is the outdated nature of many library collections, where materials are often older books and journals that do not reflect recent academic developments. This lack of up-to-date information prevents it information currently available, making it difficult for users to research effectively, especially in rapidly growing areas. Comprehensive digital inventory systems are not available.

This lack of modern technology not only complicates search and retrieval but also prevents libraries from connecting to wider global information networks, limiting opportunities for sharing and collaboration. Another important challenge is poor infrastructure and library maintenance. Limited funding often results in older buildings with poor lighting, seating and climate control, creating an uncomfortable environment that discourages long-term learning. It exacerbates staffing problems, because many libraries operate with a small number of trained personnel, making it difficult for patrons to get exactly what they need. Geographical diversity adds additional complexity, especially for those living in rural or remote areas. Although cities such as Tashkent have high-quality library services, many rural communities are left with few, if any.

Publications and collections related to Uzbek culture are often not presented in international languages such as English, French, German, or Italian. This limits the ability to research, analyze, and work with them effectively. Additionally, even the available materials in Russian, along with some reviews and critiques produced during the Soviet era, do not match the current level of studies in the most active and popular foreign languages such as Uzbek, Chinese, and Korean. Supported by organizations like the Asian Development Bank, the United Nations International Children's Emergency Fund, and the Islamic Development Bank, modern academic and scientific research literature is published predominantly in these languages. Unfortunately, there are no academic prestige publication collections in European languages on Uzbek studies. Therefore, the beginning of serious studies of Uzbek culture in English, German, French, or Italian was impossible until a very recent time. Although individual materials were published, there were no comprehensive analysis efforts. Uzbek epics, narratives, or poetry were not accessible in these languages until now. Even now, finding earlier texts in these languages on Uzbek culture is a challenge. For example, there are no translations of classics like Navoi, Babur, Ulugh Beg. Non-Uzbeks working in the field of Uzbekistan hold doctorates in departments of geography, anthropology, sociology, or political science, despite fluency in Uzbek. Consequently, all these issues create a massive problem and barrier to researching Uzbek culture.

Libraries in Uzbekistan face severe challenges due to lack of resources, which severely affect their ability to serve as effective spaces for learning, research and community engagement. A special case is libraries which outdated collections, often containing decades-old books, outdated scientific journals and contemporary scarce books.

Making it difficult for students, researchers, and professionals to access up-to-date information in engineering, medicine, and the social sciences. Lack of funding for these organizations to access new publications, subscribe to important academic databases such as JSTOR, Scopus, or ScienceDirect.

Technological limitations further add to the challenges facing libraries in Uzbekistan. Many regional libraries still operate without modern computer systems or reliable internet connections, severely limiting access to digital archives, e-books, and other online resources. For example, university libraries some in a regional town have only a few old computers and often slow or intermittent internet.

Research online or access to global academic materials is almost impossible. Digital systems go the front-end list also hinders the search and retrieval process, forcing users to resort to manually searching card catalogs or shelves that are messy, time-consuming and frustrating.

IV. ADVANTAGES OF ONLINE LIBRARIES

The emergence of online libraries has transformed the traditional notion of a library, as these libraries have diffused into all corners of the globe and become widely embraced. Whether in content or form, online libraries will provide a more extensive and comprehensive collection of materials in digitized form. Online libraries can advance the study of different cultures, including Uzbek culture, by providing easier access to various materials in a digitized format and modernizing and popularizing different cultures. By re-scaling place, online libraries can make the Uzbek culture more visible through the global digitized library web.

Online libraries are valuable venues where people can acquire various kinds of materials printed, published, or imprinted in either hard plans, soft plans, or modern digitized form. Online libraries have become devoted spaces for expansive resources with various contents for many users. The emergence of online libraries, using online materials or e-libraries, to attain digital technology has become a concern for various global communities and countries. Over the decades, online libraries have transformed the traditional notion of a library worldwide. Online libraries can become both diversified and homogenized. In content, online libraries will provide more extensive collections of materials in digitized form. In form, online libraries will provide more comprehensive collections of resources for expanded science and research.

With digitized resources, online libraries not only provide a far more extensive collection of materials than traditional libraries but also involve different languages in their collection, storing various cultural symbols and resources, such as Islamic culture, European culture, and Indian culture. These symbols and resources would also be useful for advancing the study of various other cultures, including Uzbek culture. Online libraries are already providing diversified resources to ameliorate the understanding and study of different cultures. The Internet provides equitable access to materials in traditional libraries for far-away countries and communities. Because of the opening of international online library networks, the visible and audible comparison of countries, cultures, and languages, with the emergence of various online libraries, has been quickened. Online libraries can obviate the underrepresentation of

casualties and lambasting for different languages, countries, communities, and cultures.

Accessibility is one of the key elements of a library digital. A library hosting digitized contents should be accessible in order to promote its use. Increasing digital access to cultural materials is a condition for the advancement of the knowledge of cultured groups, and providing means to take advantage of this access is essential for the cultural development of countries (Higgins & King, 2013). Easy accessibility of online libraries, both in text, images and audio-visual documents can help scholars and researchers to provide a wide collection of materials on their culture to be studied, analyzed and interpreted. Several libraries are digitizing their collections and providing cultural and scholarly materials in digitized form online, but others are not yet on the Internet. This can represent a barrier in the path of accessibility and a difficulty in promotion of studying it. Access to audio-visual material is an important subject of consideration as it has been generated in large quantities during the last three decades. Yet work on providing it in a comprehensive form over the Internet is still often lacking. Only parts of such materials are available online or accessible only to the public through limited access. The above observations provide arguments for promoting and enhancing cultural studies online libraries and improving digital access to facilities. Efforts directed toward the creation of such services generally include: promoting digital libraries in online environment, cooperation between institutions involved in cultural encoding and preservation, advancing the knowledge of scholarly on-line culture groups, and enabling scholars and institutions to create on-line cultural studies libraries.

When studying Uzbek culture, library resources can provide a variety of materials such as photographs, video documentaries, text files, digitized books, and links to collections (Sukhotina, 2018; Kendzior, 2011). However, attention should be paid to resource validity, reliability, qualities, and coverage since not everything that appears online is correct. Online library collections may provide students and scholars with technical documents, primary sources, subject guides, archives, and geographical maps. Books and articles display some of the most recent and exciting works in learning Uzbek culture or languages. Text archives and primary sources are among the most useful materials available in educational institutions where a group of Uzbekistan specialists are founded. These resources can also serve as the base on which knowledge and teaching materials can be structured and filtered according to difficulty levels (Bobojonova et al., 2024). Video recordings can afford students and scholars a rare chance to view such performances or cultural happenings not easily available or accessible otherwise. Film requests cannot easily be processed via regular channels since not all institutions respond to requests. Even if institutions cooperate, video recordings are often not reproduced in good quality, and even very small amounts of video footage request can overlook valuable recordings. Digitized photographs are also a greatly

underutilized source for illuminating many aspects of Uzbek cultural life from the expeditionary era. Photos not only offer visual representations of local surroundings and sites but can also provide evidence of former events. Figure 2 displays the Accessibility in Online Libraries and Resource Diversity in Online Libraries.

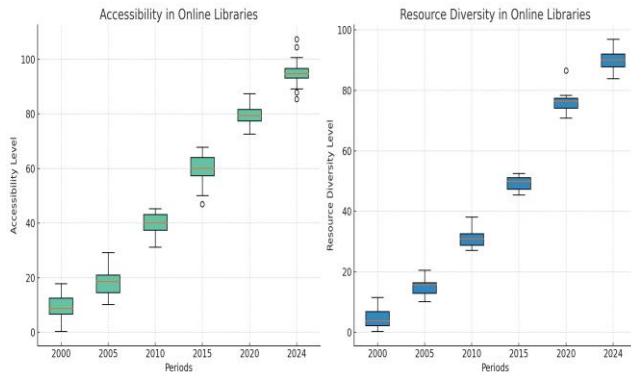


Fig. 2 Accessibility in Online Libraries and Resource Diversity in Online Libraries

V. IMPACT OF ONLINE LIBRARIES ON THE STUDY OF UZBEK CULTURE

The past two to three decades have witnessed rapid information and communication technology (ICT) development. Online libraries have an extensive textbook database, and internet users can access online resources and open access textbooks. Online libraries make information and resources accessible to a wide audience, and a growing number of Uzbek readers are using them to study Uzbek culture. The importance of online libraries in studying Uzbek culture has been discussed from various perspectives. One can see that through online libraries in the information era, documents on the cultures, religions, political systems, traditions, customs, encyclopedias, and other materials of the Uzbek people can be found, preserved, and stored, regardless of the place of users. However, online resources that provide information on the Uzbek language, literature, arts, history, etc., are still scarce. It is fitting, then, to examine the impact of online libraries on Uzbek cultural knowledge preservation.

With the advancement of computer technology and network technology, traditional libraries are gradually changing to digital ones, and digital libraries, collections of digital objects, are gradually emerging. The ease of using search engines has contributed to the proliferation of sudden libraries, where preserved digital books, magazines, newspapers, manuscripts, and other lexicons can be searched. There are online libraries on various topics that provide useful resources for users. Libraries are currently being established globally to collect, organize, store, and disseminate freely accessible information in support of the development of culture, education, science, and technology. One of the main goals of establishing libraries is to ensure equal access to information. In many less developed countries, cultural knowledge is not available or very much scarce on the web. The Republic of Uzbekistan became

independent in 1991. Although it was a part of the former Soviet Union, the people had their own language, literature, traditions, customs, and thousands of cultural values. The development of the Uzbek language, culture, art, education, science, and technology were suppressed and stymied over decades during this period (Buruga & Osamai, 2019).

Although there are online resources on the Uzbek language, literature, history, arts, traditions, religion, politics, etc., chances to learn about them are very much limited. Uzbek culture is relatively unknown even to neighboring Central Asia countries. After gaining independence, with the attention given to social sector development and the preservation of languages and cultures, huge cultural resources were collected, organized, and stored. Online libraries on languages, cultures, arts, traditions, etc., were also established; however, there are no or very few online libraries that provide information on the cultures of the Uzbek people in a single place, and hence the chance to learn about Uzbek culture has remained deficient. Online libraries have a significant impact on the preservation of any culture. Many libraries are making substantial efforts to provide digital collections of their resources for preservation.

Fostering the study of contemporary Uzbek culture, national identity, and the unity of past and present in the works of contemporary Uzbek writers (poets, developers), online libraries primarily in the English language (but also in other languages) set up by governments, public organizations, and universities of the United States, Germany, Great Britain, South Africa, New Zealand, Canada, Australia, Japan, South Korea, and the United Arab Emirates provide a broader spectrum of opportunities for researchers in Uzbekistan and those interested in Uzbek culture and literature. These libraries not only offer free access to scholarly resources (library catalogues, full-text databases, newspapers, journals, e-books, audio and video recordings, photo and art galleries, archival manuscripts, etc.) but also ensure involvement in training and transverse cultures.

The online library "Countries and Their Cultures" created in 1998 in the United States by Thomsen Learning, which was a part of the "Cultural Contexts of International Business" project run by David M. Becker of the University of Richmond for NEH, offers a survey of Uzbek culture and literature in English as well as the opportunity to receive questions regarding country or cultural customs or aspects from anywhere in the world with respect to ethnic, religious, and national diversity. Addressing this opportunity, some researchers approached it with queries on the national literature, poets, and literary style with the aim of obtaining responses that assist with fostering the research of Uzbekistan's past and present in the western world. With the aim of exploring the typology of such opportunities, the responses made to four queries taken initially as a trial sample were analyzed.

The online library "Gonwaz's World" created by an Australian historian and philanthropist Steven J. Gonwaz in honor of the Uzbek poet Abdulhamid Sulaymon ogli Choqay

(1896-1938) not only provides a survey of the poet's life and works in various languages but also enables meeting with those interested in his works in poetic competition and shaking hands with him.

A significant advantage of online libraries is that knowledge is preserved in a digital format. The internet is a dynamic space, and websites often go offline or change their format. Additionally, physical libraries can also cease to exist for a variety of reasons. Closing, abandoning, or removing electronic information does not necessarily mean that it must be permanently lost. Information can be preserved by an electronic library. The need for preservation stems from the fact that information and culture are vulnerable. Literature, memory, and certain modes of life that are characteristic of each culture are in constant danger of violating sanctions, destruction, or exile. Current literature processes are running ahead of conservation and archiving processes. Archiving has become a necessary part of current information processes. Data are required for archiving on the publications, the organizations responsible for them, and the persons involved in the information process. In this connection, digital libraries will be an advantage for maintaining the national culture.

Thanks to documentation and organizing the data, preservation, storage, and access to national cultures will be guaranteed even if hosted on servers far outside the home nation. In turn with original work, frontend interfaces can be developed to provide access to the stored resources. After all, every culture and national heritage is unique and needs to be gathered, preserved, and made generally available. The public will not find support only with the authorities of the nations. It will also seek help to process the information flows of the world and to preserve its own culture. Online libraries are expected to play an important role in this very process.

Globalization is another reason online libraries will become important for the preservation of a national culture. The nature of cultural and information globalization is such that it is one-way; it provides access to and floods with the dominant culture, limiting the variety and diversity of cultural life in the states of the planet. Without outside information and culture flow, a particular culture impoverishes. There are only two alternatives for a particular culture in the age of globalization: to perish or to gather, exhibit, maintain, and create an equivalent information flow of its own. Online libraries are a sufficient and suitable information technology to help turn the second option into reality in Table I.

TABLE I THE IMPACT OF ONLINE LIBRARIES ON THE STUDY OF UZBEK CULTURE

Aspect	Description
Accessibility	Online libraries provide extensive textbook databases and open access resources, making information on Uzbek culture available to a wider audience globally.
Preservation of Knowledge	Digital libraries help preserve documents on Uzbek culture, religion, traditions, and history, safeguarding them from potential loss due to physical library challenges.
Advancement of Cultural Studies	Online libraries provide access to diverse resources such as books, articles, and multimedia

	materials that are crucial for studying and understanding Uzbek culture.
Global Reach and Visibility	By digitizing materials, online libraries make Uzbek culture more visible on a global scale, allowing users from different regions to explore and engage with its heritage.
Research Opportunities	These libraries offer researchers access to scholarly resources and enable involvement in cross-cultural studies, enhancing the study of Uzbek literature and arts.
Cultural Knowledge Exchange	Platforms like "Countries and Their Cultures" and "Gonwaz's World" facilitate the exchange of information on Uzbek culture, fostering greater understanding worldwide
Support for National Identity	Online resources help in preserving the national identity of Uzbekistan by documenting and archiving cultural materials that reflect the country's unique heritage.
Challenges in Resource Availability	Despite the advantages, there is still a scarcity of online resources on Uzbek culture, limiting comprehensive access to materials in languages other than Uzbek.
Impact of Globalization	Online libraries play a vital role in counteracting the effects of cultural homogenization by preserving and promoting the unique aspects of Uzbek culture.
Knowledge Preservation	Through documentation, data organization, and digital archiving, online libraries ensure that cultural knowledge is maintained and made accessible for future generations.

VI. CASE STUDIES

The paper will present case studies of different online libraries that are successfully advancing the study of Uzbek culture, provide ideas for brainstorming the best practices to consider in the digitalization project of the object of research, the scientific library of the National University of Uzbekistan, and discuss the modes of collaboration and partnership that would connect the scientific library of the National University of Uzbekistan with other institutions, organizations, foundations, universities, and libraries that seek to advance the global awareness of Uzbekistan, its culture, values, history, and more, but are conscious of the expenses required by such undertaking.

The National Libraries of Singapore, Finland, Georgia, Cambodia, and the Paley Center for Media in the United States are examples of online libraries that are successfully advancing the study of each country's culture. The National Library of Singapore has a project called "Imagine Your Singapore", which is a collaborative storytelling project that embraces new technology and engages the community in co-creating the history and culture of Singapore. Participants can contribute stories (in text, audio, video, and images) about the places they live in, as well as on Singapore's development over the years. Furthermore, the "People's History" project also provides an interesting web platform for people to share their stories about World War Two in Singapore. Like Singapore, the National Library of Finland has undertaken to build a "digital library" where all Finnish and Swedish publications will be digitized and preserved. Finland also has an annual project called "Cultural Heritage Work and Memory", which promotes cultural heritage activities such as shared history, cultural interpretation, and digital culture in

schools. The Georgian National Library is establishing a "Digital Consortium Programme", which would facilitate partnerships between libraries, cultural institutions, and citizens. The Library would digitize library collections and enable remote access to library collections/out-of-print and in-rare book items. The project also envisages forming strategic partnerships with local and international organizations and institutions. Similarly, the Royal Library of Cambodia is setting up a mass-library of 100,000 books and building many small mobile libraries. Like Georgia, Cambodia has a project called "Mobile Library to Promote Reading Habits and Literacy".

The Paley Center for Media in the United States is an example of a multimedia library that actively promotes the awareness of culture (television and radio) through wide coverage of audience access. The services provided include a searchable database that can be accessed on site in the library (where more than 40,000 deep cataloged programs from public television, commercial networks, and cables), DVD-to-VHS copying services, research request services that can be emailed, mailed, or called in, and where the answer is usually provided within a week (conducted through personal assistance or a database search), as well as outreach programming that develops a series of public discussion programs on timely and relevant issues. In addition, the library cooperates with institutions and organizations that seek to advance the awareness of diversity in media through consistent collections representation, cataloging, services, and development. Furthermore, a Media Preservation Program enables collection accession through donation (the largest media collections in local communities).

In the study of cultures, libraries and collections have been important participants. It is difficult to fully appreciate the breadth of any culture without understanding its literature. For a variety of reasons, part of the literature of some cultures is hidden from others. Usually, cultural interactions result in an increase in mutual awareness, which can benefit both parties and even deepen their mutual relationship. Libraries and book collections are essential in these types of relationships. Many libraries have gone far beyond just preserving literature and are proactive in acquiring hidden literature in order to promote awareness and study of the culture. However, in this undertaking, it has been of the utmost necessity to rely on modern technologies and the globalization of the web sphere. The former allows for the rapid acquisition and dissemination of literature and the latter makes it possible to read or view literature on the intended audience's computers at home.

The culture discussion concentrates on a literature culture that is hidden from the culture due to other languages. It is described how four libraries, the UNESCO Memory of the World Register listed National Library of Latvia, Boston Public Library, British Library, and National Assembly Library of Korea, proactively address their challenges of self-awareness and development, preventive acquisition, and proactivity regarding hidden literature, focusing on

languages of cultures that are geographically close but may not mutually understand each other's languages, including the Baltic States, Uzbekistan, and Mongolia. In the last decades, new efforts in especially print literature acquisition have been observed in most instances. The source languages are usually not used in collections when acquiring literature of those languages.

Microfilm, microfiche, and digitization projects have been undertaken since the late 19th century. Underlying factors for each library and collection differ but very much complement each other. The study of the role of libraries in the formation and advancement of mutual awareness in the web sphere globalizes and extends earlier work. The role of the internet in the wider advancement of culture study is explored as well. The web sphere is analyzed with an emphasis on libraries, collections, literature, and interaction. The case studies demonstrate the role, involvement, and efforts of the libraries and collections concerned. The libraries act as central points of awareness in their wider culture area and even the wider language area. They have widely acquired and made cataloged websites available in search engines and bibliographies. The expected increase of mutual literature awareness with the web sphere and the libraries understanding it is beneficial for the more global culture awareness advancement.

VII. FUTURE DIRECTIONS AND OPPORTUNITIES

Despite considerable growth and expansion, the development of online libraries and similar resource pools remains uneven within and between different countries. In many cases, it depends on the publication of exclusively national contents, even if the users are overwhelmingly Russian language or former Soviet ones. With respect to this observation and the specifics of the Uzbek culture resource domain, it is proposed to consider promising areas and opportunities for fruitful efforts and initiatives.

One of the crucial tasks assumes the development of own software and instrument systems for the creation of virtual library pools, which would be technically similar to search engines of global giants. It would provide an opportunity to choose a platform for the creation of own corpus databases and freely introduce the corporate structure of library collecting, description, searching, and dissemination of archived information. As a result, broad national corpus databases could be created to expose the peculiarities of local languages, domains, cultures, or cultural groups. It is widely known that there are great discrepancies in dictionaries of search engines due to specific cultures embedded in a particular computational environment.

Local means involving institutions, funds, or actors for financial co-arrangements should also be widely investigated. One of the examples could be an experience of analysis and addressing some intersections across Europe using funded grants for resource sharing. The joint pocket of supporting resources could cover some UX or other charges and facilitate the creation of the needed infrastructure. Moreover, other issues could be addressed using this pocket,

maximizing the efficiency of local efforts. The importance of multi-sensory pool architecture for addressing local needs could be stressed again.

With rapid technological innovations, new electronic digital archiving methods and innovative search algorithms are creating new opportunities in online library systems. Common Web standards and commercial off-the-shelf software/hardware are creating a robust marketplace for Web-based library systems. Search methods more attuned to users' search strategies and truly collaborative collections of electronic materials could begin to make a difference how widely and thoroughly. Issues and problems likely to emerge in creating and maintaining such systems have been largely overlooked and now deserve serious consideration (Mr & Mr, 2018). Experiences in launching Web-based library systems are reported, noting how emergent systems both met expectations and took unexpected directions. Centralization, on the one hand, and an emerging empowerment of individual libraries, on the other, are two trends. Noting the tensions, a set of hypotheses is posited on what steps would promote more effective service development and utilization (Odilov et al., 2024).

As a nation with a rich culture and traditions, Uzbekistan has a wealth of cultural materials that deserve to be studied. However, such study has been hampered by political events in the last decade. The internet offers new ways to re-unite and study cultural materials previously dispersed in widely different locations, but unless cultural materials in Uzbekistan and Asia are included in this effort their study will become increasingly journal/circulation. Unless Asian/Uzbek libraries do more to provide access to these materials, the study of Asian/Uzbek culture will shortly become the exclusive domain of the few scholars with access to large traditional libraries/circulation. The development of local area networks combined with the widespread availability and low cost of internet connections is creating a new opportunity for libraries in Uzbekistan to provide wider access to cultural materials in their holdings and specifically those in the Uzbek language. The lack of widely available resources for providing information access in the Uzbek language is an impediment to this effort. However, the rapid spread of the use of the internet in Uzbekistan can also provide the incentive to overcome these difficulties.

Essentially, the sustainability and relevancy of an online library in the broader community context can only be ensured by cooperation between different libraries and virtual organizations, i.e., by creating a service network. This service network in its part should contain a comprehensive information resource system for libraries, scholars and the general public, as well as a long-term sustainable financing strategy for covering the costs of resource creation and management, without which even the best online libraries can currently be just a 'virtual mirage'. Such information resources can only be created through cooperation between national or regional libraries, archives and museums, and can cover the needs of thousands of scholars across the world

(Khaydarova et al., 2024). Likewise, common, interoperable standards and a strategy for the preservation of digitalized materials in the long-term perspective should be adopted by the collaborating institutions. The former can be ensured by joining initiatives such as 'RLG,' 'NPO,' 'CENL,' 'EDC' or 'CALIMERA' and the latter through membership in organizations such as FADGI or the International Centre for Archival Research (ICARUS) and through promoting the decentralization of responsibility for electronic documents (Gaetz, 2009). The importance of Uzbek online resources created through cooperation among libraries on an international level is best illustrated by some current successful examples encountered when preparing this study, such as the Online Programming for All Libraries (OPAL), the Latin American Online Library (LAOL), the Central and East European Online Library (CEEOL) and online libraries for establishing and promoting regional cooperation initially formed within the Council of Europe framework, focusing on the archives of the 'archived countries' (Kulakova et al., 2015).

As a result of having joined the worldwide database discussing such issues as ad hoc priority areas for access to information, the digital divide, e-commerce, etc., a number of new purpose-based surveys, studies and projects have been conducted and provided, such as a survey of online access to public libraries in Asia Pacific countries, the digitalization of public library books in the region, a project on Standardization, cataloging and other data concerning the works of Asian artists residing in Europe, a project pertaining to the creation of an information infrastructure in public libraries, as well as development plans and lists of imaginative cooperative initiatives urgently needed in the region libraries at different service levels and focusing on different libraries (e.g., in aquaculture, marine and oceanic sciences, women's studies, the academy of sciences, etc.). Subsequently, interests and abilities of different member organizations can be determined, as well as priorities for cooperative initiatives, mutually beneficial needs and programs, and joint success stories, and expectations clarified.

VIII. CONCLUSION

Online libraries have played a significant role in advancing the study of Uzbek culture. They have expanded access to diverse sources of information and materials, created online resources with public access, provided educational opportunities, and aided distance learning. They have also encouraged international collaboration and the exchange of cultural knowledge, contributing to the study of UNESCO cultural heritage.

Uzbek online libraries include the National Library of Uzbekistan named after Alisher Navoi, the Uzbek Academy of Sciences, the National University of Uzbekistan, and Abu Rayhan Beruni Institute of Oriental Studies, among others. However, there are still challenges to be addressed, such as lack of awareness of services, retrieval difficulties, and connectivity issues.

It is essential to assist cultural institutions in developing national web pages and online libraries, to create a culture of documenting and archiving, and to establish training and awareness programs to improve the supply of locally developed content.

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