

Literature Survey and Analysis of Digital Humanities and Libraries in Recent Years

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ABSTRACT

The term “Digital Humanities (DH)” suggests a sub-field of the humanities that makes the ideal utilisation of digital media, as well as the practices and instructions that are naturally associated with it, to explore a broad spectrum of topics. This sub-field is fast developing an increasingly significant sphere of academic research. The conversion to digital has brought about a considerable transformation to several underlying library services, and one of the most fundamental examples of a field where a basic foundation of digital skills can be used to promote the development of an emerging discipline is the field of digital humanities. In the past, only a few studies on digital humanities were conducted. There was a disparity in the amount of research done on the role of librarians concerning digital humanities libraries. This article presents a comprehensive review of previous literature on “Digital Humanities and Libraries,” which included contributions from a diverse range of authors. These factors include the origins and history of DH and libraries, as well as the current state of DH and libraries. The theory and concepts of digital humanities as a field of study are examined, as well as the potential mapping of these theories and concepts to traditional university library collections and services. The research concluded that effective cultural heritage digital initiatives are best carried out through the formation of constructive partnerships between DH scholars and community groups.

Keywords: Digital humanities; Library services; Digital library; ICT

1. INTRODUCTION

The study of humanities and libraries has conventionally shared linkages with the libraries. The libraries and the humanities are in their manner charged with the responsibility of collecting, organising, and maintaining collective memory as a whole. They are required to assist in bringing the past to the fore and obtaining a profound comprehension and building a detailed plan. Apart from this responsibility, they are together passing through a considerably complex phase in which their value is being dubbed with a question mark by disparagers from the outside. There is a substantial opportunity for captivating the latest relationships to come up between humanities and the libraries emerging as a direct outcome of the present simultaneous times of technological advancement.¹ In the university libraries, several mammoth digital collections on a huge scale are also conventionally linked with the sciences; nevertheless, enormous and escalating collections of digitised cultural artifacts are facilitating

the latest levels of knowledge in the field of humanities. More than three decades in the past, researchers were required to visit the library regularly so that they could inspect certain objects such as the original notebooks. In the present age, academics could study this kind of visualisation by accessing the project online rather than the library rather than visiting the library.² New theoretical frameworks are developed through collaboration amongst linguists, historians, musicians, media specialists, computer scientists, information theorists, and scholars in the digital humanities. However, the scope has recently expanded to include machine learning, data science, and artificial intelligence, all of which are often associated with the engineering domain. Actually, digital humanists predicted ahead of time that computers would become increasingly important to study in the humanities.

2. OBJECTIVES

This research is conducted to fulfill below mentioned objectives:

- To review the literature that was published earlier in digital humanities and libraries in the year 2015-2023.

- To analyse the content of selected literature in terms of history and current digital humanities and libraries published in the year of 2015-2023.
- To analyse and recognise the published literature on 'digital humanities and libraries' in terms of different country wise, subject wise and document wise.

3. LIMITATIONS

The study is focused simply on the select literature on "Digital Humanities and Libraries" published after 2015 in various forms and countries. Literature identify and analysed in terms of different country wise, subject wise, year wise and document wise only.

4. INCEPTION AND HISTORY OF DIGITAL HUMANITIES AND THE LIBRARIES

Sacco, K.L.³ outlined the process by which the Kansas State University (K-State) developed and began offering its new introduction to digital humanities class. The course was designed by the professor, who is on track for tenure and whose areas of expertise include literature and digital humanities. As a result, drawing attention to K-extensive State's facilities and scholarly offerings.

Nyhan, J., *et al.*⁴ established that the history of computers in the humanities is a nearly unexplored territory for research, proving that this is an area of interest. According to the findings of the study, this omission must be corrected as quickly as possible to compete with the evolutionary model of advancement that is now used in this sector. The study discussed in detail the history and methodology of oral history as it related to the "Hidden Histories" pilot project. The project's five oral history interviews were published in the issue of "Digital Humanities Quarterly," which coincided with the study's completion.

Prescott, A.⁵ stated the importance of organisational and financial mechanisms in deciding the scope and organisation of digital humanities projects. The study looked at the evolution of these facilities and ranked their relative strengths and weaknesses as a whole. The digital humanities center has been widely praised for its role in advancing the field's initial wave, however, critics have pointed out various critical flaws, such as its lack of long-term financial viability and prospects for professional advancement for its employees.

White, J. W. and Gilbert, H.⁶ conducted a survey and analysis of libraries participation in digital humanities study. The research was thorough and interesting, presenting notions and case studies that were bound to enliven the discussion of the dynamics that shape and govern the usage of digital collections. It was concluded from the research that libraries, both offline and online, are essential and integral to research in these emerging academic disciplines. Based on the results, it is clear that this innovative and persuasive evaluation is crucial for library and digital humanities professionals.

Wong, S.H.R.⁷ acknowledged that one of the digital humanities' most important principles is working together. Individual academics with an emphasis on a certain area, teams of scholars from several fields, computer scientists, and digital humanities institutions are all possible participants in a digital humanities collaboration. The study shows that libraries have their own set of advantages that put them in a good position to make contributions to the field of digital humanities.

Burns, J.A.⁸ asserted that the advent of the web has sped up the process of the topic matter and online platform convergence. The development and distribution of digital humanities content for research, instruction, and study has had an impact on archivists, IT developers, and librarians in the modern academic library. The study's recommendations centered on the significance of information professionals' abilities and the roles they play in the creation and dissemination of digital humanities materials used in today's academic institutions' research, classrooms, and libraries.

Nyhan, J. & Flinn, A.⁹ proposed the concept of "Digital Humanities" (DH) and provided an overview of its evolution since around 1949. It demonstrated that the application of computers to cultural heritage has been ongoing for approximately 70 years, even though the histories of DH were largely unwritten until recently. Following an examination of some of the unique challenges that arise during the process of attempting to create such histories, the methodology used in this book's research was detailed and outlined.

Smiley, B. & Rodriguez, M.¹⁰ the presentation provided an overview of DH as a field of study and investigated the philosophical and institutional relationships between the field and libraries. The theory and concepts of digital humanities as a field of investigation are examined, together with the potential mapping of these theories and concepts to the traditional collections and services of university libraries. Afterward, most of the study was devoted to discussing the specifics of the work being done in these areas by university libraries and librarians, as well as the problems and solutions that have arisen as a result of this work.

Sula, C.A. & Hill, H.¹¹ demonstrated exactly how the first two digital humanities magazines, got their starts, tracing the genesis of the discipline through the mediums and academic foci of its founding contributors. There was a total of 1,334 papers included in the study, drawn from the journals "Computing and the Humanities (1966-2004)" and "Literary & Linguistic Computing (1986-2004)." The range of annual articles published ranges from 6 to 50, with the higher end coming from a 1994/1995 double issue of CHum that was included as 1995 in the study due to copyright issues. This is because the average annual article count varies. The research also presented relative percentages in situations when the two journals are compared; this is because, given their years of coverage, CHum has roughly twice as many total articles as LLC.

Poole, A. H.¹² analysed the most urgent problems and intense arguments in the young but rapidly expanding area of digital humanities. The conventional fields of humanities and “Information and Library Science” promise to promote tremendously from digital humanities. The study’s goal was to map out the boundaries of digital humanities and address issues, such as its organisational structure and philosophical foundations.

Johnston, P.¹³ examined the implications of the value and the procedures used to assess them in the field of DH. The study categorically stated that it is misleading to focus on value creation exclusively from the perspective of the final consumer since the value is also created during the process of production. The study used the relevant data collected from online activities to argue that one should be more mindful about the information one share online and less dogmatic about the contradictory “curated vs. open” options that have been proposed. According to the results, the ethics discussion surrounding digital distribution is not concluded, rather a part of an iterative, dynamic, and relational cycle of participation remains.

Lucky, S. & Harkema, C.¹⁴ presented a plan for how academic libraries can assist in DH studies by leveraging their existing strengths to facilitate the preservation and accessibility of cultural heritage collections, as well as the creation of physical and virtual spaces for researchers and communities to collaborate. The study provided recommendations for how research libraries might make use of their current knowledge and resources. The research concluded that effective cultural heritage digital initiatives are best undertaken through the formation of constructive partnerships between DH scholars and community groups.

Gref, M., *et al.*¹⁵ The technique for using and improving the quality of the Fraunhofer IAIS Audio Mining system’s transcription and indexing of Oral History interviews for use in Digital Humanities Research was explained. The main purpose of the research was to discover a method to use cutting-edge automatic speech recognition technology to move around these problems. The word ‘mistake rate’ was reduced by 28.3 % when compared to the current baseline system, and this was accomplished with only 1/8th of the training data previously required. In the framework of these studies, new avenues for oral history research using audio mining were revealed.

Barbuti, N.¹⁶ concentrated on the requirement of rethinking digital and the digitalisation process for long-term digital preservation, to redefine them as the new cultural heritage of the current period. To fully appreciate the benefits of digitisation and dematerialisation, an individual must adopt a strategy that prioritises the protection of data and, in this context, the importance of descriptive metadata. The group’s efforts to digitise the “Historical Archive of the Giuseppe Laterza & Publishing House” provided the groundwork for the lawsuit.

Sula, C. A. & Hill, H. V.¹⁷ claimed that “1946 with Roberto Busa’s intentions for the Index Thomisticus, a

major endeavor to record approximately 11 million words of Thomas Aquinas’ writings on IBM punch cards,” was the beginning of DH in the field of computerised analysis of the text. The utilisation of thoroughly examining the formats used, the educational backgrounds of the authors, and the roles they played in the classroom, the study offered an empirical account of the development of DH. The study looked at how much emphasis was placed on text analysis in early DH work.

Kasten-Mutkus, K., *et al.*¹⁸ highlighted that academic libraries have a vital part to play in promoting digital humanities initiatives in their local communities. Open Mic nights are hosted at the “Stony Brook University Libraries” by librarians for the benefit of digital humanities scholars, faculty members, and students attending the university. The libraries were able to learn more about the digital humanities community at Stony Brook and the methods in which they interacted with one another, thanks to the Open Mic.

Webster, J. W.¹⁹ explored how information professionals viewed their position in the work of digital humanities researchers. The study provided a large-scale evaluation of collaborations based on survey responses from over 500 academics, librarians, and archivists, whereas previous scholarly literature explored partnerships between these groups through surveys or interviews with small project teams. It was determined whether IPs had begun to adapt and familiarise their work to support DH projects or to make their content more appealing and convenient for potential future DH projects.

El Khatib, R., *et al.*²⁰ emphasised that the shapes of academic institutions, laboratories, institutes, and other study places and spaces, including those of the “digital humanities (DH),” were changing as the academic landscape became more “open” plain. The study, which was conducted through C-SKI, investigated the several techniques in which communities may be more broadly engaged in publicly supported humanities scholarships.

Wang, X., *et al.*²¹ observed that during the past decade, “digital humanities (DH)” has grown exponentially in China as a field of study, attracting researchers from across the country and the world. The study used historical analysis and bibliometrics to uncover the origins and evolution of DH in China, providing a comprehensive examination of the field’s growth and current state of scholarship.

Burrows, S. & Roe, G.²² examined the method through which a web of connected digital initiatives is altering the understanding of the Enlightenment. The initiatives highlighted are some of the most prominent, well-funded, and long-standing research initiatives in the emerging field of “digital humanities,” which has piqued the interest of scholarly institutions, the media, funding councils, and the general public worldwide, particularly since 2010.

Luca, E.W.D. & Scheel, C.²³ stated that the “Georg Eckert Institute (GEI)” for international textbook research was a non-university research institution that supported and promoted basic research into educational materials from the perceptions of history and culture. The GEI’s

widely reputed research library and other specialised digital information services were made available for this purpose. As a result, the institution built and now oversees a social as well as a digital research infrastructure. As a result, the GEI has established itself as a leader in the textbook study across the world.

Bell, E.C. & Kennan, M.A.²⁴ assessed the literature on “Digital Humanities” (DH) librarianship, laying a deep emphasis on the prospective responsibilities of academic librarians in Australia. Critical librarianship offers a framework for a variety of jobs in the field. This structure also promoted greater inclusivity and accessibility in DH research. These functions are usually associated with the DH’s theoretical and critical reinforcements. The production of knowledge was one of the primary focuses as opposed to service delivery in the library.

Burrows, S. & Falk, M.²⁵ stated a classification, an overview, and an evaluation of the current state of “Digital Humanities (DH),” Particularly in terms of its actual and potential relevance to literary studies. The study examined the most persuasive criticisms leveled against digital humanities, specifically from North American literary scholars, and provided a historical overview of humanities computing and digital humanities, including its development as a field, institutional growth, and the unresolved trials that it faces.

5. CURRENT SITUATION OF DIGITAL HUMANITIES AND LIBRARIES

Elliott, C., *et al.*²⁶ noted that the responsibilities of librarians towards teachers and students in the digital humanities flow easily from Other responsibilities including liaisons, topic specialists, curators, and digital collections specialists. The authors of the study based on the conclusions suggested that librarians adopt a “digital humanities state of mind” to participate in a far better manner in and promote this field. The purpose of this study was to learn more about librarians’ involvement in digital humanities projects, how some libraries work together on digital humanities initiatives at their institutions, as well as the importance of conducting an environmental scan and needs assessment to learn more about the digital humanities scholars working within one’s organisation.

Pun, R.²⁷ designed a framework for incorporating “digital humanities” (DH) initiatives into libraries’ existing educational service offerings. The study used digital initiatives “New York Public Library (NYPL)” to illustrate how librarians may innovate with digital resources to educate patrons in areas, such as data analysis and management. The investigation was to look into three digital projects developed by NYPL and highlight how they can be incorporated into instructional services. Though the study merely touched on the potential of such amalgamations, the principles presented here applied to any library.

Bakkalbasi, N., *et al.*²⁸ explained in detail how a test plan could work for the evolving library science

curriculum. To support the digital humanities there is a requirement for innovative skills and methodologies, which can be attained through a two-year training program designed by and for librarians and professional employees in the humanities and history division.

Hoeve, C., *et al.*²⁹ addressed the creation and first iteration of Kansas State University’s DH A tenured professor with expertise in both digital humanities and the literature of the British Romantic period is responsible for creating the course. This semester, the lecturer and students collaborated extensively from public services to technical services to special collections, with librarians from across the library. Consequently, four digital projects were developed that showcased K-resources State’s and research interests innovatively and sustainably.

McFall, L.M.³⁰ found that a large number of professors and students are astounded when they become aware of the diverse set of talents that metadata and catalog librarians possess, all of which may be beneficial to their digital humanities initiatives. The “Hamilton College Metadata and Catalog Librarian with the Digital Humanities Initiative (DHI)” case study were used to illustrating how to integrate yourself into digital humanities work on campus.

Coble, Z.³¹ outlined the knowledge, background, and experience required to begin working with digital humanities in library settings. Following the study examined six sets of competencies essential for digital humanities librarians as an introduction to a large number of digital humanities research. It was emphasised that one might become a more well-rounded librarian by learning the abilities included in the digital humanities librarian’s toolkit and that these skills are transferable and can be obtained through initiatives unrelated to digital humanities.

Poremski, M.D.³² elaborated that for academic librarians to effectively serve their patrons, they must have a firm grasp of the ever-evolving field of digital humanities librarianship. The study investigated how library and information science professionals working in digital humanities entered their respective professions, and the training they received.

Harvell, J. & Ball, J.³³ realised that academic libraries should cultivate strong, mutually beneficial partnerships with academics in digital humanities and, thus, prioritize spending time and money researching ideas and engaging with academic colleagues on initiatives. It detailed how the partnership had an effect, Influencing internal working practices and culture, participating in research bids, guiding the creation of new services, and responding to library issues using digital humanities approaches are examples of such responsibilities. It specifically demonstrated the librarian’s unique role as an active participant in the research process.

Earley-Spadoni, T.³⁴ suggested that scientifically oriented archaeology may benefit from the use of geolocation technologies due to how they are reshaping the digital humanities. Tools like ArcGIS make it easier for digital humanists to do spatially oriented research, and there

has been a recent multi-disciplinary coming together on theoretical models that think of space as socially produced, both of which contribute to the “spatial shift” among digital humanists.

Wang, Q.³⁵ conducted a complete backward bibliometric study of texts related to the growing yet multi-disciplinary field of digital humanities. Research outputs and languages were analysed, along with the most prolific journals, academic centers, and research themes, and the relationships between these elements were deduced. All of the raw numbers came from the excellent “Web of Science (WoS)” database as two of the most well-known visualisation tools, VOSViewer and Cited Space, To display the full scope of this area, the bibliographic data, which included author, category, reference, and keyword, was processed.

Wang, Y.³⁶ discovered that “Digital Humanities” (DH) has emerged as a new sub-field of library science due to the combination of historical humanities inquiry with cutting-edge digital tools. The library at Jiangnan University may choose to implement some of the strategies outlined in the study to improve the quality of its Digital Humanities offerings.

Fodor, J. & Kiszl, P.³⁷ discovered that most IT work includes developing new content delivery systems and writing code for database integration, querying, and complicated web infrastructure. With this context in mind, the study described (1) content production projects, (2) experimental research projects, and (3) collaborative projects designed to improve trainee librarians’ interdisciplinary competence. The study also emphasised how the institute’s Graduation and Post-Graduation degree programs in several disciplines use project findings.

Giannetti, F.³⁸ recommended the reading of text encoding initiatives as a way into both critical library pedagogy, and digital humanities approach, especially those that place on lesser-known artists or live materials like letters. these projects can be accomplished on a smaller scale by reusing and adapting digital humanities community-shared methods and software, requiring less assistance from institutional partners in terms of technology and infrastructure, which may not be available in low-resource institutional settings.

Powell, S. & Kong, N. N.³⁹ examined how librarians might contribute to library goals by teaching intensive one-week courses, a frequent workshop format in “digital humanities (DH),” and how they may do so in a way that is both worthwhile to the DH community and effective. Library classes often take one of two formats: either a one-time session or an ongoing credit course. Case studies of “Geographic Information Systems” instruction at the University of California, Berkeley, and Purdue University’s DH institutes were examined to examine librarian involvement, course topics, pedagogy, and library services. The study discovered that intensive instruction workshops provide a good future foundation for library participation in DH based on the instructors’ experiences teaching at DH summer institutes and student surveys.

Mourer, M.⁴⁰ as academic libraries change to accommodate digital humanities work, topic Before colleagues with digital humanities knowledge arrive at their university, librarians may find themselves teaching in this new pedagogical setting. The study resulted in the creation of a useful instructional strategy tailored specifically for the role of the subject librarian in the process of organising, teaching, and assessing a curriculum that included a significant amount of digital humanities content.

Su, F., *et al.*⁴¹ In the “digital humanities (DH)” study, researchers used social network analysis and visualisation technologies to investigate the framework, patterns, and overarching themes of multidisciplinary partnerships. The sample consisted of articles from the Web of Science Core Collection that featured DH research near the end of 2018. While many interdisciplinary involved in DH research are growing, the majority of interdisciplinary efforts are focused on a small number of fields, namely CSE, LIS, linguistics, and literature.

Griffin, M. & Taylor, T.I.⁴² glanced at the manner colleges without a dedicated library center for the “digital humanities” may effectively assist DH-related teaching and learning at the undergraduate level. The study presented a case study that illustrated how embedded librarianship models might be incorporated into a DH-centric undergraduate course in place of the “traditional” librarian liaison roles and “one-shot” training sessions that many instructors still prefer.

Risam, R., *et al.*⁴³ investigated efforts at Salem State’s Berry Library to create a network for the study of digital humanities. First, the basis was laid for a DH center; second, and Third, an internship program for undergraduates was launched to explore ethically sound methods of creating new research opportunities for them.

Toscano, M., *et al.*⁴⁴ provided the most recent picture of the state of digital humanities in Spain in terms of its researchers and research centers, disciplines represented, research topics of interest, trends in the development of digital resources, major funding bodies, and the evolution of their investment since the early 1990s. It turned out that a hitherto untapped area of study in the Humanities - the quantitative analysis of financing - was a wonderful approach to evaluate the development of the field and its significance over time. The study concluded with a series of suggestions on how to focus on problems that threaten the continued growth of the study field and the contribution that Spanish scholars may make internationally.

Logsdon, A., *et al.*⁴⁵ argued that librarians are in a special position to contribute to digital humanities because of the (transitional status in the academic world (DH). The study argued for new and different responsibilities for librarians in DH by staking a claim to knowledge and making apparent labor that is frequently invisible. The analysis of the study uses a dialogic method that is predicated on the exchanges between them.

Shen, W., *et al.*⁴⁶ studied the approaches that are used by digital humanists in Chinese libraries, paying special attention to the ones that provide successful application

outcomes in (DH). Primarily, the study selected three Chinese libraries for a case study based on research into human databases created by Chinese libraries and the analysis of information collected from 152 libraries. As a result of the efforts that have been put in by several Chinese libraries to improve DH, there have been some accomplishments achieved, yet with these achievements come certain obstacles.

Kicey, M. & Clemons, J.⁴⁷ underlined that several critics have opined that libraries were the birthplace of the “digital humanities (DH)” movement, and they remain at the center of the field’s evolution to this day. the study has witnessed the incorporation of relatively simple and frequently free digital technologies, such as linked data functionality and data visualisations, into the emerging field of electronic reading. Libraries are in a prime position to promote big improvements to the reading experience as digital screen reading becomes the norm.

Alvite-Díez, M.L. & Barrionuevo, L.⁴⁸ This study was based on a systematic review of scientific papers published between 2013 and 2018 that were representative of DH in Spain. Doctoral theses, journal articles, and conference papers were all included in the scope of the review. The findings revealed connections between archival research, as well as a lack of institutional interaction between legacy institutions and academic sectors that repurpose and expand these sources of information.

Zhang, Y., *et al.*⁴⁹ The study looked closely at the skills and education listed in DH-related job postings to see where they stand right now. Between November 2006 and April 2018, 72 unique job postings were culled from the American Library Association Job LIST. The clusters of responsibilities and requirements were analysed using SCI2, VOSViewer, and PAJEK. The study’s findings, which were aimed at meeting the field’s demands, provided insights into practical applications for DH-related education and training.

Zhang, Y., *et al.*⁵⁰ presented a case study of a global digital humanities initiative in which academic librarians, IT professionals, and academics collaborated. The study resulted in the creation and distribution of two freely available resources: a bilingual dictionary of historical government official titles and an internet-hosted translation crowd sourcing platform. Throughout this process, the study has worn many hats, including project manager, hybrid scholar, content developer, and even publisher.

Yao, W. and Xiao, P.⁵¹ mentioned that a variety of “digital humanities (DH)” methodologies are gradually being integrated into higher education curricula. By conducting semi-structured interviews with eight librarians from four universities, watching their actual work, and studying the libraries’ websites, the study examined librarians’ grasp of digital humanities (DH) pedagogy and their understanding of the role of “DH librarian”. The results show that an ideal DH pedagogy practice calls for balanced cooperation, a distinct framework, a closer bond, sufficient investment in human and technological resources, and a high regard for non-book study.

6. RESEARCH METHODOLOGY

The quoted study presupposes that the investigator would refer to the publications that are most relevant to their investigation. Recognising the introduction of digital humanities in libraries was the first step in understanding the correlation between digital humanities and libraries in recent years. The Scopus database was selected as a reliable source for quotation data retrieval. Knowing the interaction of digital humanities and libraries is among the most important objective. This is necessary because, although the word “Digital Humanities”, “Digital Library” and “Library Services” is frequently used, it is interpreted in various contexts. The search yielded 133 papers, which we used in the study from 2023 to 2015. In total, three fields from each record were searched by the WOS: (1) Author’s name, (2) Journal Name in which the article was recorded, (3) Total citations. The data were analysed and interpreted through these approaches for data triangulation to gain a multi-dimensional perspective and increase the validity of the research. For the analysis and synthesis, data was collected through Scopus and retrieved in terms of keywords, titles, and abstracts were clustered and mapped according to their relatedness in a similarity matrix. SCOPUS was used as a source for this study literature review. As a result of the term searched i.e., “Digital humanities”- 4375, “Digital humanities + Libraries”- 649, “Role of Librarian + Digital humanities - 2” “Digital humanities + library services”- 23 and “Future of digital humanities”- 1 were found. The author discovered the above-mentioned information. For the study, only a few articles were chosen.

7. FINDINGS

Through Table 1, it can be concluded that for analysing the literature reviews the documents are chosen from a specific time frame, i.e., 2015 - 2023, in which mostly the documents are published from the year 2017.

Through Table 2, it can conclude that 51 documents were from the United States, 15 from China, 13 from the United Kingdom, 9 from Finland, 8 from Italy, 7 from Germany, 4 from France and Switzerland, 3 from Canada, 2 from Australia, Bulgaria, Poland, Spain, and the

Table 1. Documents published in Years (2015-2023)

Year	Documents published
2023	1
2022	11
2021	14
2020	12
2019	21
2018	19
2017	22
2016	16
2015	17

Table 2. Documents published in different countries

Country/Territory	Documents published	Country/Territory	Documents published	Country/Territory	Documents published
United States	51	Poland	2	Norway	1
China	15	Spain	2	Pakistan	1
United Kingdom	13	United Arab Emirates	2	Portugal	1
Finland	9	Brazil	1	Saudi Arabia	1
Italy	8	Denmark	1	Serbia	1
Germany	7	Greece	1	Slovenia	1
France	4	India	1	South Africa	1
Switzerland	4	Jordan	1	South Korea	1
Canada	3	Kenya	1	Sweden	1
Australia	2	Lesotho	1	Turkey	1
Bulgaria	2	Nigeria	1		

Table 3. Documents published in years (2015-2023)

Document type	Documents published
Article	77
Conference Paper	29
Book Chapter	13
Review	7
Conference Review	4
Book	2
Note	1

Table 4. Subject areas where documents published in years (2015-2023)

Subject area	Documents published
Social Sciences	99
Computer Science	60
Arts and Humanities	26
Mathematics	8
Decision Sciences	3
Engineering	3
Earth and Planetary Sciences	2
Physics and Astronomy	2
Agricultural and Biological Sciences	1
Business, Management, and Accounting	1
Energy	1
Environmental Science	1
Medicine	1
Multidisciplinary	1

United Arab Emirates, and at last 1 from Brazil, Denmark, Greece, India, Jordan, Kenya, Lesotho, Nigeria, Norway, Pakistan, Portugal, Saudi Arabia, Serbia, Slovenia, South Africa, South Korea, Sweden, and Turkey.

Through table 3, it can be concluded that the literature reviews are from various documents i.e., Articles, Conference papers, Book chapters, and Reviews. The analysis consists of 77 Articles, 29 Conference Papers, 13 Book Chapters, 7 Review papers, 4 Conference reviews, 2 Books, and 1 Note.

Through table 4 it can be concluded that the literature reviews are from various subject areas i.e., 99 from Social Sciences, 60 from Computer Science, 26 from Arts and Humanities, 8 from Mathematics, 3 each is from Decision Sciences and Engineering, 2 is from Earth and Planetary Sciences and Physics and Astronomy, and 1 each from Agricultural and Biological Sciences, Business, Management, and Accounting, Energy, Environmental Science, Medicine, and Multidisciplinary.

8. CONCLUSION

This paper summarises previous studies and types of literature by a variety of authors who emphasised the function of the librarian and library services as DH. Furthermore, the study approached the problem from three different perspectives. These factors were the inception and history of digital humanities and libraries and the current situation of DH and libraries. This study went on to identify a research gap left by previous studies on digital humanities and libraries. In the modern academic library, research has had an impact on archivists, IT developers, and librarians. The theory and concepts of digital humanities as a field of study are examined, as well as the potential mapping of these theories and concepts to traditional university library collections and services. The study made suggestions for how research libraries could make better use of their current knowledge and

resources. The research concluded that effective cultural heritage digital initiatives are best carried out through the formation of constructive partnerships between DH scholars and community groups.

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