
Guest editorial: Special issue after Covid-19: digital libraries leading digital transformation

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417

This Special Issue examines the link between digital transformation and libraries under the “new normal” after the COVID-19 pandemic, which highlights the importance of a scientific knowledge base to support improved services and the effects of shaping libraries’ digital future. This Special Issue then contributes also to the development of a research agenda on the digital transformation of digital libraries, because its emergence stimulates the cumulativeness of research in the multiple domains of digital libraries.

During the lockdown phase, the digital library community was pushed to go beyond simple access to digital resources, including the needs of a virtual community, maintaining interactive communication to avoid the feeling of isolation, even engaging in activities with children and young people, facilitating the learning and teaching of both students and teachers engaged in distance learning. To meet the growing needs of library users and researchers accessing online-only services, all types of libraries have faced a steep learning curve to implement three phases: digitization, digitalization and digital transformation (Verhoef *et al.*, 2021).

Digitization is the encoding of analog information into a digital format (i.e. zeros and ones) so that computers can store, process and transmit such information. Digitization also refers to the digitalization of services such as the shift from in-person to online services. Typically, the definition of a digital library is limited to this step, i.e. the conversion of content and documentation processes into digital format, but this does not change the value creation of the digital library for communities.

Digitalization describes how digital technologies can be used to change existing organizational processes. Such a change often involves the building of new sociotechnical structures with the production of digital artifacts and services, which would not be possible without digital technologies. Through digitalization, libraries apply digital technologies to optimize existing processes and organization, allowing for more efficient coordination and/or creating additional value for communities by improving user experiences. In digitalization, technology acts as a key factor to modify the existing internal organization experimenting with new service possibilities. Therefore, digitalization does not only focus on effectiveness but also includes process improvements and new services.

Digital transformation is the most pervasive phase and describes a change at an organizational level both internal and external to the library, reorganizing processes to change the logic of the function. Furthermore, digital transformation uses digital technologies to enable cross-border interactions with stakeholders, such as suppliers, publishers and communities, transforming the organization by building the digital asset of the digital library.

As guest editors of this Special Issue we have selected 12 papers, among those presented in response to the Call for papers “After COVID-19: digital libraries leading digital transformation,” released by Digital library perspectives in 2022, and others presented as contributions to regular issues of the journal. The 12 papers in this Special Issue together represent a continuum toward the digital transformation of libraries and digital libraries globally. The vision of the digital library in different geographical areas, including Italy, India, Bangladesh, Pakistan, Caribbean, Philippines and South Africa, highlights growing expectations of the digital libraries accelerating the digital transformation:



- (1) In the first paper, “Are library professionals overcoming the Covid-19 pandemic challenges in the current reality?,” by Syeda Mukta Begum and Umme Habiba from Bangladesh, they investigate the impacts of the COVID-19 pandemic on digital services and organization. Despite budget scarcity and inadequate infrastructure, some libraries took the initiative to establish institutional repositories and the staff to make them available working from home.
- (2) Carla Savarè contributed “How the digital library of Università degli studi di Milano has faced the pandemic crisis: a case study,” which discusses the case of the Università degli studi di Milano with a new focus on users’ behavior, on the changes in the organizational workflow to make it less hierarchical and for creating a closer connection with the stakeholders.
- (3) In “Classifying innovation in Indonesian public libraries,” Dyah Puspitasari Srirahayu, Dessy Harisanty and Esti Putri Anugrah from Indonesia analyze the websites investigating innovation in public libraries and their mission. Innovation aims to achieve increased performance, community empowerment, better accessibility of information and improved literacy of the communities.
- (4) Sujood, Samiha Siddiqui, Sehar Nafees and Naseem Bano contributed “User’s intention towards the use of digital libraries: A post COVID-19,” in which they predict users’ attitudes toward digital services and digital resources available in the post-COVID-19 period.
- (5) In “The status quo of Indian data repositories indexed in re3data registry,” S.N. Archana and P.K. Padmakumar evidence that only 80% of the Indian research data registries listed by re3data.org are currently active, and the data provided is not complete and up-to-date.
- (6) Oghenere Salubi and Ndakasharwa Muchaonyerwa contributed “Postgraduate students’ internet use and prevalence of internet addiction: what roles can librarians play post Covid-19?,” in which they assess postgraduate students’ information-seeking behavior and recommend the kind of support role that librarians could provide.
- (7) In “Usage of digital library services during COVID-19 pandemic: a study of Indian Institutes of Management (IIMs),” Anam Jamal Ansari and Naushad Ali PM describe how the pandemic has affected every aspect of life and changed the digital library services scenario.
- (8) Mapheto J. Mamabolo and Oluwole Olumide Durodolu contributed “Rural accessibility to digital libraries: requirements and challenges,” in which they advocate for the establishment of digital libraries in rural areas. Transformative policies have to be taken and, where possible, revisit the organization toward new ways of providing digital services to communities.
- (9) In “Pandemic narratives of library and information centers in Baguio-Benguet,” Daniel Jr Soriano Balbin and Elizabeth Allan Lascano determine the extent of COVID-19’s impact on the Philippines libraries. They reflect on the challenges evidence, such as lack of a written policy for the pandemic response, weak ICT skills, misinformation and users’ lack of awareness of the new services offered by the library.
- (10) Murtaza Ashiq, Shafiq Ur Rehman, Ammara Yousaf and Muhammad Safdar contributed “Exploring the use of mobile technologies for learning: an empirical study of library and information science (LIS) students,” in which they explore the transformational impact of mobile learning on the perceptions of library and

information science students. Students' perceptions are analyzed with their primary objectives, social media applications, advantages and disadvantages, barriers and overall satisfaction with using these devices.

- (11) In “#SuperLibrarian – the evolving role of librarians in technology spaces,” Petronetta Pierre-Robertson discusses the changing roles of librarians in the constantly developing technological environment and demonstrates how librarians can combine information resources, technology and research assistance in digital libraries. It also includes an exploration on how technology extends librarians' role, with a specific reference to the use of ChatGPT.
- (12) Hanlie Baudin and Patrick Mapulanga contributed “A qualitative assessment of the eResearch Knowledge Centre's support practices in the Human Sciences Research Council in Pretoria, South Africa,” in which they assess the research support practices available at eResearch Knowledge Centre and argue that research support is rare in South Africa and most parts of the world.

All 12 papers are research articles and we want to highlight the research methods they have adopted. This Special Issue has in fact the possibility of contributing to research on digital libraries and offers itself as a source of inspiration also for research methods, not only for contents. The most used method is the survey, used by 58% of the authors. The survey was considered the most suitable method to understand users' behavior toward digital libraries (students and teachers) and also to assess librarians' perceptions in the face of the challenges posed by change and digital transformation. The second most used method (25%) was content analysis, which was used to describe the contents of websites and social media. Finally, the case study was used for describing experiences during lockdowns:

Q1. What have we learned during the pandemic on our journey to digital transformation?

The papers in this Special Issue highlight that digital transformation does not occur in response to changes in digital technologies, but to the behavioral changes of communities and the consequent change in internal organizations. Most of the papers in this Special Issue evidence that organizations must develop more agile and less bureaucratic structures. Digital libraries are leading the digital transformation only in complex ecosystems, such as e-learning and e-research environments. Leading digital transformation, innovative digital libraries have initiated cooperation networks and new partnerships. It is important to note that professionals – or Superlibrarians – can obtain a leading role for acquiring or developing new capabilities, not only for digital technologies, but related to social and intercultural skills, which are also important.

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Reference

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