Public Libraries – Hubs for Recovering and Valuing Renewable and Imuable Knowledge

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Abstract

This paper addresses the public libraries evolution from the conservative concept of collective memory repositories to an updated concept, based on the knowledge reusing process, as the basis for knowledge operationalization, including via digital tools. Due to the increasing expansion of technology at all levels of digital literacy, today, libraries have become - by incorporating modern technologies and by applying the premises of the Service Dominant Logic - spaces for and actioning renewable knowledge. The main aim of this paper is to demonstrate the uniqueness of public libraries in driving renewable knowledge and to lead LIS users and specialists to consider these spaces as innovative service ecosystems, part of the process of knowledge reform in general and digital literacy in particular, with the support of technology. Starting from exploring the shared knowledge flows in library spaces, the current paper intends to demonstrate the growing role of libraries as a trigger for change, through the continuous symbiosis between users' needs and modern library services. On the one hand, libraries encompass broad bases of knowledge, skills, networks, resources etc. and allow users explore new areas of knowledge in a participatory and stimulating manner. On the other hand, libraries give users the legitimacy to propose their own value propositions connected to today's increasingly refined digital literacy needs. At the basis of the current article argumentation will stay a sociological research of the Questionnaire type, focus groups and structured interviews with leaders from the public libraries in Romania and Europe.

Keywords: Library Ecosystems, Hubs for Knowledge Sharing, Innovative Services, Knowledge Repositories, Service Dominant Logic, Co-creating and Actioning Renewable Knowledge



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Introduction

Increasingly aware of the importance of activating renewable knowledge flows through libraries, the author aims to explore and substantiate the growing role of these institutions of information, education and culture as a trigger of change, through the continuous harmonization of user needs and services modern library.

Libraries manage and capitalize on complex knowledge bases, cutting-edge skills, access to heterogeneous resources, etc. and allow users to navigate to new horizons of knowledge in a collaborative manner, centered on user needs. Libraries operate with knowledge, heritage assets and open resources that contribute to the lifelong education of heterogeneous categories of users. In the public consciousness, librarians are considered expert information managers, but also experienced facilitators in the process of guiding users in identifying and exploring qualitative information resources.

In the last decades, libraries in Romania have understood to enroll in strategic partnerships with governmental entities, exponents of the NGO environment, but also with business operators active in the sustainable consolidation of library ecosystems at the national level and responsible for the adaptation of communities to the transformation digital is increasingly present in all environments of activity.

LIS professionals from the public library system in Romania have learned the lesson of partnerships and are increasingly convinced that they contribute to a better management of resources, with a considerable impact at the community level. In addition, through partnerships, libraries can ensure a more economical distribution of costs and resources. Thus, the approximately 3000 public libraries in Romania have agreed multi-year partnerships with different social actors: from local and central public administrations, non-profit organizations or educational institutions, to important social actors or business exponents.

The Transformative Impact of Libraries

The libraries in Romania, both through their own management and through the leading professional organizations in the field of training, permanently prepare the professional force of librarian specialists, focusing in a particular way on strengthening their relationship with their social partners, in order to determine a transformative impact on community well-being.

Partnerships are the most cost-effective and efficient approach to increasing impact and empowering public libraries as hubs of collective knowledge. This approach is gaining more and more scope, both in Romania and in other European countries. Many library managers actively involved in the restructuring of the public library system in Romania are of the opinion that the conclusion of agreements and protocols not only facilitates the improvement of relations with the authorities, but also creates the legal and administrative premises for carrying out more substantial collaborative activities with minimal expenses.

Partnerships – Resources for the Sustainable Evolution of Libraries

In the context of public libraries in Romania, partnerships can be found in various forms and configurations, from interlibrary loan contracts, centralized acquisition programs, shared catalogues, consortia alliances for fundraising, project based, support agreements in

campaigns initiated by third parties, involvement in cultural or social activities of community interest and even initiating regional consortia for the sharing and common use, much more judicious, of different categories of resources. The complexity of these partnerships is directly proportional to the creativity and openness to innovation shown by library managers, as well as the diversity of development opportunities available at the local or regional level.

In practical terms, partnerships bring with them tangible benefits in terms of financial and leadership performance, as well as additional resources, attracting and retaining new audience segments, increasing social impact, increasing transparency of activities, determining favorable reactions from decision-makers and, last but not least, the diversification of the range of services made available to users of cultural goods and services who currently access public libraries.

The Public Library – The Solution Bank of the Community

The public library can be involved in a wide range of activities of general interest, including public administration, health, education, leisure, public procurement, tourist information, entertainment, funding opportunities, social protection and community involvement, among others. By tradition, the library is probably the most vital public institution for informing citizens. Here, users have access to documents of various categories in printed or electronic format, can address a number of personal issues, receive guidance in interactions with the authorities, read periodicals, browse the Internet and a host of other services, including more refined, in accordance with the increasingly sophisticated requirements of different audiences.

With an adequate and visionary management, public libraries could be empowered to get involved in solving or improving a good part of the current problems of library users, from the needs of documentation and research for professional or study purposes, to the launch of start-ups, ideas of social reintegration, identifying job offers or accessing agricultural or other subsidies. The public library can also be prepared to provide certain e-government services, such as submitting online declarations, obtaining or submitting authorizations, accessing medical investigations, or electronic payment of some services.

Libraries of the Future or About the Power of the Network and Collaboration

According to the recent evolution at the European level, the library is going through a new stage of development, marked by an eminently community role and centered on the collective interest of the users. It is widely recognized that the library institution serves as a space for social interaction and cultural vitality. However, the role of the library can be much deeper when viewed in the context of community development. Currently, the library is a social binder and an aggregator of community initiatives. The realization of this immense potential of the libraries depends, however, on the visionary spirit of the library managers, as well as of the authorities, of the credit orderers, of the patrons, sponsors and supporters of the public libraries.

From Systems Theory to Innovative Library Services

This research had as its starting point the approach initiated by Paul P. Maglio regarding the theory of service systems, seen as "a configuration of people, technologies and other

resources that interact with other service systems to create mutual value", proposing a personalization and a specific location in the field of public libraries.

This article discussed the abstraction of the library service system in order to understand, at a conceptual level, how value is created, how the library institution intervenes in the process of value creation and who are the main actors in the flow of creation and sharing of assets of knowledge.

To enhance their contribution to the sustainable progress of society, libraries must incorporate modern, technology-based services that encourage innovation and co-creation. A comprehensive process of collective knowledge development must be initiated to facilitate the real empowerment of libraries, achieved by creating new tools to support and cultivate renewable knowledge through service infrastructure, all geared towards the benefit of the general public.

Despite having sporadic and isolated contributions to knowledge creation, libraries are not adequately involved in the knowledge renewal process. Case studies from the field of libraries show that they face challenges when adapting their services to the increasingly demanding demands of modern users.

The SHIFT User Case for Libraries – Inspiration for New Renewable Knowledge Constructs

The continued expansion of web-based knowledge and the unprecedented growth of data volumes, together with robust investigative techniques and statistical data analysis, have revealed a potential for significant transformation in all facets of life. This transformation has given rise to new categories of services within libraries, promising substantial improvements in both the quality and efficiency of services.

Demonstrating the critical utility of libraries in renewable knowledge management and data science, particularly from a Library and Information Science (LIS) perspective, this article outlines the need for a conceptual framework based on S-D Logic and the Service Science Canvas to lay the foundations for more research broad regarding the various processes of collaborative value creation and the promotion of renewable knowledge in libraries.

This approach focuses on a research methodology aimed at creating innovative artifacts, structures, models, methods and their practical applications to address current challenges in the library field. In this sense, the present article uses the use case dedicated to public libraries conceived within the project SHIFT - MetamorphoSis of cultural Heritage Into augmented hypermedia assets For enhanced accessibiliTy and inclusion, the consortium initiative financed under the Horizon 2021-2027 program.

SHIFT partners are committed to developing a suite of technology tools designed to encourage cultural heritage institutions, including libraries and museums, to adopt and integrate the latest technological innovations into their day-to-day operations. The main technologies proposed by the project include areas such as artificial intelligence, machine learning, multimodal data processing, digital content transformation methodologies, semantic representation, linguistic analysis and the use of haptic interfaces to effectively deliver new experiences to a wide audience, including people with disabilities.

Specifically, as a partner within the SHIFT consortium, the National Association of Public Librarians and Libraries in Romania (ANBPR) made available to the technical team a wide base of digital stories that reflect the cultural identity of the ethnic communities in Romania. It is about pre-existing audio-video constructs, which thus gained a new life and a new destiny of use, much more attractive, as part of the renewal process of renewable knowledge.

Based on digital stories used as training resources, technical partners explored the potential of using text-to-speech (TTS) synthesis technology enhanced by language models based on natural language processing (NLP) techniques to create narrative scenarios accessible and emotionally charged, accessible including to vulnerable groups. For many vulnerable groups, such as the visually impaired, access to cultural heritage available in libraries and museums often remains limited due to the language barrier and the lack of compelling emotional narratives. This is why using TTS technology enhanced with NLP models to generate synthetic speech has considerable potential for engaging disabled people in heritage institutions.

In selecting representative digital stories, ANBPR took into account both their relevance to the SHIFT project reference area and their adaptability to be shaped and enriched semantically and emotionally through the proposed technological tools. Starting from the collection of pre-existing digital stories produced by librarians and users of library services in Romania, the technical partners focused mainly on two key aspects:

- the use of NLP natural language processing techniques to model language and create improved and engaging narratives, adapted to the cultural and linguistic context of digital story creators, narrators from Romania;
- the operationalization of the methods and tools by which, based on the pre-existing audio-video files representing the digital stories produced in Romania, to create acoustic correlations of the emotions to be integrated in the voice synthesis to communicate emotions and subtext in the newly created digital narratives.

Conclusion

Knowledge itself has no shelf life. In order not to become obsolete or useless, knowledge elements must be constantly renewed through the interaction between different actors in the knowledge exchange process. To meet the need for constant knowledge updating, people and organizations have an imperative need to invest in a coherent knowledge development process, maintaining a stable balance between process design, product development, skills, values and human factors as recipients of knowledge. According to the knowledge literature, studies have revealed the utility of "combining three resources—material, human, and symbolic—in organizations to enhance knowledge renewal between product and process development (Urso & Vacher, 2004). It is what the intelligent libraries, in their turn, replicate, in their attempt to make the process of renewable knowledge continue for the communities of the future benefit.

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