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AN EMERGING DIGITAL LIBRARY PLATFORM FOR CANADA'S NORTH (Poster)

Abstract: Digital libraries (DLs) play a crucial role in both reducing barriers, such as spatial barriers, and increasing our ability to provide access to content, particularly to remote users with access to the Internet. The proposed work on a digital library for communities in Canada's North is a step in this direction. This poster will provide an overview on the progress and development of a DL and present key findings, including lessons learned during the course of this research work.

Résumé:

1. Introduction

Digital libraries (DLs) are critical in providing access to information and reducing barriers, such as temporal and spatial/geographical barriers (Sloan, 1998), for users, particularly those living in remote communities. For example, users living in communities such as Sachs Harbour, Ulukhaktok and Paulatuk in the Inuvialuit Settlement Region (ISR) of the Northwest Territories (NWT) in Canada's North have limited access to cultural resources. Such content is often only available in other larger communities such as Inuvik, NWT, which are distant from these remote communities and are accessible mainly by air travel.

The development of a community digital library infrastructure is a complex process, drawing on different domains including: understanding users' needs and their information seeking behaviour, technology management (e.g., back-end database and front-end application layers), information organization and retrieval (e.g., metadata schema and search capabilities), intellectual property and digital rights management, artefact preservation and others (Fox and Marchionini, 1998). The current project focuses on developing a DL platform that aims to provide access to content that is important and relevant to the communities in ISR. This poster will report on the progress made on the SSHRC-funded project and share findings from the research done so far.

2. Literature Review

DLs are a technological platform that provides access to not only artefact surrogates but also to actual artefacts digitally that are difficult to represent in print format (Sloan, 1998 p. 118). This domain has been researched from multiple perspectives. For example: Park et al. (2009) and Thong et al. (2002) focused on the use of the Technology Acceptance Model (TAM) (e.g., perceived ease of use) in the DL context; Kilker and Gay (1998) applied the Social Construction of Technology (SCOT) approach to DL development and assessment; Cunningham et al. (2003) conducted an ethnographic study to understand users' search and browsing behaviour to implement search and browsing aspects in a DL; Van House et al. (1996) highlighted the importance of a "user-centred iterative design" approach to DLs (n.p.), and; Shiri (2003) highlighted three importance elements i.e., "people", "information resources" and "technology" relevant to digital library work (p. 198). All these research works, particularly Shiri's (2003) three elements, have informed and guided us shaping a DL library platform for ISR communities.

3. Research Design

The proposed project used a number of data collection approaches to develop in-depth understanding of the multi-faceted aspects, particularly around people, content and technology (Shiri, 2003), to create a digital library infrastructure for ISR communities. The approaches used include:

- *Environmental scanning* to understand both the external and internal, and personal and impersonal elements that will have impact on the development of the infrastructure;
- *Surveys*, both online and print versions, to understand the users' needs and their information seeking behaviour;
- *Field trips and observations* to learn about the community and to assess community sentiments related to a digital library for cultural heritage material;
- *Information audits* to gain insight into the overall scope of the collection including formats (e.g., audio, text), types (e.g., oral history), volume of material requiring digitization and location of material.

4. Key Findings

The key findings from the analysis of data and insight into the shaping of DL platform include:

- Internal and external personal information sources (e.g., students, community corporation members, board members, Inuvialuit Cultural Resource Center (ICRC) staff and users),

and internal and external impersonal sources (e.g., ICRC library, archival center, COPE collection) as derived from the environmental scan approach.

- The need for a multi-lingual interface i.e., community members would like to access resources in different dialects and/or languages (e.g., Inuvialuktun, Uummarmiutun, Siglitun, Inuinnaqtun and English).
- Community members use different approaches to access cultural material including: search engines, Wikipedia, social media, and online museum collections.
- The scope of the overall collection of cultural material found through our investigation is that there is substantial collection in variety of formats. For example, a huge collection of documents related to the Committee for Original Peoples Entitlement (COPE); and material related to oral history, language lessons, dictionaries and grammars in variety of formats (e.g., print, tapes, CDs).
- Evaluation of Open Source Software (OSS) software such as Hydra/Fedora, DSpace, Eprints, Greenstone, AtoM and Omeka for a DL platform, and the shortlisting of Omeka, an open source software product, for the digital library implementation.

5. Conclusion

The poster will present the current state of the DL development and the road ahead. Additional findings (e.g., detailed scoping of materials, findings from field trips, etc.) not included here due to submission length limitations will be included in the poster. The poster addresses the overall themes of the conference i.e., "Information Science in our Communities …", as the proposed research focuses on the development of a DL platform for communities in the North and sub-themes such as 'organizing information for communities' and 'listening to communities' by developing a DL for the community to access cultural information and building it by learning from and listening to
communities i.e., what communities need and how they will access information, among other things.

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