

DIRECT: Applying the DIKW Hierarchy to Large-Scale Evaluation Campaigns

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ABSTRACT

We describe the effort of designing and developing a digital library system able to manage the different types of information resources produced during a large-scale evaluation campaign and to support the different stages of it. In this context, we present DIRECT, the system which has been adopted to manage the CLEF evaluation campaigns since 2005.

Categories and Subject Descriptors

H.3.4 [Information Storage and Retrieval]: Systems and Software—*Performance evaluation (efficiency and effectiveness)*; H.3.7 [Information Storage and Retrieval]: Digital Libraries

General Terms

Design, Experimentation, Management, Performance

Keywords

Large-scale Evaluation Campaigns, Scientific Data, Digital Library System, DIRECT

Overview

Scientific data, their management, access and reuse through citation, curation, enrichment, and preservation are essential components of scientific research. We consider Information Retrieval (IR) experimental evaluation as a source of valuable scientific data and we have proposed a data curation approach in order to better manage, preserve, interpret, and enrich the scientific data produced [1].

The result of our work is Distributed Information Retrieval Evaluation Campaign Tool (DIRECT), a Digital Library System (DLS) which has been developed, adopted and tested in the Cross-Language Evaluation Forum (CLEF) campaigns since 2005 [2, 3]. In designing the system, we have adopted the Data, Information, Knowledge, Wisdom (DIKW) hierarchy [4] in order to structure the information space involved by an evaluation campaign and to model the interaction of the different actors with the created information resources.

We will provide a demonstration of the functioning of the



Figure 1: The DIRECT system.

DIRECT system and of the different tasks that can be accomplished with it.

Acknowledgments

The work reported has been partially supported by the TrebleCLEF Coordination Action, as part of the 7FP of the European Commission, Theme ICT-1-4-1 Digital libraries and technology-enhanced learning (Contract 215231).

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