CesimaDigital: a tool for the History of Science

Odécio Souza

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Pontifical Catholic University of São Paulo, Brazil

Abstract

The objective of this thesis is to offer and evaluate the solution of access, “through the internet”, to the documentary collection of the Centro Simão Matias de Estudos em História em Ciência (CESIMA). This solution encompasses a tool whose function is to support document localization for the activities of the Center’s Historians of Science. It preserves copyrights of the documents, as well as offers a method of indexation and search, directed to investigations in History of Science. Access and preservation of copyrights are provided by the use and correct configuration of the "free" tool called DSpace. The tool of "Data [Text] Mining", named SOBEK, is used to extract the most accurate terms from each of the documents, called metadata – sets of effective descriptors –, the metadata that provides the desired indexing and searchability. This solution also includes strategies for authorized monitoring of the activities of analysis with the library, in order to create a database that allows a collaborative construction of knowledge. As a method, in theoretical sphere, it explains the articulated epistemological and technological components, to fertilize the construction of new knowledge, from which CesimaDigital emerges. In practice sphere, the method points to an algorithmic set, called CESIMA Digital, and available through the internet at http://cesimadigital.pucsp.br. The CesimaDigital is the proposal, the fruit of this thesis, not necessarily or fully accomplished. The gathered elements of the CesimaDigital assessment are the requirements for assessing its effectiveness.

1 odeciosouza@hotmail.com.