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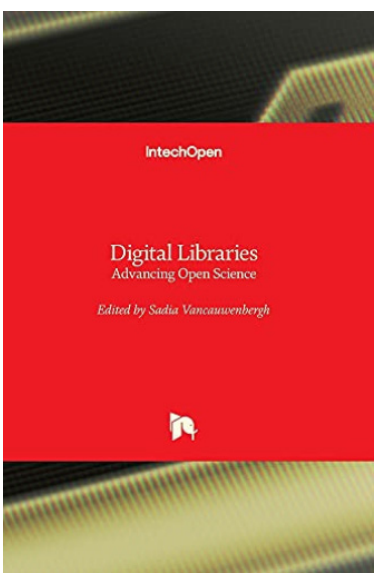

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The book “Digital Libraries - Advancing Open Science” is intended to be of interest to academic librarians and common researchers, as the content covers both general areas of open science and specific applications of digital libraries. This book contains seven chapters, i.e., Chapter 1. Evaluating the Processes and Procedure of Digitization Workflow; Chapter 2. The Interactive Applications (IAs) in Academic Libraries: Challenges and Opportunities; Chapter 3. Multiple Facets of Open: A Different View on Open Science; Chapter 4. Overview of the Principles and Practices of Open Access Publishing; Chapter 5. Origins and Developments of the Open Access Books; Chapter 6. FAIR and Open Research Metadata as Leverage for Digital Libraries: The Flemish, Chapter 7. An Educational Project Based on a Digital Library of Filmed Courses.

The aim of the book is to offer insights into the transformation of traditional library environments to digital libraries and details on how digital libraries can contribute to Open Science, in particular to Open Access, FAIR and Open Data, and Open Education, by describing methods, criteria, strengths, and weaknesses as well as applications. This book comprises seven chapters that explore the topics in the open science in publishing, digital libraries, and applications in digital libraries. Based on the content, I propose those chapters to be grouped into three sections: perspectives of open science, digital libraries, and the application of digital libraries (Figure 1).

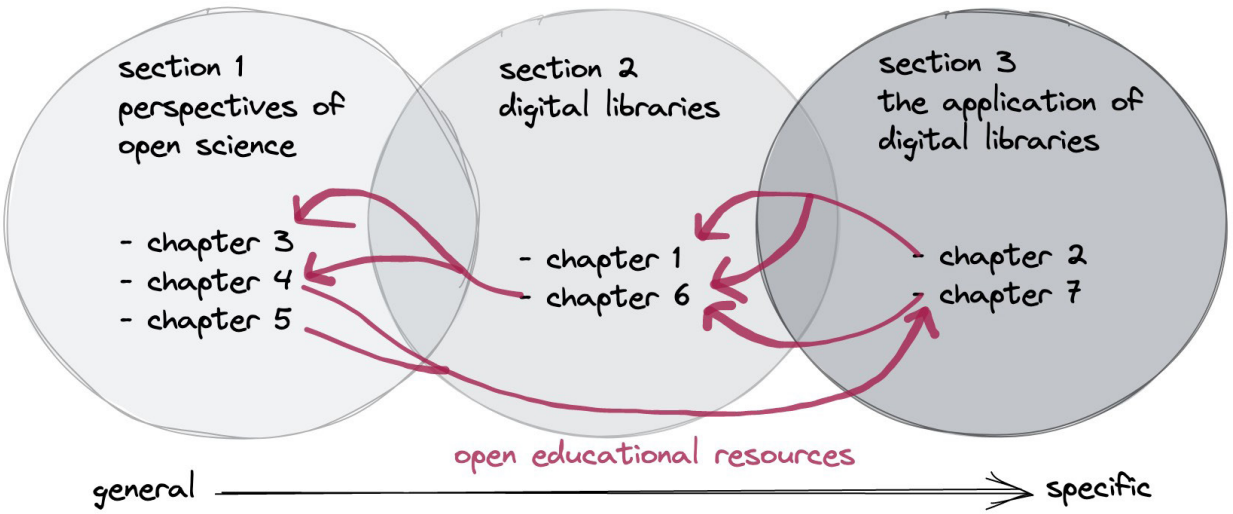

Figure 1 Proposed sections and logical order of chapters

Section 1 Perspectives Of Open Science

In this section (consisting of chapter 3, 4, and 5) the authors cover the history of open science and how it has evolved to what we see now. In Chapter 3, the authors evidently point out that there is no silver bullet definition of open science (Figure 2). It depends on the position of the individuals and the accepted norms in each field. The advancement of the internet has also been noted as the game changer in the creation and the publishing of knowledge. It could change the behavior of research sharing to develop science further and faster, as an example is the Polymath Project (Kalai, 2021).

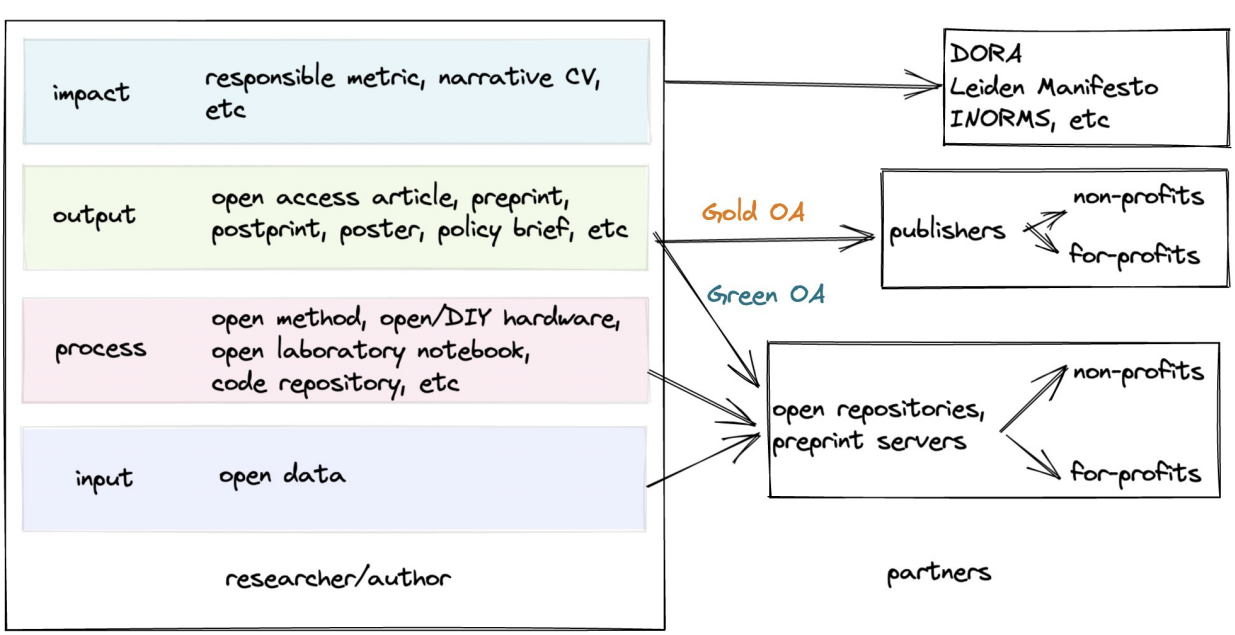

Figure 2 The stages of research, the open science principles, and the partners

In Chapter 4, we can learn the principles and practices of open access publishing. The types of open access (OA), as shown by colors (e.g., Green OA or Gold OA), serve as the consideration for researchers to choose the OA route and how they could implement it, as well as the perspectives from

publishers as their responses to these OA principles. I am particularly interested in the section of Gratis and Libre Open Access, which are related to the debates in software development (Tennant, J, 2020). It would be more effective if the authors develop this section separately for further discussions.

In Chapter 5, readers are expected to follow the history of open access books and how it has evolved in centuries. Again, with the vast development of the internet, the interest to publish printed books has slowly decreased. The author argued that the internet has democratized book publishing. In this chapter, the authors also highlight the conflict of interests in the publishing itself. Furthermore, without mentioning the antagonists, the authors describe the protagonists in the OA ecosystem which is characterized as a not-for-profit and community driven organization or initiative.

Section 2 Digital Libraries

The discussions then move to the basics of digital libraries, starting with the digitization workflow (Chapter 1). This process is the most important step since most of the scholarly documents prior to 2000's were mostly in print. Not only is the digitization process very tedious, but it also poses another barrier i.e., tracking and documenting the metadata, which is explained in Chapter 6.

Chapter 6 contains a detailed description of metadata from definition to publication. In this chapter the authors mention the FAIR and open metadata which become the starting point to discoverability and further co-creation of knowledge, and it should therefore be included in the skillset of digital librarians.

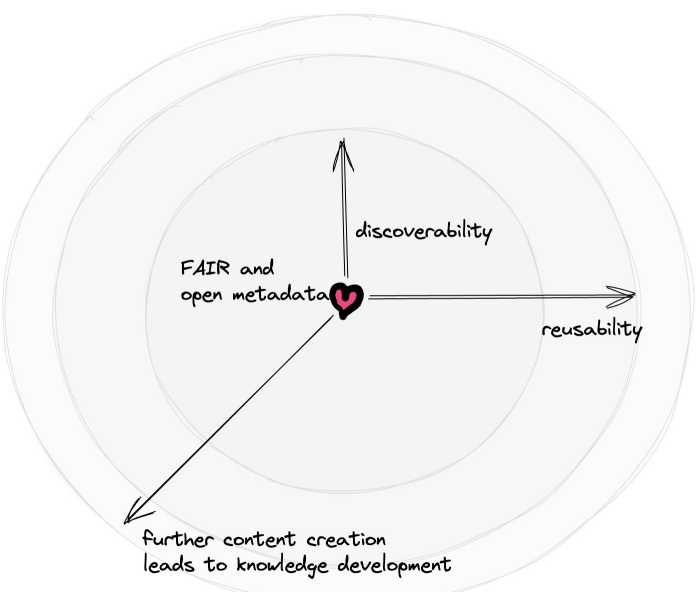

Figure 3 From FAIR and open metadata to further knowledge development

Section 3 The Application of Digital Libraries

This section (Chapter 2) presents the downstream of digital libraries, where other technologies can be applied to improve the experience in using services offered by digital libraries. The authors argue that the application of Interactive Applications (IA) can improve the way people access digital literature and other aspects in education (Figure 4). Using IA, data and information can be repackaged with more user interface. Reading would not be the same as opening pages of paper, yet there are some drawbacks, including funding, skills, and the digitization of the material (related to Chapter 1). Chapter 7 highlights the OpenFING project from Uruguay. The objective of this project is to build a multimedia teaching and learning platform for various subjects. The materials can be audio, video, and reading materials, with the addition of Semantic Web that can bring together teachers and students to collaboratively publish and

annotate any materials. As promoted by Hypothesis, web, and social annotation are the future of teaching and learning, not only to pdf or html-based reading materials, but also to audio and video materials (fannyfrench, 2022). Open Educational Resources (OER) is also a barrier that this project has faced (related to Chapter 4 and Chapter 5).

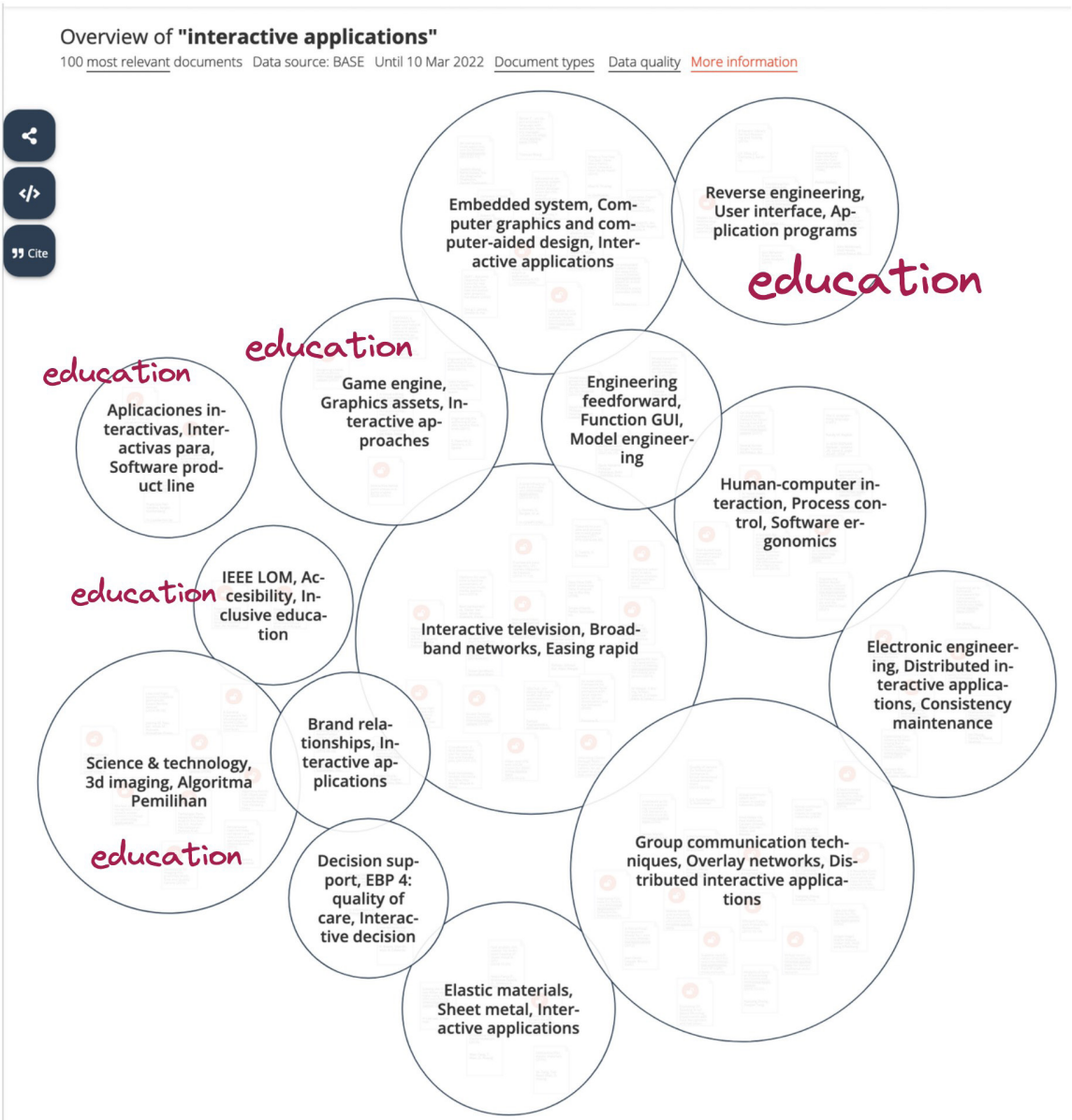

Figure 4 The topic modeling in "interactive applications"
(built using Open Knowledge Maps and annotated with Excalidraw.
Source: https://openknowledgemaps.org/map/93b6022ea9f047905b6f47fe534bf7d0)

Positive Values

This book has the following visible positive values.

- It covers the nature of open science as an umbrella of digital libraries. It also shows the various stakeholders in the open science landscape, as well as the protagonists.
- It shares the authors' basic views and application of the components of digital libraries.
- It presents light reading for non-librarians to understand the content.

Shortcomings

The following are the proposed shortcomings that need to be addressed by the collaborators of this book.

- The chapters should be placed in a logical order from general to specific, which has been explained in this book review.
- Reading the manuscript, I see opportunities to visualize the narrative to get the attention and engagement from the readers, therefore, more visuals would be an advantage.
- The editor and authors can add a page to sum up suggestions for readers, e.g., suggestions from the easiest to the most difficult route in participating in digital libraries.

Author's Statement

This book review has not been previously published or is not being considered for any publication elsewhere.

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