

*Title of the Satellite Meeting:* "Inspired and Engaged on Sustainability" *Date: 22-23 July 2022 Location: Cork University College Library, Ireland* 

# Wikidata/Wikibase: A Green Platform Solution for Coworking

#### Viviana Vitari

Librarian (Public Library), Italian Library Association (Regional Executive committee of Lombardia, National Group for Coworking in libraries), Italy E-mail address: viviana.vitari@aib.it



Copyright © 2022 by Viviana Vitari. This work is made available under the terms of the Creative Commons Attribution 4.0 International License: http://creativecommons.org/licenses/by/4.0

#### Abstract:

Public libraries are a gateway to the citizens' most disparate information needs. Consequently, contents, methods and tools require to upskill or reskill daily expertises. Services are only partly measurable, they evade the institutions they are part of. This paper summarizes an innovative activity carried out by the newborn work group within the Italian Library Association (A.I.B.) on "coworking in libraries".

Thanks to the involvement in a follow-up action as requested by the National Observatory "Libraries and sustainable development", the group has been experiencing the virtual lab results on digital ecosystems and the potential of open linked data offered by Wikidata and Wikibase.cloud. The paper deals with this innovative venture that, in a short time, has led to cooperative and constructivist learning on digital tools.

In Italy libraries are often considered as treasures of manuscripts, annexes for University students, lively places for the children's reading: nothing or almost nothing is provided for freelancers and smartworkers. Not even they are places where workers turn to ask for sources and suitable tools.

Still, the first article of the Italian Constitution states the "work" as the first right for all. At the same time, we wonder how libraries can influence the basket of consumer goods and services. It is taken into consideration the opportunity offered by Wikibase.cloud to support libraries to face "crowds" and "neocollectives". The coworking environment can be a shaping space where individuals meet and thrive expert communities. It may be an environment in which to integrate green platforms for digital repositories and directories of processed information. Sync linkable data could be very useful for people working in libraries. Indeed, the physical workspace could be expanded. Information literacy could be experienced within the workers' digital practices and help them develop new information skills.

On one side, coworking can help the library rethink lifelong learning. On the other, controlled data in ecological networks can allow:

1) the library to be socially interactive: a digital library cannot be limited to being a point of access to digital resources on the network;

2) the librarian to be an active agent through the socialization of work knowledge;

*3) the users to access the platform experience through a wider community collecting data and upload them with the supervision of librarians themselves.* 

This is a two-way communication sustainable ecosystem for open culture. Grassroot actions and the use of wikibase.cloud can both take advantage of their mutual characteristics, developing a gloCal tool for workers inside the lights and shadows of the semantic web.

See the animated slide show: <u>https://vimeo.com/734932574</u>

Keywords: Coworking. Management. Wikibase. Wikidata. Semantic web.

#### The learning environment

As we are involved in the National Recovery and Resilience Plan, we are also told that the current technological boost is akin, in some ways, to the first industrial revolution, definitely changing one's lifestyle, no one excluded. We discover ourselves differently abled. We walk like tightrope walkers on the rope that connects two ends: innovation and tradition, creativity and standards, cultural sites and intangible items, book supply chain and digitalization, robotics and staff mismatch. Given for certain both complexity and irreversibility, it is up to us to reorganize tools and methods within the old and new knowledge. If a crisis taken to the extreme leads us to a tear, reinterpreting it can be a tonic for the profession. We are in a position to learn what we did not think was available for learning.

# The power of meaningful connections

Non-hierarchical perspectives enter the scene, thanks to the infosphere. Even when similar, digital environments set the stage for different behaviours. Let's take a quick look at "neo collectives". Human sharing platforms, they may create informal communities of practices in an undeclared identity. Members help each other. Some are interested in hair care, others in learning the Gothic calligraphy. A common interest shapes distance sociality and digital aggregation. "Crowds" are also socio-relational aggregates of collaboration, no necessity to know one another, or work together. There are no real barriers: members can change, but the project goes ahead. You can participate temporarily, even newcomers and untrained. Once the goal has been achieved, the call closes. Collectives are entities that network, without belonging to an institution or to a professional group. They do not give up their autonomy. They are proactive, overcoming social and information barriers. Their agency is substantial. They intervene on reality, exercise causal power, build public identities. How do these audiences interact with digital libraries? How can we support them with appropriate information? Or, what can we learn from these aggregative styles?

#### The consumer price inflation basket of goods and services

In the current new relationships, a further focus is about the basket of goods and services used to calculate the consumer price inflation index.

After this pandemic, the basket includes for 2022 new products: anti Covid tampons, pulse oximeter, air fryers, take-away pokes, streaming services of music and movie downloads, individual psychotherapy. The products chosen by ISTAT (Italian government institution in charge of statistics and census data) reflect the social progress. The CDs and overboards have been released. Ten years ago, there were smoked salmon and the iPads, in the '70s talcum powder, in the '50s nylon stockings, in the '30s castor oil and ink for the nibs. In the 90s Alberto Tomba brought skiing to the mass: housewives who prepared the Sunday table watched him get off the slopes on TV.

There is one factor to keep in mind: the basket contemplates legal transactions in money, but it does not measure the improvement of the quality of life. The same goes for crimes, pollution, road accidents, inequalities that impact real life. In this scenario, what is the role of libraries? Can we influence any good change for the future? Can we challenge new skills to improve the quality of life and influence the "shopping basket"?

#### The right to "work" in the Italian Constitution

In Italy, the Constitution was founded on the republican and democratic hopes of a post-fascist post-war period. The value of "work" is at the foundation of *res publica*. In the very first article, in force since 1948, "Italy is a democratic Republic founded on labour". Then (article 3)

"It is the duty of the Republic to remove those obstacles of an economic or social nature which constrain the freedom and equality of citizens, thereby impeding the full development of the human person and the effective participation of all workers in the political, economic and social organisation of the country".

The first law of the State in its first article highlights the importance of working and the dignity of the worker. As a right, working is the result of the will of the citizens. The public administration is also involved in negotiations. So, we are conveying the attention of the library to the concerns of working, in particular coworking, as a collaborative form including new challenges and smart working, generally not yet practised in public administration. The theme of the "work" requires to work on it.

#### **Coworking dwells the library**

Many reasons are behind the management of this brand new programme on coworking. An extract is on the dedicated web page: <u>https://www.aib.it/struttura/commissioni-e-gruppi/gruppo-coworking/</u>

Rethinking the future and being part of it, accommodating new learning strategies of information in the library, dwelling a new global vision, dealing with old educational habits, changing the information management, being really sustainable and courageous, growing empowerment, enhancing the reputation of our services...

In Italy there is a decree (DPCM 3/2017) with guidelines related to the organization of work and reconciliation of the life and work time of employees. It refers to *Co-working as a way of performing work and organizing human and instrumental resources based on the sharing of the work environment.* It allows the development of multifunctional centres for the provision of public services and spatial dimensions for sharing offices, laboratories etc.

However, it is not mentioned that there are further orientations of coworking concerning, e.g. the digital environment, the phygital perspective and, last but not least, the mutual educational healthy effects of proximity, relationships, free interactions and collaboration. It is not a question of sharing logistics, but of knowledge building through relevant connections for life long learning.

The quality of work and the quality of the data management go hand-in-hand with the quality of practising innovation.

Coworking can be seen as a goal, a good practice, a tool, an experimentation, a trial-and-error, work style, a social need, a social "ecosystem", an elastic space. It goes beyond the norm. In the utopia of heterotopic spaces (M. Foucault) it exalts such relationships as sharing and learning. The librarian can be involved as a tutor, a facilitator, an observer, an intermediary:

this can make the difference for the assets of sustainability. As a "growing organism", the library is a library not only for its resources and items, but also for the way in which they are shared.

So, coworking should not only be interpreted in terms of physical spaces. A library is asked to facilitate the journey of a community and to retrain it with multiple knowledges, increasingly controlled data, innovative methods. In a win-win logic, the parties benefit from each other, and the citizens too.

If we take the heterogony of ends (W. Wundt) into account, we can assess coworking as one of the phenomena that go beyond our learning expectations. Not exactly co-working, but coworking.

# Digital libraries and the Wikibase ecosystem

A.I.B. (Italian Library Association), *Rete delle reti* (an Italian network of networks of libraries) and EBLIDA, as partners, have promoted a relevant initiative: 10 Virtual Labs on Sustainable Development Goals of the Agenda 2030 aiming to provide tools (project ideas, guidelines, checklists, etc.) for library project design based on EU funding opportunities.

This initiative went along with our idea of knowledge being environmentally friendly and sustainable:

1) a library can be socially interactive: it is not limited to being a point of access to digital resources on the network but reworks them;

2) the librarian can be an active agent and affect the ethical sharing of knowledge;

3) users can enjoy controlled data, and be aware of a web experience through a wider community where librarians include themselves.

The public library could become another engine of innovation and an outpost for open culture thanks to their staff, with the prospect of serving as a general knowledge base "for the world at large".

Let's think about how many small actions a librarian could do to improve the digital ecosystem, for example starting from Wikipedia.

If we factor the data of June 2022 from GLAM, we discover that in Italy there are 282 wikipedian librarians out of more than 7.400 libraries.

If every library controlled a wiki item per year, we would have updated database. As social servants we could work according to the "Response Ability" (the ability to respond to widespread information needs).

The use of new tools should not be something that "happens" to librarian, but something that becomes part of a more dynamic process and manage various levels of a service.

#### Why Wikibase and Wikibase.cloud matter

The Virtual Lab # 4 "Smart metadata" caught our interest. The main results have been summarized in "Guidelines for using wikibase.cloud in a relevant (meta)data management project within GLAM Institutions" (uploaded on Zenodo on July 11, 2022).

The Virtual lab adopted the "field trial" method, thanks to the availability of the Wikibase instance of work "Smart Metadata", installed on wikibase.cloud (initially WBstack). The result of this collective experiment is accessible on <u>https://smartmeta.wikibase.cloud/</u> and here below are some of their accurate considerations matching our purposes.

At first, metadata are referred as "*structured information according to a certain model (or schema) with the aim of making possible or facilitating a given human activity*". For example, catalogue metadata help us find the book we need as well as Google maps metadata can guide us to a chosen destination.

Libraries have a long tradition in this field, but their potential in the Web ecosystem is not yet adequately exploited in Italy, neither so popular. This is weird if we think how interesting is the vision inspiring the WMDA strategy:

"We work towards a future in which people share the power to collect and organize the data that shapes humanity's understanding of the world. Diverse communities around the world participate in Wikidata and in a network of specialized Wikibases, co-creating an open and free global knowledge graph in a thriving Linked Open Data web. This is the basis upon which people, companies and institutions of all sizes can generate new insights, build new apps and services, and change the world for the better."

Wikibase data model is a metamodel rather than a conceptual model. That is to say, compared to common data models, the Wikibase data model consists of a further level of abstraction, due to which, on the level of representing reality with interrelated concepts, it involves only the definition of the syntactic macrostructure (i.e. the way how entities of interest relate to each other). It does not establish either an ontology or a reference domain, that, at the semantic level, may constraint the contents to be managed.

In other words, the Wikibase data model only provides instructions on how to manage information on contents that are relevant for structuring meaningful and complete statements.

In addition, the contents deemed relevant are identified and reconfigured from time to time by Wikidata contributors in a scalable and bottom-up way. They are described and interrelated by properties that are also not predefined. This allows the maximum semantic interoperability, that is the possibility to formulate and interpret any statement on any object, because the Wikibase data model does not impose from above, in a top-down mode, any dominant vocabulary.

Wikibase is convenient, if the final goal is to publish Linked Open Data.

The Observatory detects that there seem to be no other similar tools on the market, that are not linked to a particular commercial supplier and that allows the immediate release of Linked Open Data.

Normally the tools for publishing LODs are linked to a particular domain (they have a predetermined ontology), and they are LOD translations and input of other management databases.

There are however some missing points in Wikibase:

- A controlled and ergonomic interface for data entry:
  - There are tools such as ShEx and Cradle that offer a customized input interface without the need of external programs (just follow the instructions with a little patience).
  - If there are special needs, the input interface can be done with a bespoke application that uses the APIs to access Wikibase through reading and writing programs.

- A friendly user interface (like Enslaved and Kohesio): it could be developed with APIs to access Wikibase through reading and writing programs.

- Basic computer skills are required for the installation of Wikibase, but to use wikibase.cloud (management, configuration, design of new features) training courses are useful (maybe on the same style of Library Carpentry). There are many possibilities offered on the Net.

In general, it is known that open source software developed in research projects and European projects could be at risk: there is no funding to the software. The choice of designing the software within the Wikibase ecosystem allows you to protect the investment made (the community takes care of it and keeps it).

The Virtual Lab #4 emphasizes that by using the Wikibase.cloud solution:

- Institutions have no direct costs to acquire and maintain basic technologies: this is provided as a service (Wikibase as a Service);
- You are part of a widespread metadata management ecosystem (federation and use of semantic web technologies);
- The Wiki model has very low barrier of entry, comments, transparency of changes, possibility of recovery.

Moreover, there are better benefits:

- Good ratio of (human, financial, etc.) resources invested and results;
- Ease of intervention in a widespread platform;
- Sustainable model of linked data and respect for "ontodiversity" [This neologism is here created on the model of "biodiversity". Every semantic web ontology is a point of view: Wikibase can host the sharing and reuse of data between different points of view and ontologies];
- Increase in cultural participation as well as reuse through one of the largest (meta)data management ecosystems.

There are different uses that are interesting for libraries:

- A user searching for and getting only web pages as a result (no need to know how wikibase works);
- A user using SPARQL functionalities;
- Machines that query, index data (e.g. search engines) or reuse data for other services, applications and users;
- A user updating via wikibase interface;
- A user updating via quickstatements interface (massive data import, modification and deletion);
- A user updating via freely customizable forms with controls on the data entered (e.g. Cradle).

Wikibase.cloud is free of charge if the data are freely available (each institution can also decide who is allowed to update the data). It is also possible to invest in a landing page and pay special attention categories to fragile users.

The data-driven investment is long-term and all metadata can be downloaded in standard formats and serializations at any time.

#### **Final considerations**

The world's documentary heritage needs preservation and new movements: we are referring to tangible and intangible items, but also to data flows and metadata, so that all generations can reconstruct the cultural landscapes of the contemporary. Such biodiversity also requires competent guardians of the memory of the world, capable of grasping connections among domains of knowledge and prone to the ethical action of debunking. Every competence is an expression of autonomy and responsibility, so it is not a "thing" among others, but a relationship that is established with the context, people, space-time.

This work has been developing thanks to the interaction between the new group on coworking within the Italian Library Association, at first a collective, and the Observatory on Libraries and Sustainable evelopment (OBISS) involved in the 10 Virtual labs initiative.

The "group on coworking" has officially started in March 2022 with the aim of enhancing hybrid work, a novelty for the traditional Italian framework, and sharing knowledge and transversal practices for workers (not only students). The library can be organized physically and digitally for coworking, including smart working. Since this is a free access space, it can be appropriate for interactions with third sector audiences, for social cohesion especially of entrepreneurs and for information literacy for skilled workers in digital practices.

The coworking can promote the vision of a library as an "environment" to rethink lifelong learning. Creativity remains an important element for innovation, even at work, but it is not enough for the social development and resilience. It is necessary to intentionally move from an individual cognitive process to an interim process. The study of new forms of coworking through the creation of instances of wikidata and the control of contents seems to be consistent with these goals, especially for the ubiquitous use of powerful portable information.

The 10 thematic <u>virtual laboratories</u> by the A.I.B. Observatory "Libraries and Sustainable Development" took place in 2021 in parallel with different purposes in order to identify tools (project ideas, guidelines, checklists, etc.) to facilitate the presentation of projects.

The two trails have met, thanks to the results of the Virtual LAB #4 conducted by Stefano Bargioni, Giovanni Bergamin and Valentina Lepore: their guidelines are being published on Zenodo and they have enriched the whole effort.

The field trial on libraries and sustainability has crossed coworking, allowing non-expert librarians to enter the wiki environment.

The bequest use of these relationships consists in a new form of cooperative learning between two very different study groups, without distorting their mutual perspectives, but enhancing them. To broaden the technical knowledge, to create a new instance, to give support to the emerging work instances may be sustained ethically by a non-commercial public space. The two groups gave themselves the relay and put into practice the constructivism of the continuous training offer of the Association. At this level, the effort to generate metadata has not produced in the group customers or victims, but genuine players in the shift. Folksonomy often disorientates cataloguers for the spontaneity in the management of tags in the web 2.0 in contrast to formal classification methods.

However, the opportunity of non-hierarchical communities linked to web applications for the diffusion of text and multimedia contents has been seized.

The librarians'expertise can take advantage of it. In the melting pot of skills, the strategies for the reuse of data are a new focus. If every Institution could control and integrate one item per year in the Wiki environment, it would be also effective to upskill librarians and, at the same time, the service for the information society. The quality of life is based on continuous empowerment for everyone, without victims or tail ends.

*Libraries play a fundamental role also in the digital ecosystem* (Conference <u>BC2021</u>): the strength of a community, which guarantees the authoritativeness and certificability of a source, is also given by the number (quantitative aspect) and by the typology (qualitative aspect) of the community guarantor of the source.

Nevertheless, changing some habits to access information and reuse them for ethics and sustainability makes us walk towards peace education.

# Acknowledgments

This contribution offers some insights about collaborative facilities and new social workstyles for a better resilience. Indeed, this work has arisen in a relatively short time, involving librarians, some of whom have never even met in life. In this differently close-knit community the exchange of soft skills has been equal to technical ones. Everyone of us works in a different institution, i.e. academic, theological, national, public one. Nevertheless, the data creation has generated a new awareness about a little hierarchical ontology of items. We still don't know what it is going to bring, but our sleepless nights to solve some questions are a token of a great interest towards new strategies of collaboration. The commitment within the newborn group on coworking has been providential to bring together different approaches into a similar ecosystem. So, this work is based on the cooperation and active contributions in the Italian Library Association, thanks to **Samuele Camnasio, Elena Corradini, Maria Giacobbe, Francesca Nidola, Stefania Puccini, Federica Tassara**.

Last but not least, we are extremely grateful to **Giovanni Bergamin**, National Executive Committee (A.I.B.), who has continuously given us his support hardly believing in the opportunity for us to deal with wikidata/wikibase, also flipping our viewpoints.

# References

Associazione Italiana Biblioteche. *Guidelines for using wikibase.cloud in a relevant data (meta) management project within within Glam institutions*, Proceeding paper of AIB Virtual LAB #4 - Smart Metadata (2021), uploaded on Zenodo on July 11, 2022. https://doi.org/10.5281/zenodo.6816705 (Italian), https://doi.org/10.5281/zenodo.6816981 (English).

Associazione Italiana Biblioteche. *Manifesto sul web semantico*, (12/10/2020). <u>https://www.aib.it/struttura/commissioni-e-gruppi/gruppo-di-studio-catalogazione-ed-indicizzazione/2020/86520-manifesto-per-il-web-semantico-la-comunita-dei-dati/</u>

Bergamin Giovanni, Guerrini Mauro, *Bibliographic Control in the Digital Ecosystem* /with the assistance of Carlotta Alpigiano. Roma: Associazione italiana biblioteche; Macerata: Edizioni Università di Macerata Firenze: Firenze University Press, 2022. (Biblioteche & bibliotecari / Libraries & librarians ; 7). <u>https://www.fupress.com/isbn/9788855185448</u>

*Coworking Library and Libraries: Come fare coworking in biblioteca*, (09.08.2020). <u>https://coworkinglibrary.com/2020/08/09/coworking-and-libraries-come-fare-coworking-in-biblioteca/</u>

Guerrini Mauro. *Il web semantico: il contesto di lavoro odierno*, in «AIB Studi», 62 n.1 (gennaio/aprile 2022), p.113–117. <u>https://aibstudi.aib.it/article/view/13395</u>

International conference Bibliographic control in the digital Ecosystem. Florence, Italy (8/12 February 2021). <u>https://www.bc2021.unifi.it/</u>, and <u>https://www.ifla.org/news/bibliographic-control-in-the-digital-ecosystem-8-12-feb-2021/</u>

*Lab #4: Metadati intelligenti* – Accesso [SDG 4 + trasversale] / a cura di Stefano Bargioni, Giovanni Bergamin, Valentina Lepore, (2021). <u>https://smartmeta.wikibase.cloud/</u>

Lepore Valentina. Il Wikibase data model per la pubblicazione dei dati bibliografici sul web semantico. Una sperimentazione presso la Biblioteca Nazionale Centrale di Firenze. Università degli Studi di Firenze (second level master's thesis, 2017/2018). http://eprints.rclis.org/39494/

Murray R., Grice JC., Mulgan G. *The open book of social innovation*, GB: Nesta, March 2010. <//media.nesta.org.uk/documents/the\_open\_book\_of\_social\_innovation.pdf

Uggeri Matteo, Vitari Viviana. "*Piattaforme ecologiche per le biblioteche: introduzione a due voci*", in "La biblioteca piattaforma della conoscenza" (conference paper), Milano: Bibliografica, 2021, pp. 437–441.

Vitari Viviana. *Come fare coworking in biblioteca*, Milano: Bibliografica, 2020. ebook from <u>https://www.editricebibliografica.it/scheda-ebook/viviana-vitari/come-fare-coworking-in-biblioteca-9788893572781-579415.html</u>

WMDA. *LinkedOpenData/Strategy2021/JointVision*, (05.04.2022). https://meta.wikimedia.org/wiki/LinkedOpenData/Strategy2021/Joint Vision

World Economic Forum, The Future of Jobs Report 2020. https://tinyurl.com/yckz5zmm

#### Watch our videoclips

See the animation of the work and study group on coworking (2022) for the second national day of coworking in libraries (A.I.B.): <u>https://vimeo.com/714876750</u>

See the animation for the satellite meeting (July 22, 2022): https://vimeo.com/734932574

More items are available on:

- https://www.aib.it/struttura/commissioni-e-gruppi/gruppo-coworking/

- <u>https://www.aib.it/struttura/commissioni-e-gruppi/gruppo-coworking/bibliografia-coworking/</u>