Curating content as a way to promote interesting resources

Michal ČERNÝ
Department of Information Studies and Librarianship of the Faculty of Arts MU
mcerny@phil.muni.cz
INFORUM 2017: 23rd Annual Conference on Professional Information Resources
Prague, 30. – 31. 5. 2017

Abstract:

Content curating is one of the exciting possibilities of untraditional works with content and themes. While the user has the ability to assess the relevance and relevancy of the document in question, the user has formulated the appropriate search queries as a topic from the very beginning, the content curating provides relatively simple and interesting possibilities to show the poorly attended and poorly promoted resources and make it accessible for the wider or professional public.

In order to create curatorial texts or collections, he / she may not be an information expert on the subject, but must be able to perform effective search, contextualization and presentation of information. In the article, we will try to show some of the options, tools and approaches that allow similar work with the content, and we will attempt to quantify some important complementary service to digital libraries that are - though still - primarily repositories of digitized or digital data rather than modern library.

We also want to show how this activity can influence information education, collaboration with educational institutions, or to support the education of own users in and outside of the library.

Introduction

Etymologically, the concept of curatorship is based on care or administration, the curator is a guardian, someone who supervises the content or property entrusted to it and works with it to bring benefits and to be safe. At this point, it is possible to separate two basic directions of digital curatorium, which are increasingly intertwined.¹ The first one is connected with the

digitization and protection of cultural heritage, which is related to long digital preservation, ie long-term storage of data in such a way that it can be repeatedly read and worked with them after some time.\textsuperscript{2}

The issue of long-term data storage has been relatively long associated with something we could describe as an almost archivist activity, where the primary interest was indeed data protection and retention, and secondarily the topic of their publication and delivery of content to potential candidates. As in the 1990s, we have seen a change in the paradigm in the concept of libraries - from borrowing or depository centers towards community or educational institutions, often with social integration elements - that can also be followed by the transformation of digital archives and repositories that are increasingly aware that their meaningful existence is undoubtedly associated with a certain care for the user and the interest in his habits, needs, way of work and thinking, ie information behavior.

The second dimension of digital information curatorship can be understood as an activity that aims to collect the contents of the curator, organize it in some way, or interpret and translate it into a form that will correspond to the information needs of the target group. It can be very simple, such as Pocket and Tumblr through IFTTT, for example, to track selection from one (or more) people, or relatively complex data processing projects such as Brain Pickings\textsuperscript{3}.

This approach from the curator expects a deeper knowledge of both the field itself and good knowledge of the target group. And last but not least, enough time. As far as additional costs are concerned, it is possible to count on the initial technical and design input, which may (and often also have) a longer-term effect.

We believe that libraries could be active in this area and run their own curatorial projects, but it is also a topic of interest to the private sector, and especially academic libraries or departments can perceive such activity as interesting and beneficial. Whether from the point of view of promoting own work and profiling, seeking and acquiring candidates, branding or community building, but also from the point of view of other benefits that such an approach can bring.

Libraries, especially those specialized, professional or academic, have a large amount of electronic information resources that are either stored in databases or repositories or data warehouses and which (unfortunately) have relatively low attendance or attendance considerably smaller than would be for the lucrative data sources desirable. Librarians and digital content managers face a serious dilemma - how to deliver this content to academics, students, or other consumers, and better design services for them? How to make more effective use of purchased resources to support scientific research.


Perhaps the most common way is an information e-mail in which it is simply communicated that an institution now has access to a specific database (or even databases) and users can use it. However, such an approach assumes that the user has a fairly clear idea of what resources they need, what they are looking for, where they want to look for them, or that they are only interested in legal content. The real situation, however, is that many users do not present anything specific under the database description, even if the information email was read. Contextual curationship is also one of the ways to bring such content closer and to present it in a more attractive and interesting form.

Librarians have a great advantage in knowing their target groups, working with electronic resources, searching for them, evaluating them, conducting searches, and working with them. And these skills should be able to benefit from content curationship to which they have competence very close.

**Models of digital information curatorship**

At this point, we would like to briefly pause for the models that are being applied in the area of digital work in the curatorial area. Whatever this activity and first glance may be trivially simple or easy, its theoretical reflection is very useful. It allows us to describe and think through the whole chain of work with information, but also to offer easier identification of individual instruments, but also related themes, competencies or procedures. We will focus on the three models that appear in the area of digital information curatorship and describe it in some way, each in a slightly different perspective: Seek-sense-share model, The 5 Models Of Content Curation and Whittaker’s model.

Generally speaking, it is possible to draw attention to the fact that digital information curatorship is closely linked to procedures that can be found in the area of personal knowledge and information management but also in information behavior models as such. Individual approaches or thought paradigms will certainly emphasize the different dimensions of work with the collection. For example, in the context of a connectivist (or more generally social constructivist) concept, emphasis will be placed on the participation of individuals and mutual sharing, a more conservative view associated with, for example, cognitivism will accentuate rather professionally created unidirectionally distributed collections. Also, the choice of this paradigmatic framework is part of the design of the entire curatorial project and we recommend that it pay close attention.

---


Seek - sense - share model

The Seek - sense - share model\(^6\) works with three closely related phases of information work. It is a process model. It comes from the area of personal knowledge management and can also be encountered in the field of learning, where it can be encountered in the area of various networking, constitutive or autonomous learning models.

The first phase is called Seek and is related to search, but also to the organization and preservation of information. At this stage, interesting resources are identified to further their use for curatorial activity. This includes building Twitter lists, working with the community, and so on. While it may seem that this phase will only be limited to databases and prepaid EIZs that we would like to intensify to use, it is important to emphasize that the resulting curator product should also respect modern trends, topics discussed, what is happening in the field of actual discourse and in working with resources must in no way be limited to EIZ, however they will probably be one of the focal points of the resources we will work with.

This phase is key not only to find adequate resources, but also to track new trends and topics that can be addressed within the curatorial process. The second phase in the Seek area is also the basic organization of the found resources and the work with them. This is a phase that, for example, in a model such as Big6\(^7\) puts it into later steps, but in real practice the search and organization of resources itself is very close and can not be separated from each other. This area includes tools such as various readers or read it later tools, social bookmarking, web clipper and many more.\(^8\)

When we find a resource, it is appropriate to describe it in some way - this description may take the form of tags, short annotations, or just inclusion in the appropriate folder on the system, as well as some automated tools (such as annotations) or the entire metadata Description.

The second phase deals with the evaluation and processing of the information already obtained. The assessment may concern (as distinctly as the standards of information literacy as well as, for example, various practical courses of information work), both formal and (and at this stage above all) content aspects. This is connected with the analysis of the important and interesting in the given source, drawing or emphasizing the key ideas, information or approaches, but also with their contextualization and interconnection into new units. In the models that emphasize learning, the reflective parts, the active work with the text, the analysis of the arguments, and so on.


Among the tools that can be used here can be mentioned programs for the creation of conceptual or conceptual maps, annotation of resources, etc. Tools that allow the text itself (or video source or video) to work actively. The selection of these tools is bound to the previous stage (Seek) and must also be designed with respect to the expected outputs. Also, community involvement may or may not be available in this area, such as help with content management, resource reflection, or other activities. This phase may also regress backwards, for example, by reflecting citations or other bibliometric methods that can help identify sources and links between them that will be thematically interesting.

The last phase is related to publishing and sharing. The model assumes an emphasis on this component in all areas of work with digital artefacts, which is important in terms of the overall design of curatorial activity. It is necessary in the proposal to think about sharing collections and entire documents so easy that it will take place as organic as possible. The dimension of sharing is important for the 3S model and throughout curatorial activity. This is one of the primary objectives that the whole process monitors - delivering content to the target group, promoting it, spreading, sharing easily, etc.

The tools that apply here are either curatorial platforms, or various editorial systems or publishing tools. Their choice should be based on good knowledge of graphical and interactive design, UX as well as information behavior.

**The 5 Models Of Content Curation**

The 5 Models of Content Curation model\(^9\) is based on a muse or galley environment and focuses on curatorial content in these institutions. They try to emphasize that their purpose is not only archiving objects, but they also have a social responsibility that manifests themselves in the necessity to present and promote collections or artifacts. The curator's dimension is emphasized as someone close to the artistic environment\(^10\) - selects, extracts information, thinks what line of the story is interesting to the consumer, and what form of the story should be communicate. This model assumes five steps to working with the content, with some steps, of course, being modified to fit other industry requirements.

Aggregation of information artifacts presupposes their systematic acquisition, collection, search, but also basic organization. We can assume (which is important for real curator applications) that we are collecting more resources than we are able to use in the application. But that does not mean that we should not store and process them into information structures that can be further worked on. At this stage, of course, different social networks or participatory information can be used.

Distillation and selection of interesting information for a given context already presupposes a clear boundary of the topic. This is based on both a broader logical intent and a knowledge of

---


aggregate information. By having a framework idea of what we have, we can better identify the resulting shape and the thematic profile of the resulting collection.

It is one of the most challenging stages of curatorialism to highlight and identify what is interesting about the artifacts. He assumes that the curator will be able to extract what is really interesting and important, working with interesting quotes, condensing content, and paraphrase well. From a large amount of information, he prepares an "informative dense" object. There is more to be done at this stage. You can see a model where we create extracts from a book or longer text, but also with texts that are filled with references to the next reading.

Mashup\(^{11}\) and blending is based on working with different forms of content. One of the things we tend to tend to prefer is one media form that we promote at the expense of others. In this step, they may be interconnected, but they can also use objects that have been created by someone else. The task of the curator is not to create something that already exists in a sufficient quality elsewhere, but to properly interconnect, complement, combine.

Linking the context, creating timelines, and integrating the individual is the last step. It consists of incorporating individual new digital artefacts into a logical framework. The collection is not a disordered set without context, but with something thoughtfully structured, logical, complemented by a link. The curator should think not only about the existence of individual objects and their quality, but also about the whole, its appearance, its consistency and its comprehensibility.

**Whittaker’s model**

Whittaker sees in digital information (and data) curatorship a competence that every person\(^{12}\) should master. We believe that this is an activity that should be perceived as fundamentally as the ability to learn or search for information. It is an essential element of information literacy, because a person who does not develop enough personal information management has a major economic and social disadvantage, he becomes a digital divide.

The basis for the model is the study of information behavior (emphasizing that it is today one of the most prominent topics of information science). While in the case of curatorship it is possible to start from models and concepts that primarily emphasize some theoretical starting points, the personal organization of data needs to reflect the specific needs of individual users. In information retrieval, as well as in what technology they want to use, what kind of data they work with or what they prefer the organizational structure (it can be thought maps, common notes, ...). It is certainly possible to form or educate the user in this field, but it is necessary to know and respect this specificity.

---


This study of information behavior, or its understanding, leads to the design of the structure, which can be described as the curatorial process itself. Whittaker identifies a three-step chain that can be perceived as curatorial itself. At the same time, he carefully shows that there is a close link between curatorial and personal knowledge or information management. They use similar models, procedures, and knowledge, differing primarily in the purposeful accent or in what kind of data it is working on.\textsuperscript{13}

The first phase of information curatorship is to retrieve data. One should systematically build a database of resources from which they can draw and which bring some profit. This section also requires data filtering - are relevant, good quality, interesting, will be ever needed for something? This phase is also crucial in that it requires access to as much as possible and best sources. In the case of academic workplaces, they are prepaid databases, but libraries also have access to their EIZs. The key role of libraries in the traditional resource area is to support the ability to obtain information and data of a different type for a particular user. This is an approach that may look like a search service at first glance, but they follow up on the minimal organization of data, that is, the second step, but at the same time they are little associated with the context of a particular user.

The second phase consists of the need to find a system that allows the information to be acquired in a meaningful way. It is not just a simple document storage, but also a description of metadata (often such as tags), the creation of a logical structure, creation of hypertext links, computer data processing, indexing, searching, etc. In this area we can use the systems for organizing notes (OneNote, Evernote, ZIM, personal wiki) or visualizing them or conceptualizing them (Mohiomap, Novamind, ...).

In the third phase, ways to use it meaningfully and efficiently - whether by automatic presentation, sorting and creating a collection, or just user-accessible or shared between users, are sought. In this area, it is possible to encounter both technical solutions where curatorship is just some sort of intermediate between resources and consumers and actually only modifies and selects data so that an API can be presented through an information system. But it may also work with editorial systems or curatorial tools that emphasize the publication folder. Given the current technological possibilities, it seems desirable to also develop participatory or social models of collaboration and sharing with users.

**Curatorship of content**

From the above, it is clear that curatorship is a complex activity. It is also possible to meet concepts such as exhibition curator, social curator, community curator, and so on. The curriculum in question will be curricular content. We would like to emphasize that there are a large number of professions or activities that are associated with curatorship, to a large extent they are actually run by it, but he does not necessarily consider it to be curatorial.

There are undoubtedly different information specialists or knowledge workers involved in collecting and organizing information that serves other users or employees of the institution. It is also very closely associated with the operation of various ECM (Enterprise Content Management) information systems, the role of which is to work with differently structured content that needs to be further processed.\textsuperscript{14} After all, corporate information management is linked to certain forms of content work that essentially duplicate the basic ideological frameworks that we have attempted to set out in a discussion of various models of access to information curatorship.

As with digital libraries, in the case of information curatorship, it is necessary to distinguish between the content owned by the institution and producing it as its unique content that it manages physically and must store and search in it, possibly linking it to the metadata description, and last but not least, the content is only referenced. Each of these categories requires their own model of treatment and care.

In the context of working with and accessing EIZs, this is primarily the third area where the purpose of curatorial activity is to ensure better availability of resources that the institution does not own but has access to it. It can work with an exclusive model where only paid resources are selected, but also open-ended models that may result in the creation of OpenAccess\textsuperscript{15}-based collections or Open Educational Resources (OERs).\textsuperscript{16}

The issue of accessing content from licensing policies can be very important for several reasons. First of all, it is a form of capital the institution seeks to use and can be perceived both as a means of work and as a competitive advantage. At the same time, however, it should be said that working with licensed resources means (in the subscription model that is the most frequent) a certain fixation of long-term acquisitions and their binding to this type of projects, but also a limitation of readers and contributors, a classic corporatist approach. Comparison with more open forms is often relatively costly and demanding.

**Searching or discovering?**

In order for a search to be successful, it requires that the person who searches knows what exactly he is looking for, he is able to formulate a query, know current trends and projects. Curatorship seeks to offer a way to help users navigate the issue and help them develop a propedeutics that will offer them the opportunity to set goals for their own research or


education. There is a clear distinction between search and discovery. In case of discovering, it is a gradual work with the knowledge of our own context and context, with a gradual revelation of what we need to know about the topic and identification of key themes within which the student is able to actively search for and work with information.

Heuristic teaching or learning, based on working with one's own thinking world, is undoubtedly one of the areas that can now be termed as a pedagogical standard. Interestingly, libraries have been unable to respond systematically to this trend. If today a part of the library community is saddened by the fact that users do not use enough electronic information resources or do not search for it, the problem is not on the users' side but on the libraries. Knowing how to find information is difficult - not in the sense that it would be difficult to use Google to find what we need, but that we often do not even know what we are looking for. The basic knowledge base can bring the user into a "bubble" of social, cognitive or informational nature. He may feel that he has gone through an adequate amount of resources, can publish interesting articles, but may lack the knowledge of what he might be looking for, the understanding of contexts he may not be aware of at all.

Creating collections can also play a significant role in supporting science, research, innovation and education. One does not learn and does not recognize the world by searching, even does not even apply the thesis that there is no need to know anything but to know where to find it. You need to know what to look for. The discovery model of information work based on information behavior can greatly help to understand how libraries should work with EIZ. Curatorship of content in this regard appears to be a fundamental fundamental task for libraries, whether they will be devoted to it or will cease to exist.

I am convinced that we are faced with a similar change that libraries have undergone in terms of function and architecture in the last half-century - from catalog cards and libraries as depositaries, to libraries where users are moving between bookshelves, they can search for what they are interested in, taking the books in hand. This move - from pure searching to ever more emphasis on discovery - is crucial.

In this respect, educational institutions should educate a larger number of curatorial librarians than background librarians. Not that there is no need, information and resources need to be owned, accessed and worked with, but the focus of libraries’ sense and importance is moving to work with content. This will naturally build on the educational role of the library.

---


In addition, projects such as P2PU perceive libraries as a space\textsuperscript{19} where people can meet and learn from each other, that is, as a physical space with a high degree of openness, but also as a place where the content is actively working.

**Examples of individual tools**

In this section, we would like to focus on the specific tools that can be used for curatorialship. We will focus on tools that are especially used in curatorial areas, which may be linked to the distribution of curatorial content.

**Bibblio\textsuperscript{20}** is a tool for creating collections. It can be used as a curator either directly or through an API. It works with two basic types of objects: common components such as video (YouTube and Vimeo), audio (SoundCloud, Audioboom), books (Amazon, Goodreads), articles or visual information (Prezi, SlideShare, Imgur). You can also attach a basic metadata label. This creates individual objects that can be part of the collection. This is the second possible outcome of working with the system. On one long page you can arrange individual objects for each other and add them with a text description. The resulting collection may be public or private, the service also allows you to search by keywords or track individual collectors. Overall, it is focused on the work of an individual, a professional who collects a collection with careful commentary and unifying content for others. It is especially interesting when working with open sources, not with closed content.

---


Bibblio is also interesting by being associated with an API that allows both collections to connect additional resources, but also from objects that create new collections or sites. The Bibblio project is also interesting to observe for its wider thought and ideological view, which shows to a large extent what the libraries are good at and how to work with different aspects of information behavior in education as well as digital libraries.

**Hypothes.is**\(^{21}\) offers the ability to annotate content directly on the web. The basic idea is that the user downloads and installs Chrome extensions, allowing them to create a "foil" over any page with text content that allows you to tag and comment on the text, or, of course, to add additional elements. This makes it possible for you to enrich different pages for your own needs.

**Hypothes.is**

Significance beyond this personal commentary is Hypothes.is primarily thanks to the API. This allows the service to link to systems for sharing these notes, so that teams can be created to comment on certain materials together, share new links, including information about what interests them, or why they are already widespread. Thanks to the API (a variety of environments and tools is really quite wide), this tool can be enjoyed both plug-in and PLE. Didactically, it is remarkably remarkable that the system as a teaching material uses the entire web. This is a nice attempt to come out of a closed LMS environment and to use the educational potential of the whole Internet (or HTML pages for which Hypothesis is intended).

**Medium**\(^{22}\) applies as probably the most popular blogging platform today. While most competitors have started to accentuate shorter content, Medium is trying to be a publishing platform rather than a single-image storage site with a short label. It is not a tool for making collections from already finished materials (however it can be partly used), but above all one of the most interesting environment for participatory curatorship of the text. Apart from the

---

\(^{21}\) **Hypothes.is** [online]. 2017 [cit. 2017-02-22]. Dostupné z: https://hypothes.is/

\(^{22}\) **Medium** [online]. 2017 [cit. 2017-02-22]. Dostupné z: https://medium.com/
fact that it is possible to write texts as an individual, to add links and to include them in a magazine, the

**Medium**

Medium offers two optional collaborative modes. The first is the work of more people in one magazine. This means that each individual can individually process the text individually, and the whole community then generates complex content. The second option is that more people can work in real-time in a single text, much like Google Docs. The difference, however, is that the result is fairly nice and can be shared, for example, through social networks. According to our judgment, it is probably the best tool for creating curatorial texts in a participative way and, at the same time, in the context of PLE models, it allows us to present and share with our own work.

**Scoopit**[^23] is about the most classical and most typically typical curatorial service that is associated with the school environment but can also be found elsewhere. It works by linking

---

labels and tags to a page, and Scoopit assigns an image to them to create individual notes on the desktop. It offers a choice between presenting a collection or closing it privately. It can be used as a personal collection of collected resources - as part of PLE, but also as a tool that offers very easy content distribution. It can serve as a bulletin board for a university course, a space for processing a topic, monitoring industry news, ... Possibilities are almost unlimited. What Scoopit offers, compared to most other projects, is working with tags. It is not necessary to search by a single tag, but all used are displayed in the filter and can be combined in various ways. This makes it extremely efficient to work with thematic links or relationships. However, no custom content can be added here.

Twitter\(^24\) is a classic social media that does not need to be presented in any way. However, we would like to draw attention to some aspects that are associated with its use. In the first place, tweeting itself can be a certain form of curatorial activity, where we send our content to the consuments, which they can read. The specificity of Twitter is that most users consume content from mobile devices. A very tempting form of curatorialism that relates to connectivity is the creation of sheets where you can create lists of accounts (or people) that deal with a topic, then remove and monitor their content, or other users can draw from your selections. It is extremely interesting to use twitter data from other services, such as Paper.li, which allows you to create one report per week or a week based on specified hashtags or accounts. For example, you can create a great newsletter from a variety of themes very simply and, for example, plug-in. Twitter can be one of the easiest and best ways to deliver content to users.

---

Practical demonstrations

At this point, we would like to show some practical curatorial projects that have recently been created at KISK and illustrate different approaches and possibilities to work with this phenomenon in real education or library practice.

The Learning Society\textsuperscript{25} is a connectivistically designed course that is compulsory for librarians and information studios in the post-graduate studies. However, the subject of a learning society is too broad to be able to be traced back to a few (twelve) two-hour lecture blocks. The subject is intended for about forty students who have to submit six articles that always deepen a subtopic.

\textbf{The Learning Society web on Medium.}

Preparations are handed over to Medium, where we have a publication to which everyone contributes. Students (especially those good) are motivated and writing long and interesting texts. Others can read what others have written, which they also do in some way and engage

in some interaction. Instead of preparations, articles are essentially appearing and some very nice. In practice, this means that the students themselves determine the topics they are discussing to a large extent and also provide their classmates with educational content, themes and texts. The main educational roles do not depend solely on the teachers, but above all on the students themselves and their activity. The great advantage of this model is both the width and depth and the diversity of educational content that one person could not provide. At the same time, Medium also has social and annotation tools, so the content can also work effectively in this regard.

We used another model to work with Psychology and EdTech\(^\text{26}\) and Digital Bloom Taxonomy\(^\text{27}\). These are topics that are relatively little scholarly trained and difficult for students to grasp. They are currently not linked to any course and can be browsed freely. These are relatively short texts (usually about three to four thousand characters) that are written to have some information or educational content themselves, but for effective study students should browse through the links listed here. Each topic has about ten sources that expand what the basic text contextualizes. The reader thus has an idea of the whole and the context, so he gets to the deeper ones. Technically, both sites are running on Tumblr, and if they refer to closed sources, Tumblr can also build private sites. However, the new Google Sites may be worthwhile as well.


Psychology and EdTech on Tumblr.

The latest project is actually a very easy connection between Pocket and Tumblr via IFTTT. It serves as a place where you can watch articles that the teacher (the Michal Černý web: Things from Pocket going through IFTTT to Tumblr\(^{28}\)) finds it interesting to read. If I hit an interesting page, just click on the button in the browser and the page is automatically saved - Pocket gets an address, caption and annotation, the user can add keywords and the result is published on the blog. This way you can easily show different points of interest or resources and share them with readers.

---

Michal Černý: Things from Pocket going through IFTTT to Tumblr.

Conclusion

Digital information curatorship is no longer a specific activity of a highly specialized or specialized librarian or information scientist who would offer libraries as something extra. It is an activity entirely fundamentally linked to changes in the information society and the status of libraries in it. As it is unthinkable for a regular library to operate on a funded basis from a user, it seems unacceptable that it does not focus on content work that will be tailor-made to users, organizations, or otherwise defined demand.

Efforts to ensure better and more effective promotion of EIZs can be a good springboard for these changes, but according to our judgment, it represents only one piece in a wider paradigm shift in the role of the library in the 21st century.
Reference


Hypothes.is [online]. 2017 [cit. 2017-02-22]. Dostupné z: https://hypothes.is/


