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Report on the DARIAH Digital Practices in the Arts and Humanities  
Web Survey 2014.

Beat Immenhauser



# SWITZERLAND

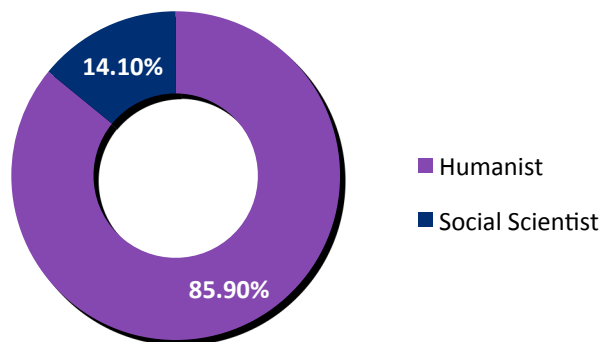
*This chapter reports on the findings of the Swiss sample of the DARIAH Web Survey on Digital Practices in the Arts and Humanities 2014.*

## 1. Characteristics of the Swiss sample

The Swiss sample consists of 197 complete answers. These answers have been categorized according to the discipline to which the respondents belong in order to create a homogenous sample consisting solely of researchers working in the humanities and social sciences (HSS). This filtering resulted in a new sample, consisting of 184 answers.

### 1.1 Discipline

As expected by the web survey design and targeting strategies, most respondents are humanists (85,9%), while a minority are social scientists (14,1%) (see Figure 1).



*Figure 1 – Swiss sample. Percentage of humanists and social scientists, N=184.*

Furthermore half of the sample consists of historians (20%), representatives of linguistics (19,3%) and language and literature (15,3), due to the disciplinary anchoring of the Digital Humanities in Switzerland. The disciplines of archaeology, philosophy, anthropology / ethnology, art, history of art or visual studies, medieval studies, theology or religious studies and Classics are also adequately represented (4,7–6,7%), while the subjects drama, theatre, or performance studies, music, folklore and ethnic, gender and cultural studies reflect their disciplinary distribution at the Swiss universities (0,7–1,3%). Other disciplines (18,5%) represented in the sample include sociology, Middle East and Asian studies, law, economics, educational sciences, geography or psychology (see Figure 1a).

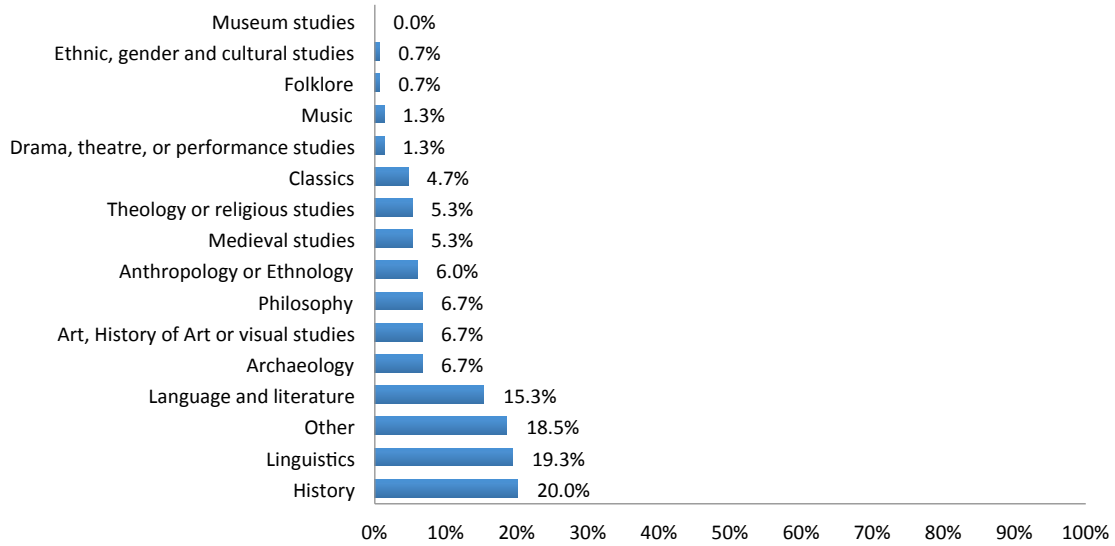


Figure 1a – Swiss sample. Discipline, N=150.

## 1.2 Professional affiliation and status.

The vast majority of the respondents is attached to a university (91,5%), while only few scientists are affiliated to a research center (4,5%), a government department (2,3%) or are not attached to an institution (1,7%) at all. The private sector isn't playing any role regarding to the professional affiliation (see Figure 2). Regarding to their professional status, most of the

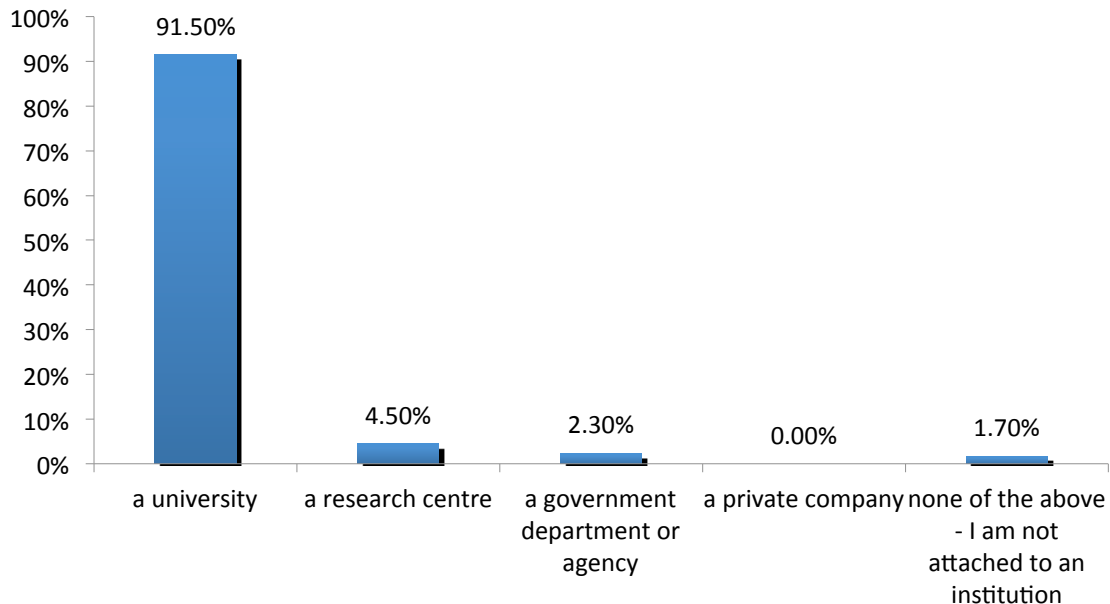


Figure 2 – Swiss sample. Professional affiliation, N=177.

respondents are full or associated professors, readers or senior researchers (38,7%), while the mid-level academic positions like assistant professors, lecturers (9,8%) or post-doctoral re-

searchers (13,3%) include almost a quarter of the sample. The PhD students represent an important percentage of the sample (29,5%), whereas amateur / independent researchers (2,9%), junior researchers (4,6%) and master students (1,2%) constitute only a small proportion of the sample (see Figure 3).

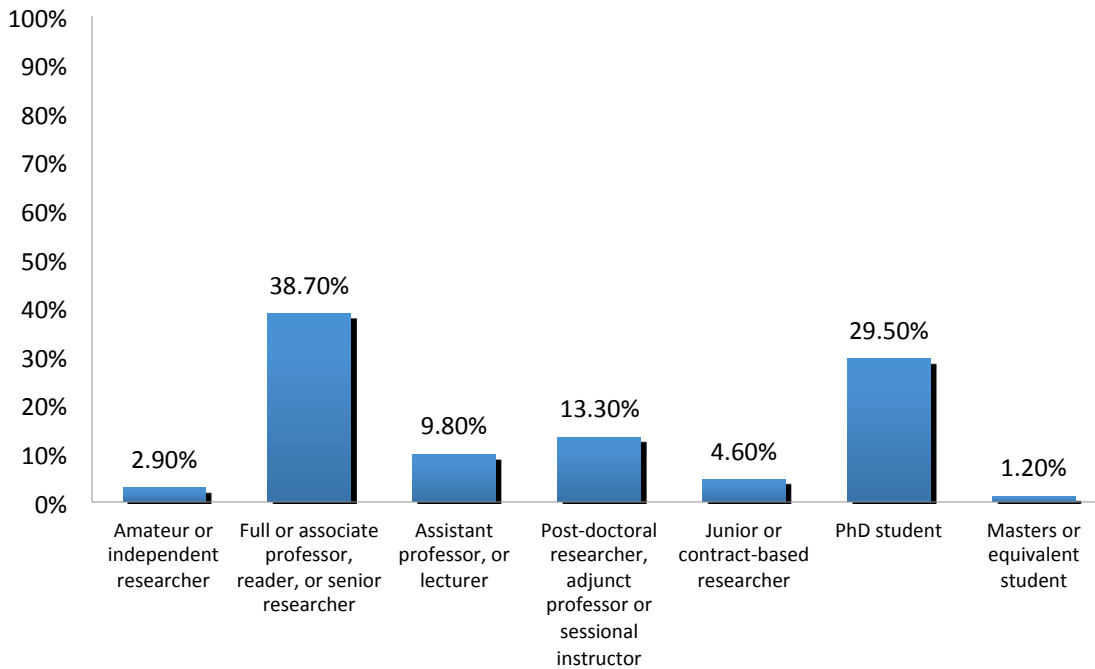


Figure 3 – Swiss sample. Professional status, N=173.

### 1.3 Years in research, age and gender.

Most respondents (53,3%) are experienced researchers, have been working for more than 10 years in research, while 26,1% of the respondents have been working as researchers between 3 and 10 years. No fewer than 17,9% of the respondents started their research careers only 1 to 3 years ago, while 2,7% have been working less than a year as researchers (see Figure 4). The age group of relatively young researchers of 26 to 35 years form the major part of the respondents (34,8%), followed by researchers of 36 to 50 (31%) and 51 to 65 (27,7%) years of age. Very young researchers (3,3%) and respondents older than 65 years (3,3%) are represented less within the Swiss sample (see Figure 5). Finally, the majority of the respondents is male (54,3 %) (see Figure 6).

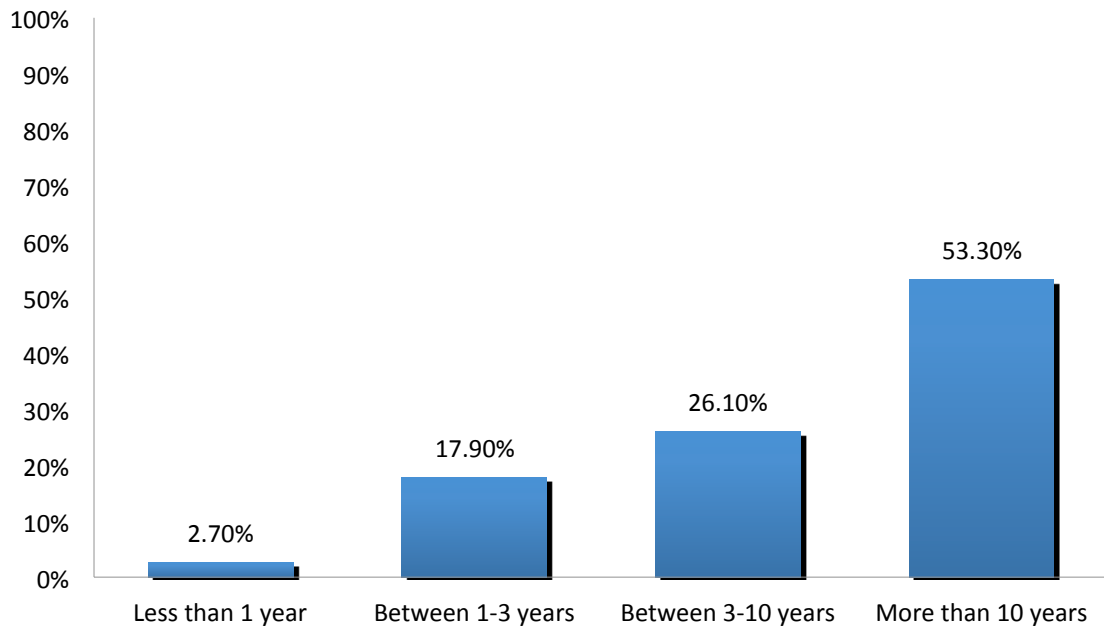


Figure 4 – Swiss sample. Years in research, N=184.

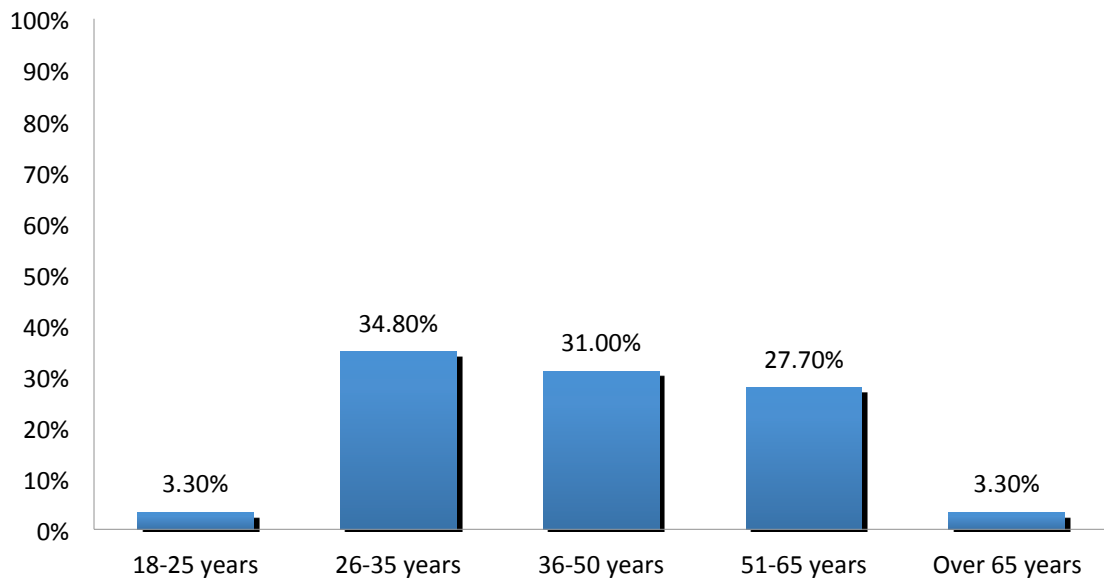


Figure 5 – Swiss sample. Age, N=184.

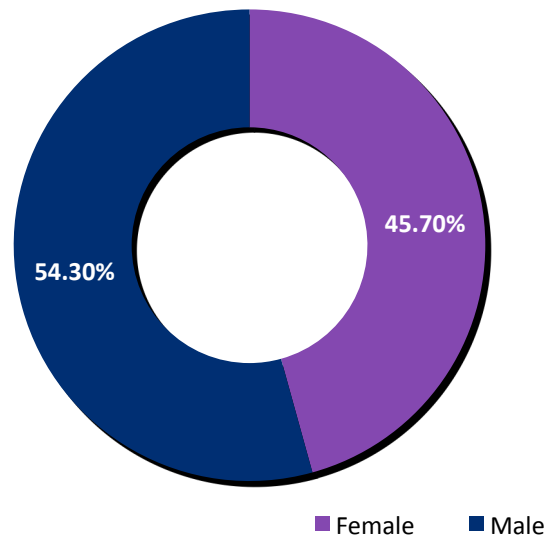


Figure 6 – Swiss sample. Gender, N=184.

## 2. Digital practices and needs: Switzerland

### 2.1 Use of digital media to consult research material

The use of digital media in order to consult research material seems to be quite common among Swiss researchers. The respondents were asked to state how they consult materials such as articles in scholarly journals or conference proceedings, books, archival holdings, images, maps, video and audio. They furthermore were asked if they use a desktop or laptop PC, some mobile device and / or if they use an analogue device to study the above-mentioned resources. Multiple responses were allowed (see Figure 7).

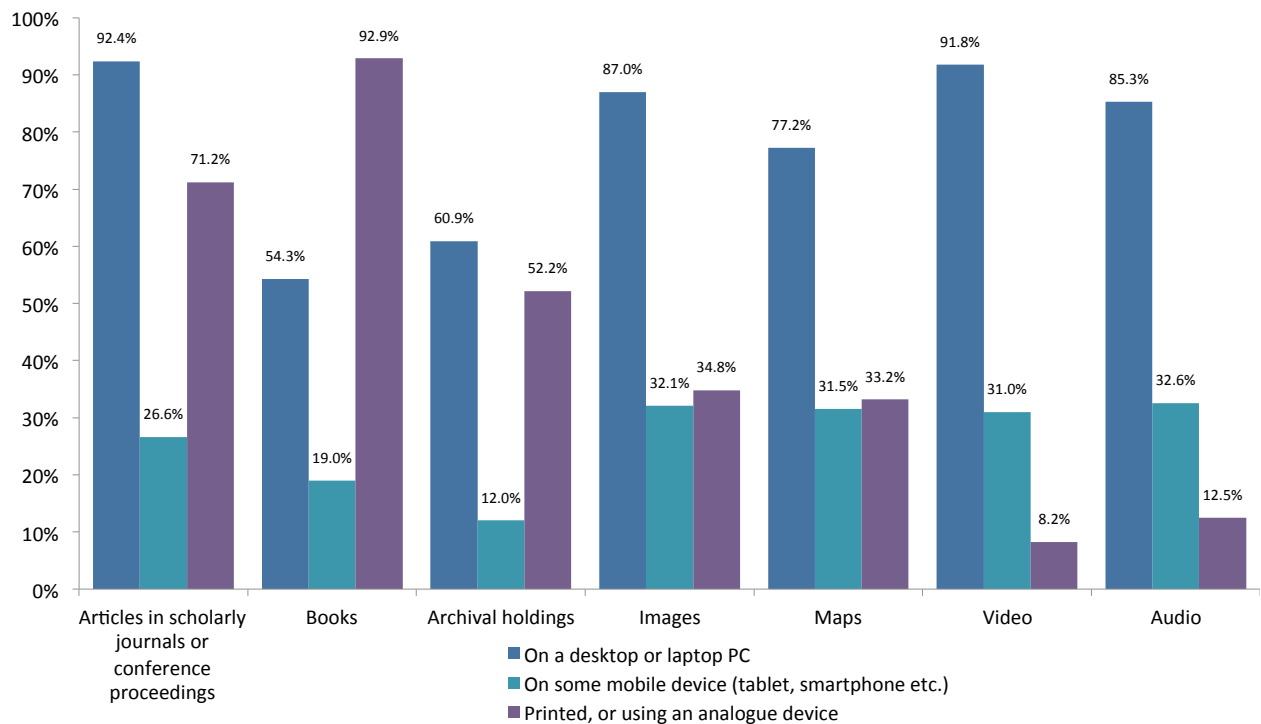


Figure 7 – Swiss sample. Use of desktop/laptop PC, mobile devices and printed or analogue devices to consult research material, N=184.

#### 2.1.1 Articles in scholarly journals or conference proceedings

92,4% of the respondents stated that they use a desktop or laptop PC to consult articles in scholarly journals or conference proceedings. 26,6% indicated that they use a mobile device for the same purpose, while 71,2% still use printed text or analogue means.

#### 2.1.2 Books

54,3% of the respondents stated that they use a desktop or laptop PC to consult books, while 92,9% indicated that they use printed copies for the same purpose. Books are the only case in which the use of printed / analogue devices is more widespread than the use of digital devices. 19% of the respondents stated that they use some mobile devices to consult books.

### 2.1.3 Archival holdings

60,9% of the respondents stated that they use a desktop or laptop PC to consult archival holdings. A minority of 12% indicated that they consult archival holdings by using some mobile devices, while 52,2% stated that they use printed or analogue media for the same purpose.

### 2.1.4 Images

Images are consulted primarily using a desktop or laptop PC (87%), whereas the use of mobile devices (32,1%) doesn't differ much from the use of printed or analogue media (34,8%).

### 2.1.5 Maps

The use of mobile devices (31,5%) or printed / analogue media (32,2%) for consulting maps corresponds to the above-mentioned percentages for images. Here again the use of a desktop or laptop PC is the most frequent answer (77,2%).

### 2.1.6 Video

The vast majority of 91,8% uses a desktop or laptop PC to watch video. 31% stated that they use a mobile device for the same purpose, while 8,2% stated that they use analogue media.

### 2.1.7 Audio

85,3% of the respondents stated that they use a desktop or laptop PC to listen to some audio related material for their research. Almost one third (32,6%) uses a mobile device for the same purpose, while 12,5% stated that they use analogue media.

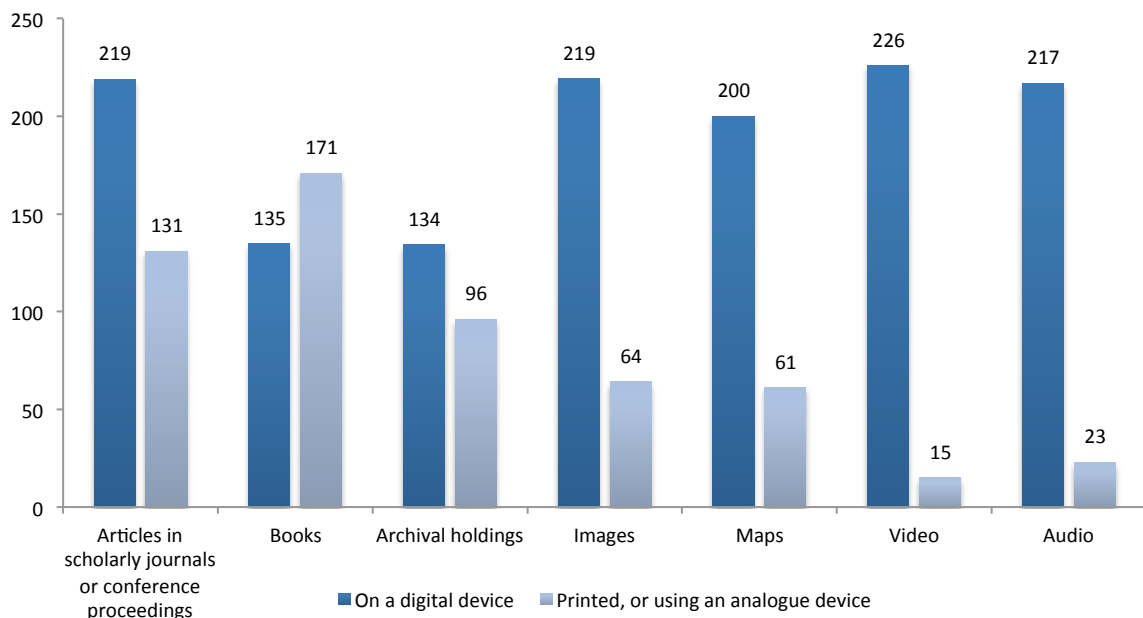


Figure 7a – Swiss sample. Use of digital and printed / analogue media to consult research material, N=184.

Figure 7a illustrates the overall use of digital media (based on desktop or laptop PC and mobile devices) compared to the use of printed or analogue media. In almost all cases, digital media are more often used than printed or analogue ones, with the exception of books. Printed books are still more often used than digital copies, whereas digital devices are clearly the preferred way to work with images, maps, video or audio. The use of digital and analogue media is more balanced



for articles in scholarly journals and archival holdings, the digital approach however still exceeds the analogue one.

The use of mobile devices, such as tablets and smartphones, is supposed to be growing as the percentage fluctuates already between one quarter to one third for the consultation of articles, images, maps, video and audio.

## 2.2 Interest in using digital methods or tools

The respondents of the survey were asked whether they use or are interested in using digital methods or tools for their research. The large majority (90,8%) states that they already use digital methods or tools in the course of their research. 7,6% of the persons surveyed indicated that they are interested in using digital methods or tools, while only three (= 1,6%) interviewees say that they neither use nor are interested in using digital methods or tools (see Figure 8).

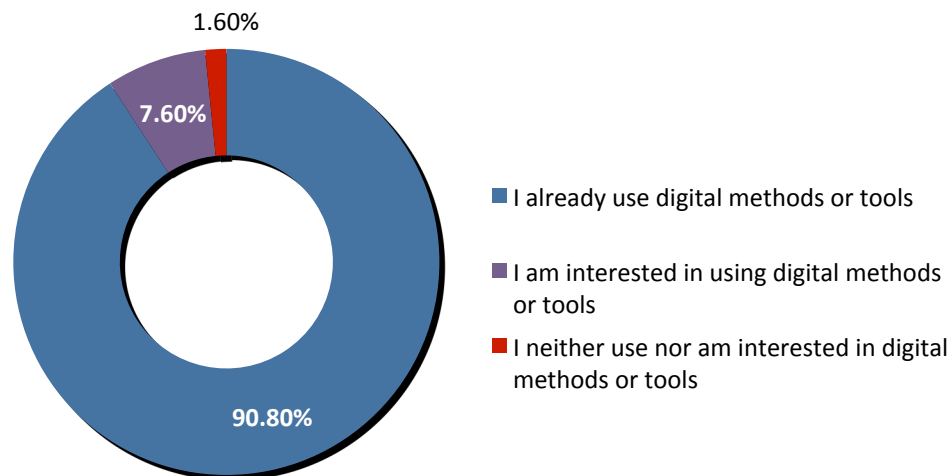


Figure 8 – Swiss sample. Interest in using digital methods or tools, N=184.

## 2.3 Purpose of use of digital methods or tools

The respondents who stated that they already use digital methods or tools were then asked, in a filter question, to indicate for what purpose they use them. Five answers were available, and the respondents could enter multiple responses. Their answers indicate that all five purposes proposed are relevant. More specifically, more than 69% of the persons surveyed state that they use digital methods or tools to (1) discover, collect or create their research assets, (2) organize, structure or manage their research assets, (3) annotate, enrich or curate their research assets, (4) process, analyze, or visualize their research assets, (5) publish, disseminate or communicate about their research. Of these activities, the first two (to discover, collect or create research assets and to organize, structure or manage research assets) and the last one (publish, disseminate or communicate about their research) seem to be more widespread (see Figure 9). On the other hand the use of digital methods or tools for annotating, enriching or curating research assets seems to be less frequent (69.6%).

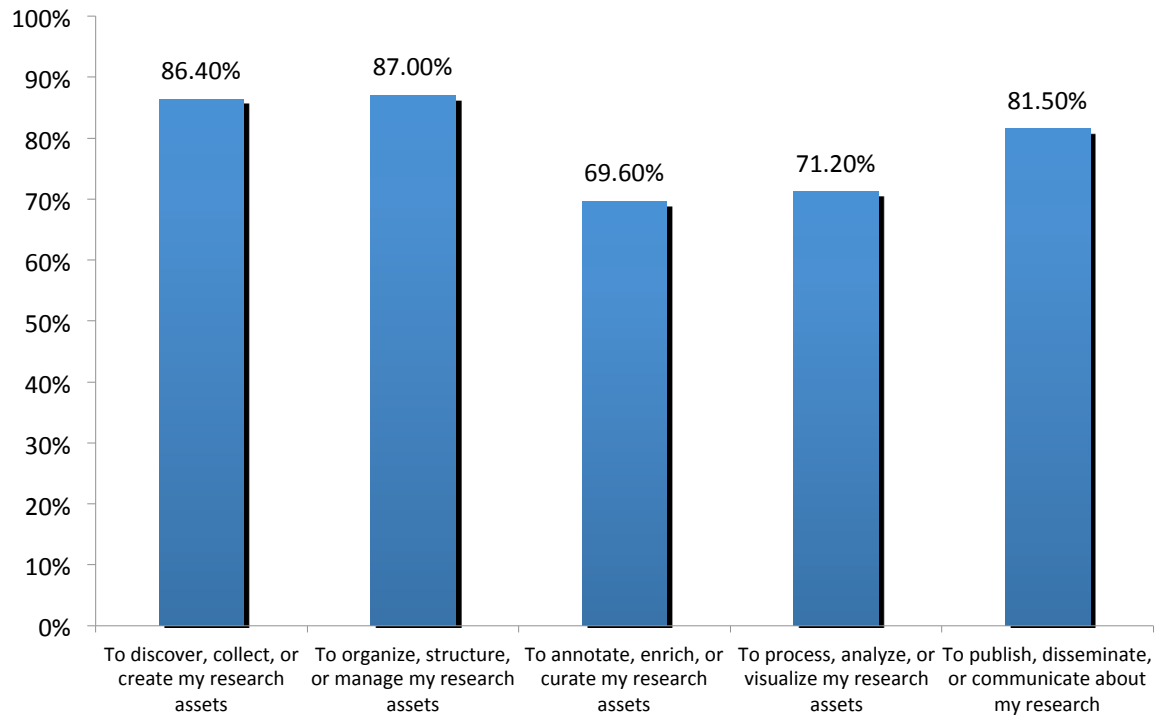


Figure 9 – Swiss sample. Purpose of use of digital methods or tools, N=184.

## 2.4 Specific digital methods or tools used

The respondents who stated that they already use or are interested in using digital methods and / or tools were also asked to specify them. This open question allows us to gather free text from spontaneous answers and thus to gain a deeper insight in the way the surveyed researchers understand the use of digital methods and tools, along with their specific answers.

The answers were treated as follows: They were categorized into five groups, according to the specific scholarly activities related to them. These categories are (1) to discover, collect or create research assets, (2) to organize structure or manage research assets, (3) to annotate, enrich or curate research assets, (4) to process, analyze, or visualize research assets, (5) to publish, disseminate or communicate about research. Since the answers comprise activities and examples of applications altogether, they were separated into two groups and the activities were matched with the applications. The findings presented below do not take into account the frequency of emergence of a specific answer, since it is our intention to present the entire variety of uses, activities and services / tools with these findings.

### 2.4.1 To discover, collect or create research assets

In order to discover and collect research assets the respondents state that they access digital repositories and library catalogues. The repositories listed represent a wide variety of data collections in numerous disciplines and are mainly available online; most of them are international repositories, while a small number of Swiss collections is also mentioned (see Table 9a). For the creation of research assets the respondents name methods like scanning / digitization, audio-capturing and other data-harvesting methods.



Table 9a – Swiss sample. Specific digital methods or tools used – Discovering, collecting or creating research assets.

<b>Discover, collect, create research assets</b>	
<b>Activity</b>	<b>Examples mentioned</b>
Digitization of manuscripts	-
Surveys, data collection	LimeSurvey, Qualtrics, SurveyMonkey
Dictionaries	Merriam Webster, Linguee, TLG-online
Web / media monitoring	Netvibes, feedly
Transcription of audio-files	f4QDA, f4analysis, sonal
Access to digital repositories and library catalogues	<p><b>International:</b>            Social Sciences Research Network, Gallica.fr, Google, Google Books, Google Scholar, Ina.fr, NO-DO, Luce, Archive.org, Gutenberg, JSTOR, Project Muse, Abell, MLAIB, Britannica online, Fweet.org, Dyabola, Persée, research catalogue of the Society of Artistic Research, Karlsruher virtueller Katalog KvK, SUDOC, Electronic research management (ERM), Frontiers, Cosmas, DWDS, eLexico, Cairn, CrossAsia, Philpapers.org, Wiley Online, FRANTEXT, Loeb Classical Library online, Musisque deoque, Perseus, Brepolis, THEOLDI, New Pauly, ScienceDirect, Thesaurus Linguae Aegyptiae, Centre National de Ressources Textuelles et Lexicales (CNRTL), Giza Archives, Europeana, Modern Language Association MLA Bibliography, Stanford Encyclopedia of Philosophy</p> <p><b>Swiss:</b>            Swiss Archives, e-codices, e-rara, Bibliographie biblique informatisée de Lausanne BiBIL, SERVAL, Scriptorium, retro.seals.ch, RERO, swisslex</p>

#### **2.4.2 To organize, structure or manage research assets**

In order to organize, structure or manage their research assets the respondents state that they use a variety of tools like databases, reference management tools like Zotero, Citavi, Entnote etc. (see Table 9b). Project management tools are also quite often used as well as collaboration, storage and sharing software like Skype, Dropbox and Wetransfer. The use of social media tools like Twitter and Academia is equally pointed out by Swiss researchers. Salsah is on the edge of becoming an important platform for a virtual research environment.

Table 9b – Swiss sample. Specific digital methods or tools used – Organizing, structuring or managing research assets.

<b>Organize, structure or manage research assets</b>	
<b>Activity</b>	<b>Examples mentioned</b>
Wikis	-
Social Bookmarking	-
Use of databases	Filemaker, MS Access, PHP, MySQL, PubMed
Use of reference management tools	Endnote, Zotero, Citavi, Evernote, diigo, Delicious Library, BibTeX, BibDesk, Mendeley
Project management	GanttProject, Jira, Merlin, PBWorks
Collaboration	Realttime Board, Skype, doodle
Storage, sharing	Dropbox, SlideShare, ResearchGate, OJS, Calibre, Wetransfer
Virtual research environment (VRE)	Salsah
Social Media	Academia, Twitter, Facebook, LinkedIn

### 2.4.3 To annotate, enrich or curate research assets

In order to annotate, enrich or curate research assets the respondents state that they use tools like ELAN for text annotation (see table 9c). Other tools like Dropbox can be used for managing and curating purposes. The Swiss web service Metagrid is a promising tool for online networking of humanities resources that is already used by a number of research infrastructures.

*Table 9c – Swiss sample. Specific digital methods or tools used – Annotating, enriching or curating research assets.*

<b>Annotate, enrich or curate research assets</b>	
<b>Activity</b>	<b>Examples mentioned</b>
video / film annotation	-
metadata enriching	-
Text annotation	ELAN, MMAX2, ANNIS2
Data linking	Metagrid.ch
E-Learning	Chamilo

### 2.4.4 To process, analyze, or visualize research assets

The respondents identified a lot of tools, services and software to process, analyze or visualize research assets. The activities mentioned and the tools used include text processing (LaTeX, Word etc.) and different kinds of text and data analysis (Wordle, MAXQDA, SPSS, NVivo etc.). Image and audio processing and all kinds of visualization are activities that are mentioned quite often as well (see table 9d).

*Table 9d – Swiss sample. Specific digital methods or tools used – Processing, analyzing or visualizing research assets.*

<b>Process, analyze, or visualize research assets</b>	
<b>Activity</b>	<b>Examples mentioned</b>
Creating websites	HTML-editor



Web mapping / visualizing	NetDraw
Text encoding	TEI
Presentation	Acrobat, Freemind, PowerPoint, Prezi
Text processing / publishing	LaTeX, TexShop, OpenOffice, MSword, LyX, LibreOffice, TUSTEP, WordPress, Scrivener
Text analysis / mining	Praat, ANNIS2, MAXQDA, Tesseract, Alceste, CAQDAS tools, Atlas.ti, Wordle, Word Count Tool
Text recognition	Dragon speaking
Data analysis	SPSS, SAS JMP, R Project, Excel, Sofastats, Sphinx, NVivo
Geovisualization	QGis, WebGis
Image editing	Photoshop, Adobe Illustrator, Macromedia Fireworks
Video editing	Screenflow
Programming	Python
Audio processing	Audacity, Express scribe

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## 2.5 Scholarly activities

The next set of questions seeks to measure how often researchers perform specific scholarly activities related to their work. The activities examined are the following: (1) visiting historical archives, special collections or museums, (2) seeking information or advice from archivists, subject librarians or collection curators, (3) accessing primary sources outside one's country of residence, (4) using a standard keyword list or thesaurus to organize research assets, (5) using one's own keyword list or thesaurus to organize research assets, (6) using a bibliographic management application to manage citations, (7) collaborating with others on a research project, (8) communicating with others in a social media site or discussions forum.

### ***2.5.1 Visiting historical archives, special collections or museums***

Nearly 40% of the respondents state that they visit historical archives, special collections or museums very often (13,7%) or often (25,8%). The majority, however, indicated that they visit these institutions seldom (35,7%) or never (24,7%) (see Figure 10).

### I visit historical archives, special collections or museums

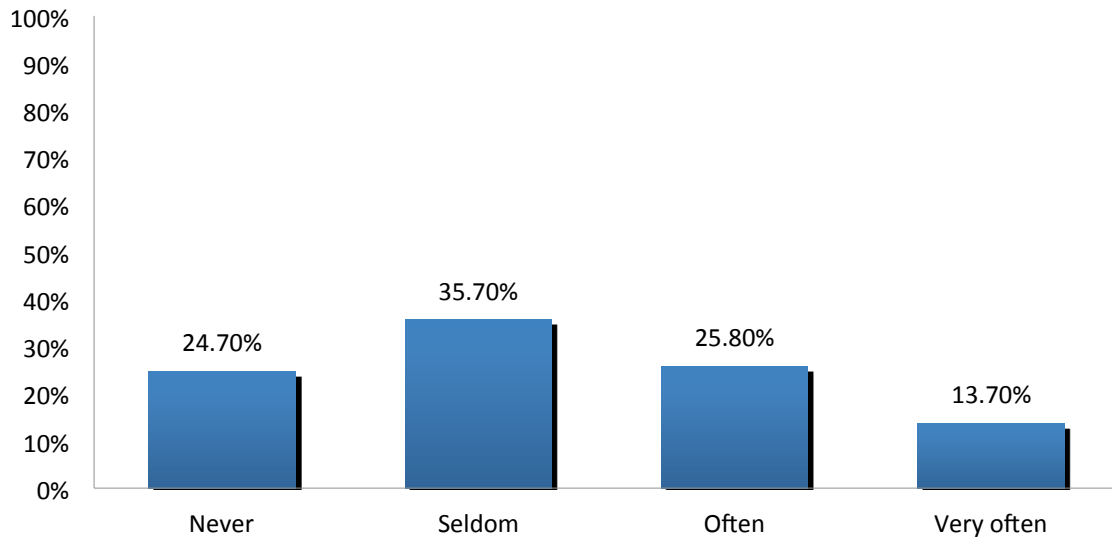


Figure 10 – Swiss sample. Scholarly activities; frequency of visiting historical archives, special collections or museums, N=184.

#### 2.5.2 Seeking information or advice from archivists, subject librarians or collection curators

A minority of 30% of the respondents states that they seek information or advice by the help of archivists, subject librarians or collection curators often (22,8%) or even very often (7,1%), whereas 70 % seldom (42,4%) or never (27,7%) seek information or advice form these experts (see figure 11).

### I seek information or advice from archivists, subject librarians or collection curators

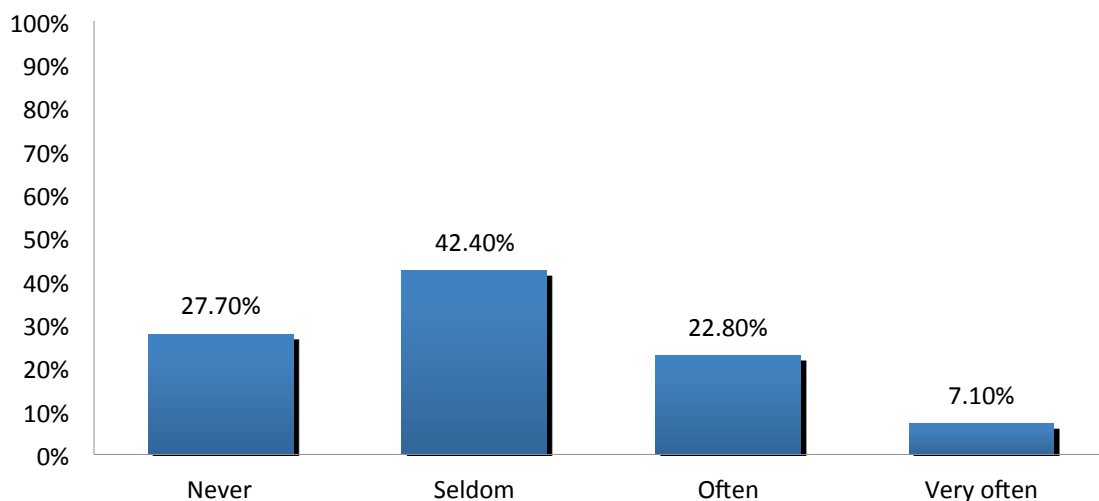


Figure 11 – Swiss sample. Scholarly activities; frequency of seeking information from archivists, subject librarians or collection curators, N=184.



### 2.5.3 Accessing primary sources outside one's country of residence

Almost 60% of the respondents state that they often (32%) or even very often (26,5%) access primary sources outside their country of residence. On the other hand 41% of the persons surveyed indicated that they focus their research on primary sources in their country of residence and therefore seldom (28,7%) or never (12,7%) access sources abroad (see figure 12).

#### I access primary sources outside my country of residence

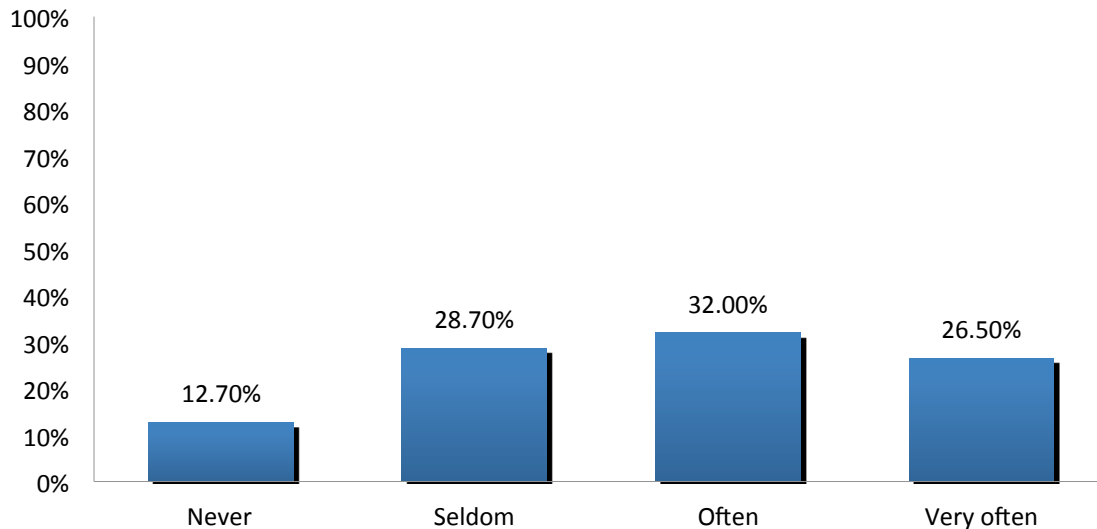


Figure 12 – Swiss sample. Scholarly activities; frequency of accessing primary sources outside one's country of residence, N=181.

### 2.5.4 Using a standard keyword list or thesaurus to organize research assets

Using a standard keyword list or thesaurus to organize research assets seems to be an activity that most respondents never (48,6%) or seldom (32,6%) perform. 12,2% of the respondents, on the other hand, indicate that they often – 6,6% very often – use a standard keyword list or thesaurus (see Figure 13).

### I use a standard keyword list or thesaurus to organize my research assets

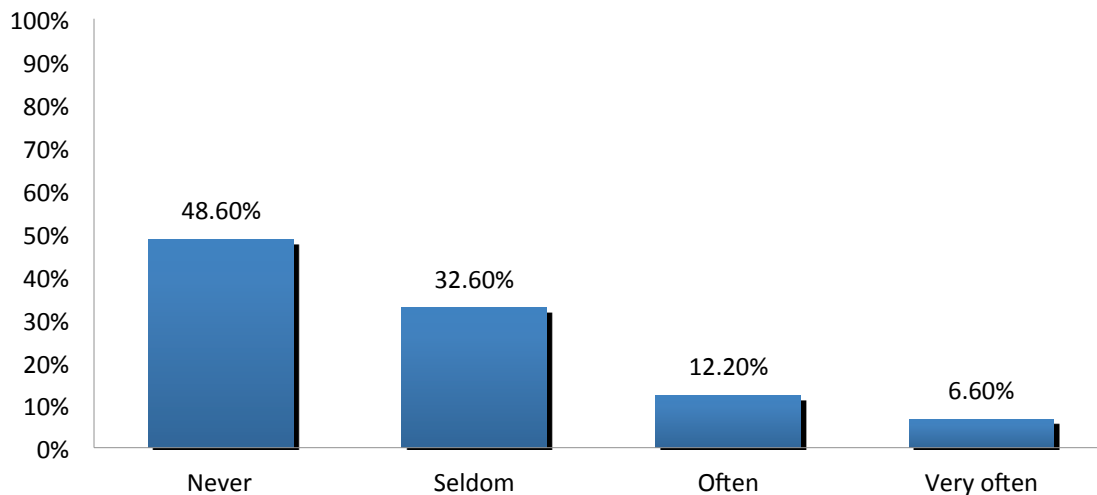


Figure 13 – Swiss sample. Scholarly activities; Frequency of using a standard keyword list or thesaurus to organize research assets, N=181.

#### 2.5.5 Using one's own keyword list or thesaurus to organize research assets

The responses to this statement show that more than half of the interviewees use their own keyword list or thesaurus to organize their research assets (29,1% often and 22,5% very often), whereas 28,6% never and 19,8 seldom create their own keyword list or thesaurus (see Figure 14).

### I use my own keyword list or thesaurus to organize my research assets

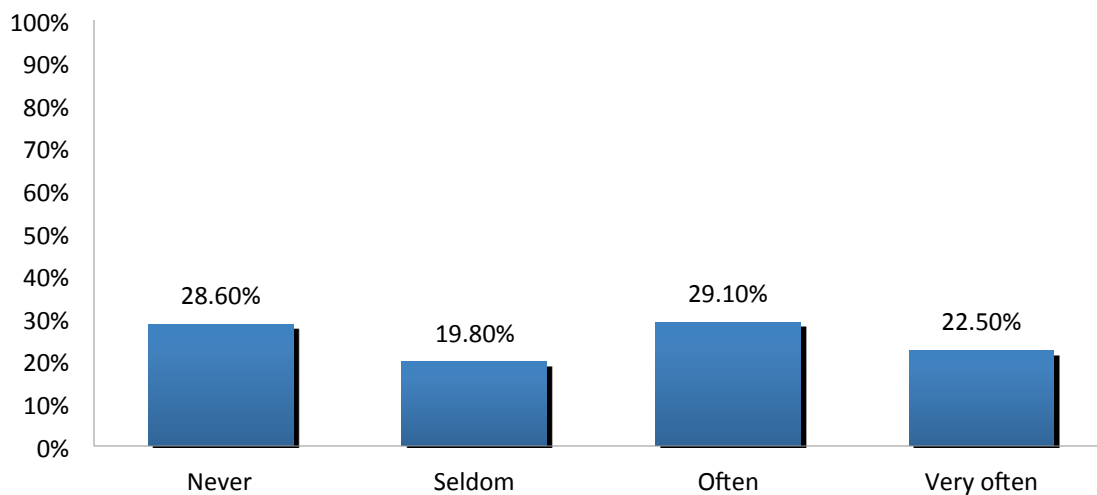




Figure 14 – Swiss sample. Scholarly activities; frequency of using one’s own keyword list or thesaurus to organize research assets, N=182.

Overall, the researchers seem to use their own keyword lists more than some standard keyword lists, even those who state that they use such lists very often (see Figure 14a).

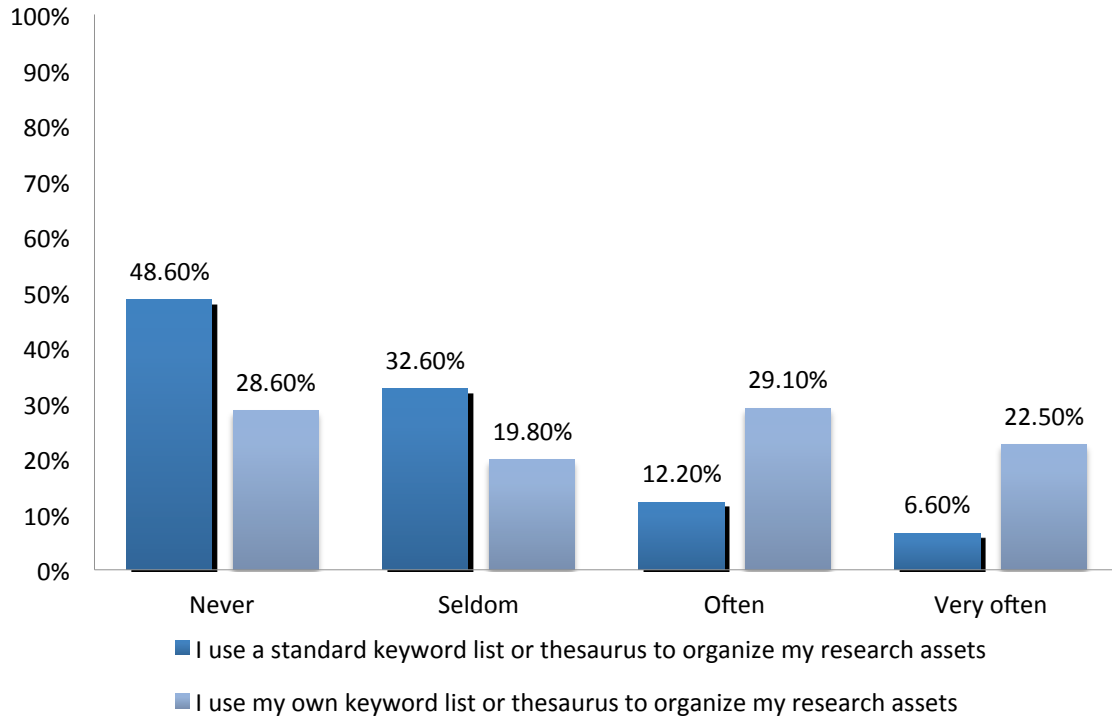


Figure 14a – Swiss sample. Scholarly activities; frequency of using one’s own or a standard keyword list or thesaurus to organize research assets, N=182.

### 2.5.6 Using a bibliographic management application to manage citations

Using a bibliographic management application seems to be a quite widespread way to manage citations, as 37,5% of the respondents specified the frequency of use as ‘very often’ and a further 16,3% as ‘often’. On the other hand, one third (33,2%) of the respondents never uses such tools, 13% seldom (see Figure 15).

**I use a bibliographic management application (e.g. Endnote, Zotero etc.) to manage my citations**

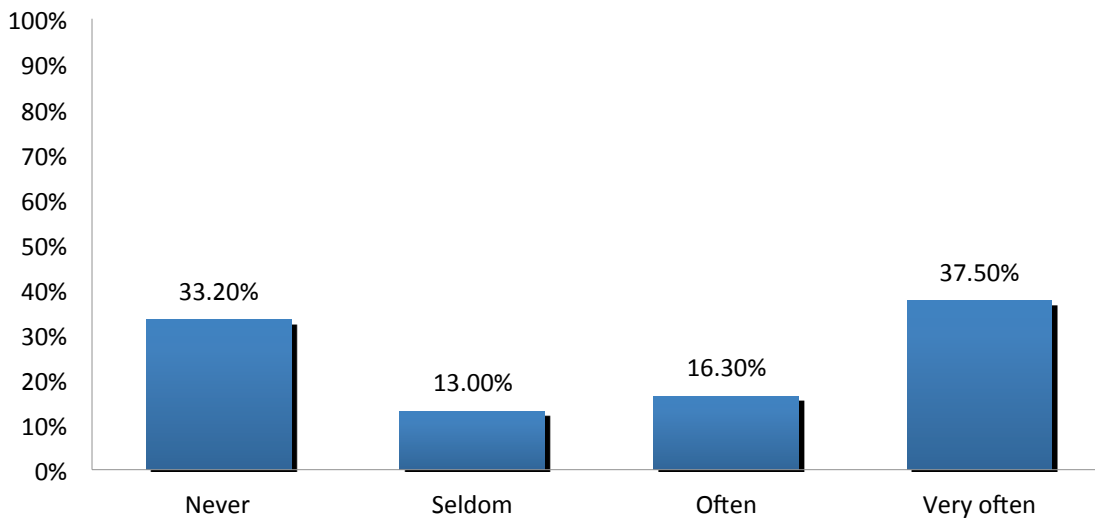


Figure 15 – Swiss sample. Scholarly activities; frequency of use of bibliographic management applications to manage citations, N=184.

**2.5.7 Collaborating with others on a research project**

According to the statements, three quarters of the respondents prefer collaborating with others on a research project, as 37,7% practice this often and 35% very often, whereas only 6,6% never and 20,8% seldom collaborate with other researchers on projects (see Figure 16).

**I collaborate with others on a research project**

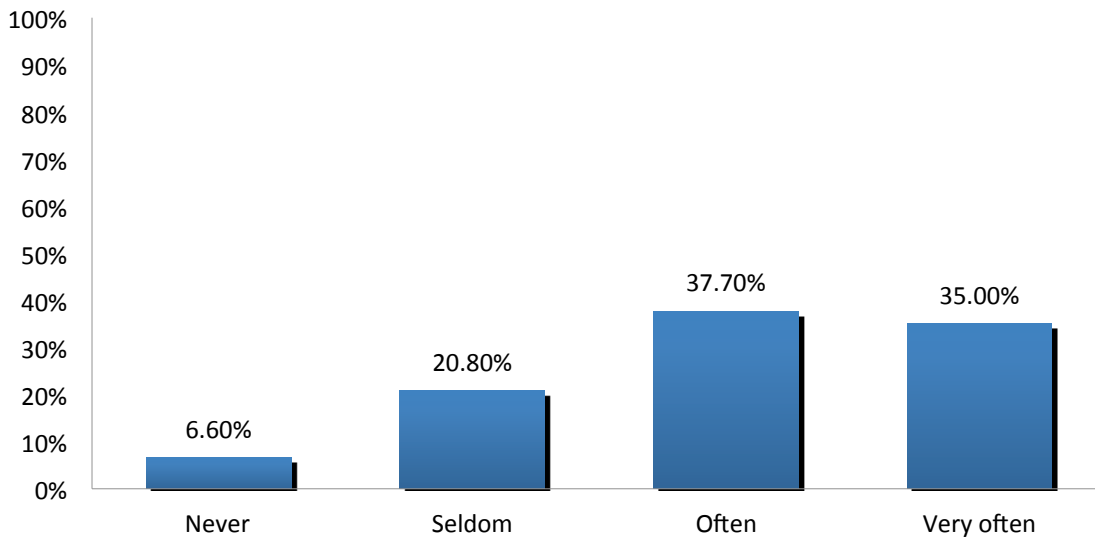


Figure 16 – Swiss sample. Scholarly activities; frequency of collaborating with others on a research project, N=183.



### 2.5.8 Communicating with others in a social media site or discussion forum

A minority of 40% of the respondents prefers communication with others in a social media site or discussion forum often (20,8%) or very often (19,7%). One quarter (23%) never communicates with their peers by social media, one third (36,6%) seldom (see Figure 17).

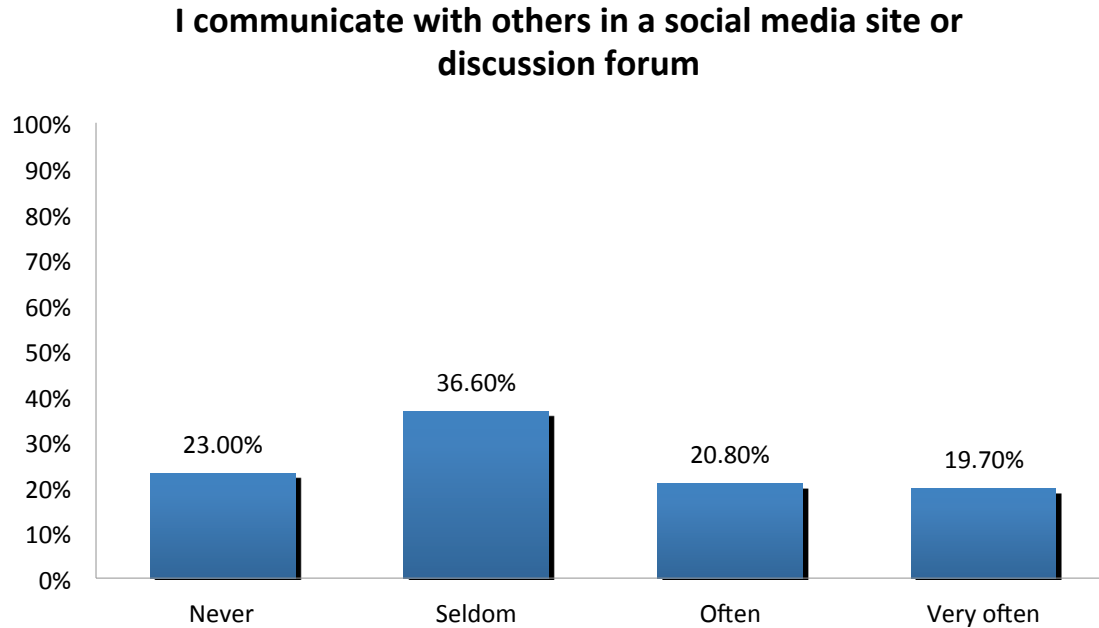


Figure 17 – Swiss sample. Scholarly activities; frequency of communicating with others in a social media site or discussion forum, N=183.

### 2.6 Publishing language

64,1% of the respondents state that they primarily publish in their native language, while 30,1% state that they primarily publish in English and 5,8% state that they primarily publish in some other language (see Figure 18).

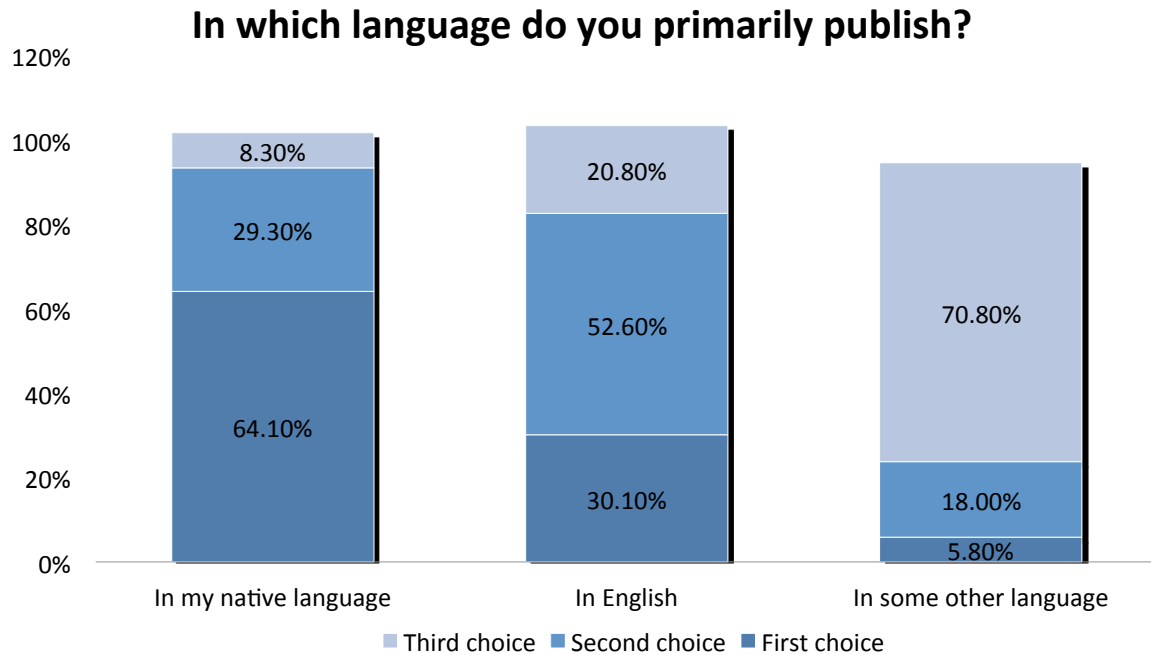


Figure 18 – Swiss sample. Publishing language, N=184

## 2.7 Means of dissemination of scholarly work

When it comes to the dissemination of scholarly work Swiss researchers chose more often a scholarly community site, the portal or repository of the researchers' institution, an open content journal or publication or their own website or blog. Less often dissemination is done through a social network, while dissemination through a generic online content community is rarely chosen by Swiss researchers in the humanities (see Figure 19).



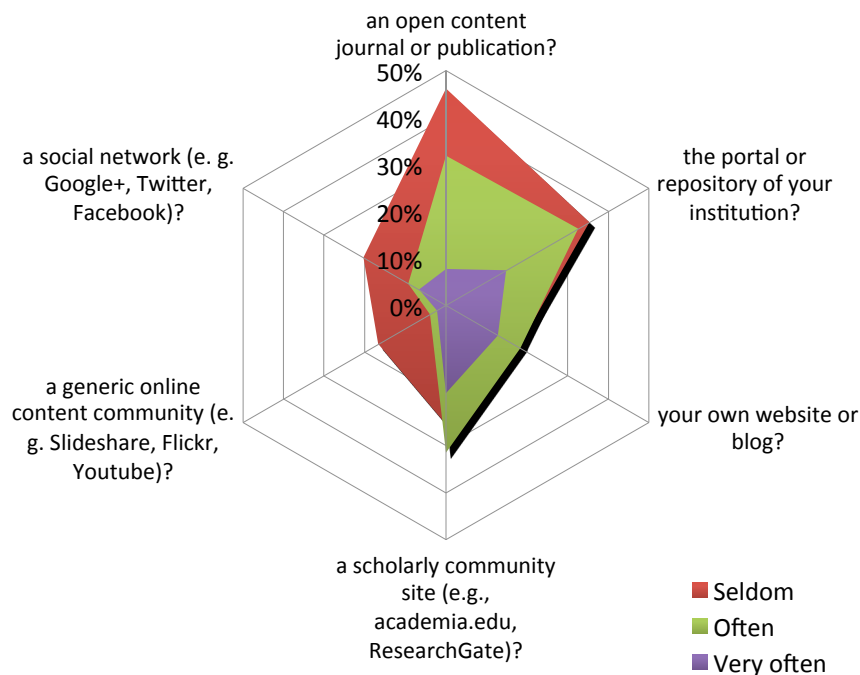


Figure 19 – Swiss sample. Means of dissemination of scholarly work, N=182.

More specifically, dissemination through an open content journal or publication is seldom performed by 46,2%, often by 31,9 and very often by 7,7% of the respondents. Dissemination through the portal or repository of the researcher’s institution is seldom performed by 35,4%, often by 32,6% and very often by 14,9% of the respondents. Dissemination through the researcher’s web site or blog is performed never by 51,9%, often by 18,3%, seldom by 17,8% and very often by 12,85 of the respondents. Dissemination through a scholarly community site is performed often by 31,5%, seldom by 25,3% and very often by 18,8% of the respondents. Dissemination through a generic online content community is performed never by 73,3%, seldom by 16,6%, often by 3,9% and very often by 2,2% of the respondents. Dissemination through a social network is performed never by 63,8%, seldom by 20,3%, often by 9,3% and very often by 6,6% of the respondents.

## 2.8 Use of databases

Most of the respondents (39,7%) state that they use a personal database for their research data or sources. One third (33,2%) of the respondents indicate that they do not use a database. 19% of the respondents say that they use both an institutional and a personal database for their research data or sources, while 8,2% exclusively use an institutional database (see Figure 20).

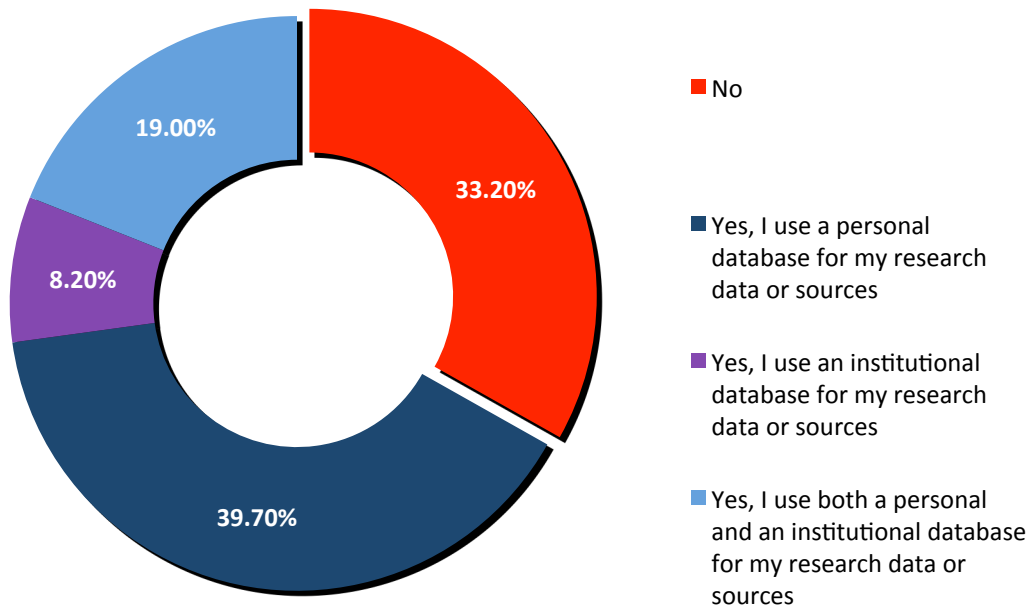


Figure 20 – Swiss sample. Use of database, N=184.

## 2.9 Database content

The researchers using databases were asked in a filter question to indicate what types of objects are contained in those databases. They could choose among eight kinds of objects: (1) characteristics (attributes of data or sources), (2) textual descriptions or commentaries, (3) photographs or scanned images, (4) transcripts, (5) maps, (6) audio recordings, (7) video, and (8) 3D models. According to the answers of the Swiss researchers, their databases mainly contain textual descriptions or commentaries (91,8%) and characteristics or attributes of their data or sources (91,7%). Databases are also used to keep and manage transcripts (65,5%), photographs or scanned images (62,4%), audio recordings (36,4%), video (32,2%), maps (22,6%) and 3D models (4,3%) (see Figure 21).



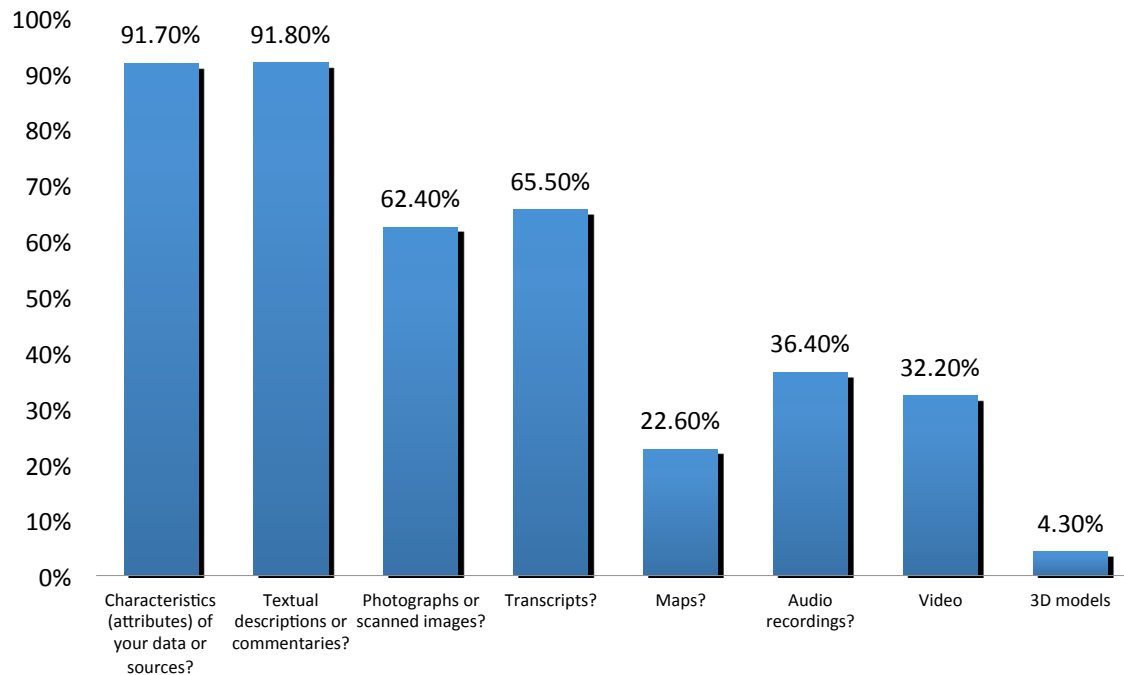


Figure 21 – Swiss sample. Database contents, N=122

## 2.10 Frequency of use of services

The vast majority of the respondents (between 90 and 100%) use some kind of digital services for their research activities. Only the use of social media tools is not (yet) very widespread. More specifically, this question produced the following results: Most respondents (83,7%) state that they use web search engines very often or often (13,6%), while only a few researchers say that they use them seldom (1,6%) or never (1,1%). The use of search engines of research publications, such as Google Scholar or Microsoft Academic Search, is also frequent. 44% state that they use such search engines very often, 28,8% often and still 20,1% seldom. Only 7,1% indicate that they never use such tools. Digital archives, digital collection or data repositories are very often used by 40,2%, while 35,9% state that they use them often, 19% indicate that they seldom use them and finally only 4,9% state that they never use such collections. The use of online scholarly journals, such as JSTOR, Emerald or Springer seems to be widespread, with 61,4% of the respondents stating that they use these services very often. One quarter (26,6%) of the respondents says that they use them often, 10,3% state that they seldom use them and 1,7% state that they never use such services. None of the respondents state that they never use online library catalogues, whereas 65,2% indicate that they use them very often and still 25% often. Online library catalogues are seldom used by 9,8% of the respondents. Finally, social media sites seem to be less used compared to the services mentioned, as only 12% use them very often, 9,2% often and 30,4% seldom. Almost half of the respondents (48,4%) never uses social media sites for research purposes (see Figure 22).

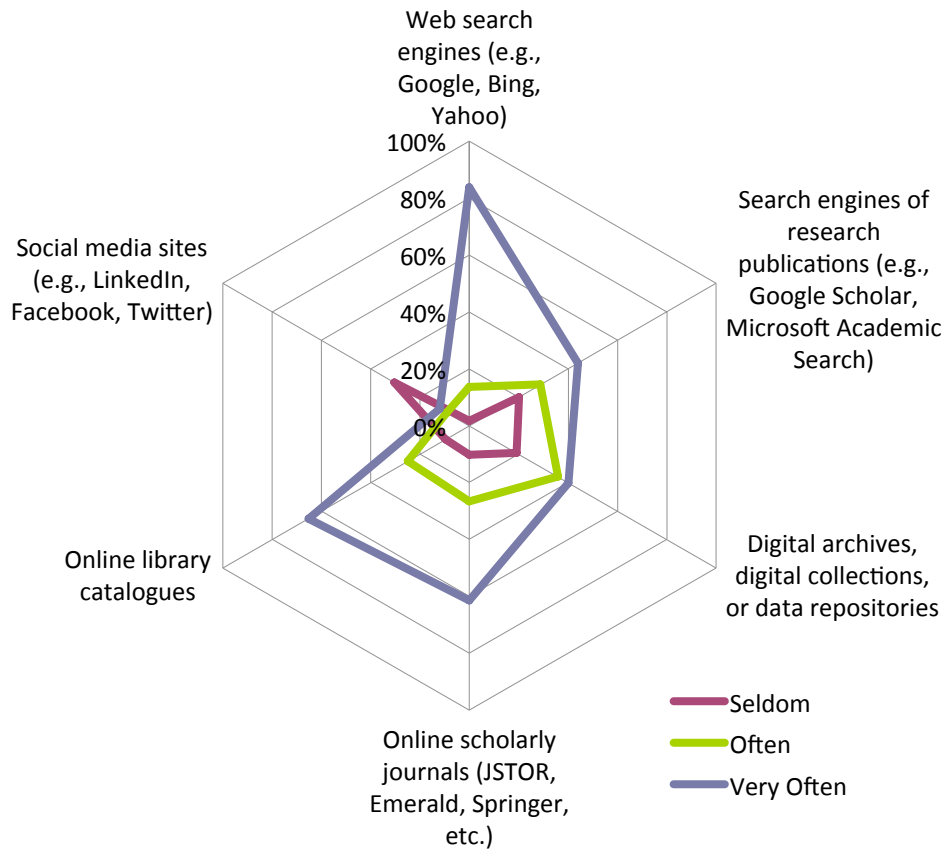


Figure 22 – Swiss sample. Frequency of use of services, N=184.





## 2.11 Use of applications

Most researchers state that they use a word processor to store and manage their research assets (88%) and spreadsheet applications (60,3%). 45,1% indicate that they make use of a note-taking application, 36,4% of a database management system and 15,8% of a web-based content management system, while 39,7% say that they use some other non-digital methods for their research (see Figure 23).

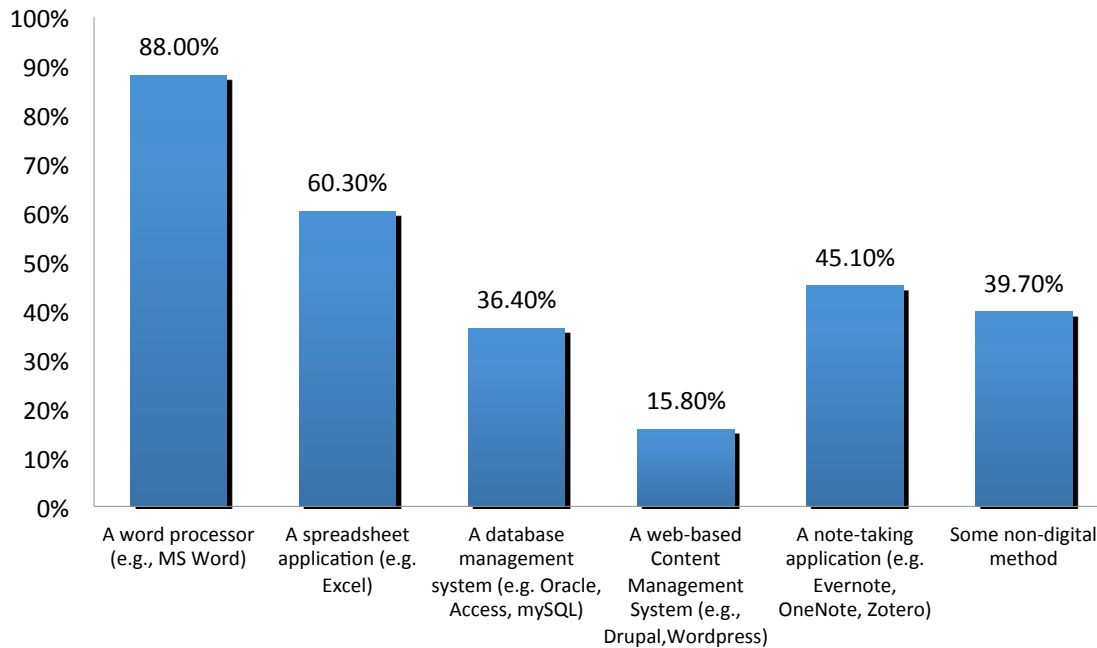


Figure 23 – Swiss sample. Use of applications, N=184.

## 2.12 Assessment of needs

Finally, the researchers were asked to rate the importance of a series of statements regarding their needs in a scale from 1 to 10, where 1 is the least important and 10 is the most important. All available statements were considered to be important for their research, as shown in Figure 24. Nevertheless the improved findability and access to existing digital research resources or data seems to be most important according to the respondents, gathering a score of 9.07 of 10. The importance of digitization of research resources or data that are not currently in digital is still rated as important (8,26 / 10) by the respondents as well as the improved findability / access to digital tools or software (7,97 / 10), the networking with other researchers, research groups and institutions relevant to their research (7,9 / 10) and the technical support on digital infrastructure, tools or software (7,21 / 10). Finally, the statements that are rated with less than 7 points have to do with the importance of online advice and information on using digital methods and tools (6,6 / 10), of online support from archivists, curators and / or librarians (5,97 / 10) and of the existence of courses or workshops on how digital humanities methods and tools might be useful in research (5,8 / 10).

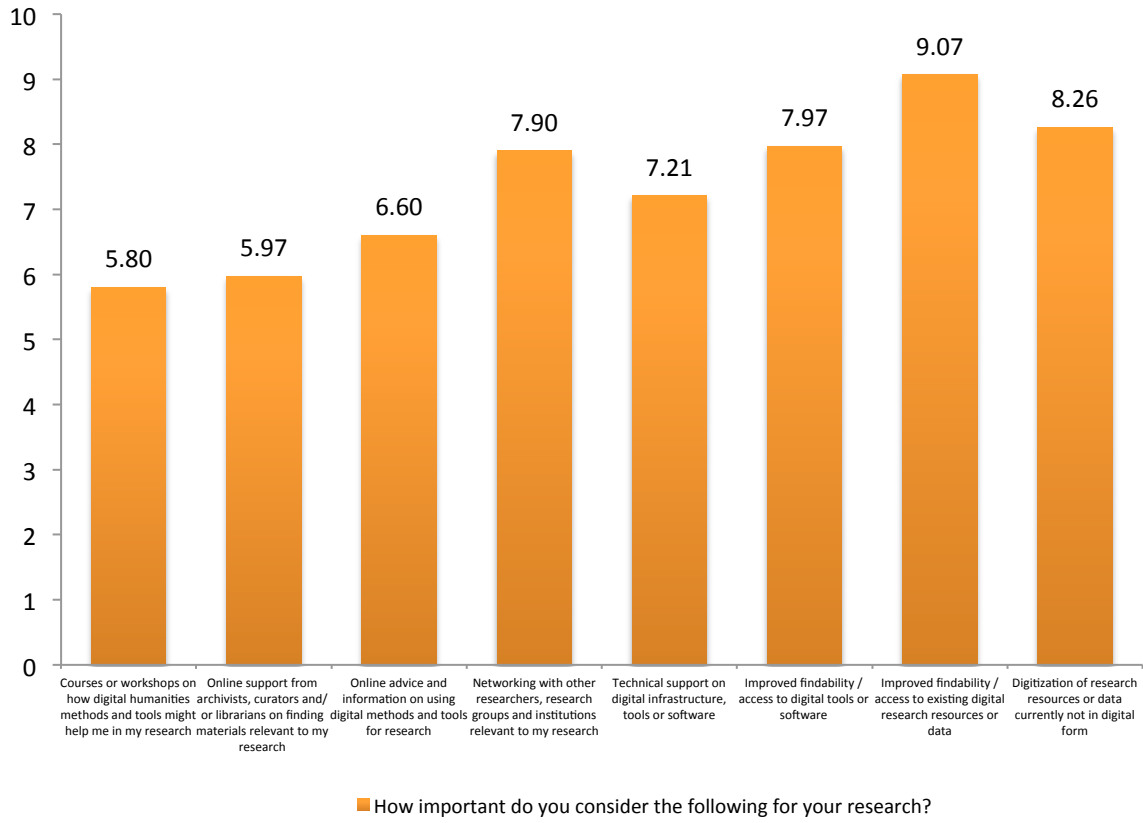


Figure 24 – Swiss sample. Importance of needs, N=184.



### 3. Conclusion

#### Consulting research material

The large majority of Swiss researchers in the humanities responding to the survey already use digital methods for their research (90,8%), and another 7,6% are interested in using digital methods or tools. Most of them use digital devices to consult relevant media like articles in journals, images, maps, video and audio. Only books are still more often used in a printed form. Resources like video, audio, images and maps are mainly consulted on a digital device, whereas the use of textual information in an analogue or a digital form is more balanced. It seems that Swiss researchers are using both digital and printed books and journals; it, however, can't be judged whether the respondents use analogue devices to consult research material by preference or by lack of digital alternatives.

#### Scholarly research activities

During their research work, Swiss humanities researchers often collaborate with others, but they don't use social media tools to communicate with others very frequently. As primary sources for their work, they often rely on material outside their country of residence. The majority does neither rely on archives, special collections or museums nor on advice from specialists curating those collections for their research. In order to organize research assets, the respondents usually use keyword lists or thesauri created by themselves instead of standard products. But when it comes to organize the bibliographic management for citations, the majority uses well-known applications like Endnote, Zotero etc. For the research process itself Swiss humanities researchers make use of a wide variety of methods and tools, especially of online repositories for digital resources like journals or discipline-orientated collections. Most of them are international resources, some are national based initiatives like retro.seals.ch for online journals or RERO DOC as digital library. For activities like text analysis or encoding, solutions particularly adapted for the needs of Humanities researchers like Praat, ANNIS2 or the TEI standard are in use, whereas many of the other tools mentioned like LaTeX, SQL, SPSS or Dropbox cover basic needs for text processing or collecting, analyzing and sharing data.

#### Publishing and disseminating research work

Almost two third of Swiss researchers in the humanities publish in their native language. As a consequence of the multilingual culture in Switzerland, the information "native language" is not very clear. This can be German, French and Italian or – given to the high percentage of researchers with foreign background – other languages, but mostly English and some Spanish. English as publication language seems to be the second choice for half of the respondents, whereas something else than the native or the English language is rarely chosen. To disseminate their research results, they primarily use a scholarly community site, the portal or repository of their institution, an open content journal or publication or their own website or blog. The social network like Twitter or Facebook, and generic online content communities like YouTube or Flickr are less important for this purpose.

## **Database use**

Databases are commonly used for data management purposes by Swiss humanities researchers. Only one third of the respondents states, that they never use such management tools. Databases are used to primarily manage metadata, textual descriptions and for images or transcripts. Depending on the type of media academics search for their work, databases only contain audio files, video, maps and – not yet often – 3Dmodels.

## **Use of digital services and applications**

Web search engines, engines for research publications, digital archives, collections or data repositories and online scholarly journals are tools that Swiss Humanities researchers often use. Social media sites do not play an important role for research purposes. The most common applications to display, manage and store research results are some kind of word processors and spread sheet applications, and, to a lower extent, database management systems and note-taking applications, whereas only a few researchers use web-based content management systems to run a website. Non-digital methods are still in use by almost 40% of the respondents.

## **Importance of needs**

Finally, the Swiss researchers in Humanities consider the findability and the access to existing digital research resources or data as well as the digitization of research resources or data that are not currently in digital as crucial for their work. Furthermore, the access to digital infrastructure, tools or software and to some sort of support and advice seems to be of great importance, together with the possibility of sharing data and networking with other researchers.

