OpenGLAM CH
A working group of the opendata.ch association

mix'n'hack 2019 (Swiss Open Cultural Data Hackathon)

Final Report

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Appendix A: Project Goals

1. Introduction

On 6-8 September 2019, the OpenGLAM Working Group of the Opendata.ch association organized the fifth edition of the Swiss Open Cultural Data Hackathon in cooperation with Museomix CH and other partners. This edition combined the OpenGLAM hackathon format with the Museomix make-a-thon approach and was thus entitled “mix’n’hack”. The event was kindly hosted by the Médiathèque Valais, the State Archives and the Cantonal Museums, as part of the opening celebration of the cultural space “Les Arsenaux” in Sion. Further partners included infoclio.ch and the members of the Friends of OpenGLAM Network.

The mix’n’hack was preceded by a pre-event at Les Arsenaux in Sion on 5 June and a pre-event at the Palais de Rumine in Lausanne on 13 June 2019. Both pre-events were aimed at people who had not participated in a make-a-thon or hackathon before, giving information about how the mix’n’hack works, about the type of data provided as well as examples of projects conducted during past editions.

The present report provides a summary of event results as well as some insights with regard to future hackathons. It is based on an assessment of project goals, the results of an internal evaluation meeting, and the past years’ participants’ survey. An overview of the financial result is also provided.

Puzzle piece made by Frédéric Noyer at the FabLab Sion during the mix’n’hack and given to the participants as a souvenir. Photo by GLAMoperator, CC BY-SA 4.0.

2. Main Objectives of the mix'n'hack

The main objective of the event was to bring different stakeholder groups together, to get them to interact around specific topics in order to share experiences and to develop prototypes. The focus was on the development of software and installations that use open data/content from various institutions and engage an audience – either online or in form of physical exhibits. On the last day of the mix'n'hack, the prototypes were presented to the public and tried out by the visitors.

Like the earlier hackathons of the OpenGLAM CH Working Group, the event was used as an opportunity to encourage Swiss heritage institutions to open up their data and content and to spread the word about OpenGLAM[1].

And last but not least, the event was used as an occasion to foster longer-term cooperation between the heritage institutions of the Canton of Valais, local hacker/maker communities and universities, as well as between the OpenGLAM CH Working Group and the Museomix CH community.

The collaboration with Museomix CH and the integration of the make-a-thon format came with the following adjustments to the hackathon concept compared to previous years:

- Collaboration with the FabLab Sion: in order to encourage the creation of physical installations, the local FabLab was involved in the event.

- Mentors: a group of experienced coaches was hired to accompany the groups during the entire process.

- Mix-room: a so-called "mix-room" was set up to improve the documentation of the individual projects and of the event in general.

- Main topic: "pluralism" was defined as the main topic of the mix'n'hack in order to inspire the groups and raise their creativity.

3. Achievement of Project Goals

The table in appendix A gives an overview of the goals that were set for this year's hackathon, the level of their achievement, and the achievements in the previous years for comparison. Please note that not all targets could be assessed yet, as dissemination activities take more time.

[1] http://openglam.org/principles/

The documentation of individual hackathon projects and an overview of the media coverage can be found on the event website[2].

Specific goals were set in six areas. In the following, we will shortly discuss the level of achievement of these goals in the context of the hackathon.

3.1 Opening up cultural data and content for reuse and making them available at a central location

Little effort and thus little progress have been made in this area. As a consequence, the specified target was not reached. 153 open datasets / collections from 70 Swiss institutions[3] have so far been made available through the make.opendata.ch website (compared to 148 open datasets / collections from 66 institutions in the previous year). Participation in the hackathon by museums fell again short of expectations. By the museums of the canton of Valais, only one dataset was released. There were two or three hackathon participants with a museum background, but they constituted a small minority. Like in the previous year, the outreach to acquire new data providers was not pursued very thoroughly. In future editions, this task should be taken up more systematically again.

Data catalogue platform strategy

The cooperation with the opendata.swiss platform was continued. As per January 2019, the Swiss Federal Archives have handed over the responsibility of the platform to the Federal Statistical Office. So far, the improvements suggested by the hackathon team (see our 2018 report) have not been implemented.

3.2 Promoting the re-use of cultural data / content (with a special focus on sustainability)

This year we encountered a decrease in the number of participants and consequently in the number of projects. Despite collaborating with Museomix CH and holding the event in a French speaking area, we hardly succeeded in attracting new participants from the Suisse romande or the museum sector. While there was a decrease in the number of participants, the change of the format led to an intensification of the work carried out by the participants during the hackathon. Thus, the hackathon resulted not only in electronic artefacts but also in physical prototypes providing a setting where the public could interact with the artefacts, as well as short videos describing the projects, which are particularly helpful in further promoting the projects. On the downside, the more intensive mix'n'hack format was perceived as too heavy in terms of workload by some of the participants and may have discouraged some potential participants from joining the event.

[2] http://make.opendata.ch/wiki/event:2019-09

[3] These numbers do not include all the collections from the e-rara and e-manuscripta platforms, which were officially marked as Public Domain material in the course of 2017; these platforms have been counted just as one dataset.

The data used in this year's projects covers a variety of areas, reaching from audio files to historical photographs to a database of the most popular names in Switzerland. Like in the previous year, non-standard hardware such as virtual reality was used in more than one project.

3.3 Fostering the exchange and cooperation among stakeholders from various backgrounds

This is an area where the hackathon had been doing very well, as is exemplified by the fact that approx. 80% of participants of the 2015-2017 editions appreciated the hackathon's effectiveness in terms of meeting interesting people and fostering networking. For 2018, this score was lower (68%), which may be due to the fact that no side programme was proposed. Due to the small number of participants, there will be no reliable data for the 2019 edition, but given the fact that the overall number of participants was notably lower than in previous years and that the intensity of work demanded from the participants was clearly higher, this year's hackathon may have done even worse on networking than the one of the previous year. There is however strong episodic evidence that high level of exchange and cooperation has taken place within hackathon project teams which continues after event. The Museomix approach of mixing together people from different backgrounds and of stressing the importance of a tangible project output may even have facilitated the exchange among people with a larger variety of profiles.

Participants during one of the activities lead by a facilitator. Photo by infoclio, CC BY-SA 4.0.

Table 1 below shows that this year's hackathon was particularly bad at attracting female participants. At the same time, it attracted the highest proportion of software programmers when comparing it to earlier editions.

Table 1: Different categories of participants

Participant category	2015 edition (N = 49 of 107)	2016 edition (N = 94 of 105)	2017 edition (N = 94 of 98)	2018 edition (N = 66 of 69)	2019 edition (N = 33 of 33)
Female	19%	**33%** ↑ **	37%	39%	**12%** ↓ **
Male	81%	**67%** ↓ **	63%	61%	**88%** ↑ **
Data provider	35%	–	–	–	–
Data provider or expert	–	28%	32%	38%	24%
Software programmer	35%	25%	34%	33%	52%
Ideator	27%	25%	22%	21%	24%
Researcher	22%	31%	21%	27%	–
Wikipedia editor	12%	11%	5%	3%	–
Wikidata editor	–	–	5%	3%	–
Artist	8%	7%	**1%** ↓ **	5%	–
Designer	4%	**13%** ↑ *	**3%** ↓ **	8%	–
Organizer	25%	–	–	–	–
Hackathon organizer	–	11%	11%	17%	24%
Other	12%	20%	18%	11%	12%

Changes marked * are significant at the 0.10 level; those marked ** are significant at the 0.05 level.

Like in the previous year, the smaller number of participants is partly due to the fact that no side programme was offered.

3.4 Propagating the OpenGLAM principles within the Swiss heritage sector

In terms of the number of new datasets made available for the mix'n'hack, the targets in this area have not been achieved, due to the limited efforts to reach out to museums and other potential data providers. Thus, notably fewer institutions than in previous years were directly contacted in view of the hackathon. A specific effort has nevertheless been pursued with the local institutions from the Valais. The selection of datasets to be used during the event was however not as easy as expected, because the institutions did not have the rights to publish the data under the required conditions. In this regard, the mix'n'hack was a way of sensitizing the heritage institutions to legal issues which should be taken into account when accepting new content donations. Such events and the projects that they bring to life help us open up the minds of the institutions towards the OpenGLAM principles. It shows them that to achieve their task of valorisation of their collections, they have to grant access to their data so that others can participate and contribute. Furthermore, these events provide arguments to the institutions when it comes to negotiating the terms of use with the donors of new collection items.

3.5 Promoting the public visibility of OpenGLAM

The mix'n'hack was part of a series of events celebrating the opening of the cultural centre Les Arsenaux. The festivities were well communicated by the host institution and we hoped to receive larger media coverage through the communication activity of our host institution and the context of the opening of Les Arsenaux. Apart from one radio report on RTS, the classical media did not respond to the mix'n'hack with the desired interest.

Furthermore, we hoped to reach new audiences through the series of events which attracted a variety of potential hackathon visitors. As in the previous year, the teams were encouraged to create prototypes which engage an audience. This type of projects is more likely to address broader audiences, especially people who do not have any knowledge or experience with opendata. The attendance of the public event on Sunday was not as high as hoped for, but the feedback from the audience was really positive. The visitors grasped the opportunity to try out the prototypes and the fact that they were not only digital but also physical was highly appreciated.

4. Evaluation of the mix'n'hack format

The mix'n'hack was the very first event of this kind for the OpenGLAM working group and Museomix alike. Given the hybrid and multidisciplinary character of the event, the cultural centre Les Arsenaux, which promotes innovation, interdisciplinarity and synergies between the heritage institutions of the Valais, has proven to be a perfect host.

From the adjustments made to integrate the Museomix approach and the make-a-thon format in the event, some were more successful than others. The collaboration with the local FabLab and

creation of physical prototypes was seen as a very positive aspect. On the one hand, it gave a whole new character to the public presentation on the last day: an interesting physical prototype will attract the visitor's attention, it might even diminish some apprehensions, it will provide a tangible experience and ideally allow or provoque the interaction of several users at the same time. On the other hand, the creation of a physical prototype meant a new challenge for the participants, especially the ones used to the "classical" hackathon format. It meant to reflect explicitly on the final user experience. To impose a physical output however often gives a direction to the projects, namely towards entertaining, interactive prototypes which are well suited for museal contexts, but less for projects which are more anchored in the academic or research area. As the 2018 and 2019 editions of the Swiss Open Cultural Data Hackathon were clearly oriented to museums, the make-a-thon aspect made a lot of sense. If and how it should be kept for future editions needs to be discussed.

Participants working at the FabLab in Sion. Photo by infoclio, CC BY-SA 4.0.

The highly structured method of Museomix encountered both positive and negative reactions. The collective brainstorming at the beginning of the event was well appreciated. The iterative process of regularly presenting the projects to the other teams was also valued as a helpful method. The collective moments of warm-up and exercise as well as the interactions with the facilitators were however not always appreciated as they disturbed the team's working rhythm. Sometimes, the strict procedures of the Museomix approach – which are part of their identity and success – seemed too rigid to the hackathon habitués.

The mix-room which was to be set up in order to document the individual projects did not come to existence as planned due to a lack of volunteers. The idea of the mix-room was however pursued and a video was created to document each project. This aspect was regarded as very useful, not only for the teams but also in view of the further promotion of the projects. The idea of the mix-room is a particularity which we want to further develop in the upcoming hackathons.

All in all, we noticed that some participants felt not well informed about the different format of the mix'n'hack compared to the traditional GLAMhack. This did not help implementing some of the new aspects, especially the Museomix methodology. At the same time, there are differing views as to whether the rather rigid set of standard roles within hackathon teams suggested by Museomix is appropriate for projects involving data cleansing and software development.

5. Potential for Improvement

Potential for improvement has been identified in several areas. The most notable points that were brought up during the internal evaluation meeting were the two following:

- The host institution often does not have any hackathon experience and therefore does not know what to expect. The OpenGLAM Working group should better explain what the hackathon is about and how it works.

- Find a way to better involve other local institutions (heritage institutions, schools of higher education, Wikimedia communities).

- The event communication should be further professionalized, both towards participants and towards the media. The event website is still in need of a renewal.

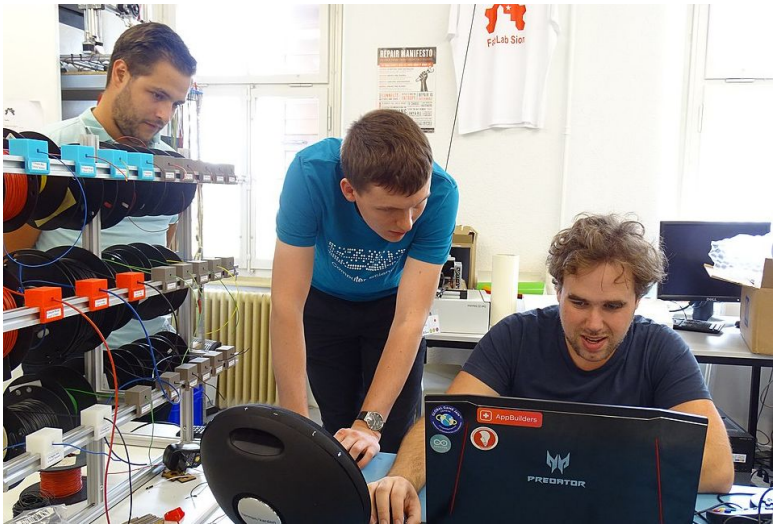
- Outreach efforts vis-à-vis museums and other heritage institutions should be further intensified.

- Find a way to avoid "no-shows" (persons who register but don't come to the event).

6. Outlook

After putting our efforts into raising awareness about OpenGLAM among museums and encouraging projects which engage an audience and make use of non-standard hardware in 2018 and 2019, the focus of the 2020 and 2021 editions will lie on linked open data, machine learning, human-computer-interaction and crowdsourcing. We will collaborate closely with institutions of higher education to give students the opportunity to put their skills into practice by working on concrete projects; to this effect, we will also cooperate to further develop the institutions' curricula.

Like the first three editions of the Swiss Open Cultural Data Hackathon, the upcoming editions will again have a side-programme that allows participants to update each other on recent developments and to share skills and experiences. Also, the duration of the actual hackday will again be reduced to two days.



Work in progress. Photos by infoclio, CC BY-SA 4.0.

7. Project Resources

7.1 Financial resources

Table 2 below gives an overview of the financial resources of the project:

	Budget	Effective Costs / Revenues
Expenses	**- 75'300**	**- 49'563**
Food & Beverages	14'000	7'512
Accommodation (Youth Hostel)	6'000	2'223
Project Coordination	19'800	19'800
Communication	10'000	7'800
FabLab	15'000	1'910
Association Opendata.ch (10% of revenues and contribution to new online platform)	6'000	7'880
Varia / Incidentals	4'500	2'439
Revenues	**+ 72635**	**+ 51'897**
Internal Sponsors	14'000	7'512
External Sponsors	54'385	44'385
Voluntary Participation Fees	4'250	0
Balance	**- 2'665**	**+ 2'334**

Table 2: Overview of financial resources

The project was kindly supported by the following sponsors:

- Les Arsenaux (7'500 CHF)
- Engagement Migros (15'000 CHF)
- Wikimedia CH (14'000 CHF)
- Migros Kulturprozent (5'385 CHF)
- Ville de Sion (2'000 CHF)
- Ernst Göhner Stiftung (8'000 CHF)

Note that the effective costs for accommodation and catering resulted much lower than expected due to the fact that the effective number of participants (30) was lower than budgeted for (100).

The excedent from the payment from Engagement Migros (2'118 CHF) remains on the account of the Museomix association, earmarked for future Museomix events. The rest of the excedent

(217 CHF) remains on the account of the Opendata.ch association and is earmarked for future hackathons or similar events related to cultural heritage.

7.2 In-kind contributions

The organization of the event would not have been possible without the substantial in-kind contributions made by several individuals and organizations, most notably by contributing their volunteer and/or staff time:

- Charlotte Mader (Museomix CH)
- Frédéric Noyer (docuteam)
- Damian Elsig (Médiathèque Valais)
- Michael Ravedoni (Médiathèque Valais)
- Beat Estermann (Opendata.ch / Bern University of Applied Sciences)
- Enrico Natale (infoclio.ch)
- Lionel Walter (Basel University Library)
- Oleg Lavrovsky (opendata.ch)
- Alain Dubois (State Archives of Valais)
- Pascal Ruedin (Cantonal Museums of Valais)

but also by allowing us to use their infrastructure and/or equipment:

- Les Arsenaux (hosting of the mix'n'hack and pre-event)
- Palais de Rumine (hosting of pre-event)
- Opendata.ch (online and hardware infrastructure, financial administration)

8. Final Remarks

This year's hackathon was only a partial success. It helped the OpenGLAM Working Group identify a couple of ways how to improve future editions of the GLAM Hackathon from a qualitative perspective (a more structured idea-finding and group forming process and the systematic creation of promotional/explanatory videos about the hackathon projects). At the same time, it clearly underperformed with regard to a series of core goals of the GLAM Hackathon, which is due partly to the hybrid format of the event and partly to the fact that we were unable this year to mobilize a significant number of hackathon participants from the region (Canton of Valais, Suisse romande).

As a consequence, the hackathons of the next 2-3 years will again have a format that is closer to the one of the earlier editions of the GLAM Hackathon, integrating some of the successful innovations of the last two years. At the same time, the OpenGLAM Working Group will revise

its strategy when it comes to pursuing goals that we have consistently been unable to achieve through the hackathon (outreach to museums, public visibility).

We would like to thank all our sponsors and partners for supporting the event and are looking forward to continuing our cooperation in the future.

The project teams. Photos by infoclio, CC BY-SA 4.0.

Our Sponsors

Appendix A: Project Goals