Heritage Here, K-Lab and intra-agency collaboration in Norway

Introduction

This paper aims to give an overview of an ongoing collaboration between four Norwegian government agencies, by outlining its history, its goals and achievements and its current status. In doing so, we will, hopefully, be able to arrive at some conclusions about the usefulness of the collaboration itself – and whether or not anything we have learned during the collaboration can be used as a model for – or an inspiration to – other projects within the cultural heritage sector or the broader humanities environment.

First phase – "Heritage Here" 2012 – 2015

Heritage Here (or "Kultur- og naturreise" as it is known in its native Norwegian) was a national project which ran between 2012 and 2015 (http://knreise.org/index.php/english/). The project had two main objectives:

1. To help increase access to and use of public information and local knowledge about culture and nature
2. To promote the use of better quality open data.

The aim being that anyone with a smartphone can gain instant access to relevant facts and stories about their local area wherever they might be in the country.

The project was a result of cross-agency cooperation between five agencies from 3 different ministries. Project partners included:

- the Norwegian Mapping Authority (Ministry of Local Government and Modernization).
- the Arts Council Norway and the National Archives (Ministry of Culture).
- the Directorate of Cultural Heritage and (until December 2014) the Norwegian Environment Agency (the Ministry of Climate and Environment).

Together, these partners made their own data digitally accessible; to be enriched, geo-tagged and disseminated in new ways. Content included information about animal and plant life, cultural heritage and historical events, and varied from factual data to personal stories. The content was collected into Norway's national digital infrastructure 'Norvegiana' (http://www.norvegiana.no/) and from there it can be used and developed by others through open and documented API's to create new services for business, tourism, or education. Parts of this content were also exported into the European aggregation service Europeana.eu (http://www.europeana.eu).

In 2012 and 2013 the main focus of the project was to facilitate further development of technical infrastructures - to help extract data from partner databases and other databases for mobile dissemination. However, the project also worked with local partners in three pilot areas:

- Bø and Sauherad rural municipalities in Telemark county
- The area surrounding Akerselva in Oslo
- The mountainous area of Dovre in Oppland county.

These pilots were crucial to the project, both as an arena to test the content from the various national datasets, but also as a testing ground for user community participation on a local and regional level. They have also been an opportunity to see Heritage Here's work in a larger context. The Telemark pilot was for example, used to test the cloud-based mapping tools developed in the

Best Practice Network "LoCloud" (http://www.locloud.eu/) which where coordinated by the National Archives of Norway.

In addition to the previously mentioned activities *Heritage Here* worked towards being a competence builder – organizing over 20 workshops on digital storytelling and geo-tagging of data, and numerous open seminars with topics ranging from open data and LOD, to IPR and copyright related issues. The project also organized Norway's first heritage hackathon "#hack4no" in early 2014 (http://knreise.org/index.php/2014/02/27/hack4no-a-heritage-here-hackathon/). This first hackathon has since become an annual event – organized by one of the participating agencies (The Mapping authority) – and a great success story, with 50+ participants coming together to create new and innovative services by using open public data.

Drawing on the experiences the project had gathered, the project focused its final year on developing various web-based prototypes which use a map as the users starting point. These demonstrate a number of approaches for visualizing and accessing different types of cultural heritage information from various open data sets in different ways – such as content related to a particular area, route or subject. These prototypes are free and openly accessible as web-tools for anyone to use (http://knreise.no/demonstratorer/). The code to the prototypes has been made openly available so it can be used by others – either as it is, or as a starting point for something new.

Second phase – "K-Lab" 2016 – 2017

At the end of 2015 *Heritage Here* ended as a project. But the four remaining project partners decided to continue their digital cross-agency cooperation. So, in January 2016 a new joint initiative with the same core governmental partners was set up. Heritage here went from being a project to being a formalized collaboration between four government agencies. This new partnership is set up to focus on some key issues seen as crucial for further development of the results that came out of the *Heritage Here* project. Among these are:

- In cooperation develop, document and maintain robust, common and sustainable APIs for the partnerships data and content.
- Address and discuss the need for, and potential use of, different aggregation services for this field.
- Develop and maintain plans and services for a free and open flow of open and reusable data between and from the four partner organizations.
- In cooperation with other governmental bodies organize another heritage hackathon in October 2016 with the explicit focus on open data, sharing, reuse and new and other services for both the public and the cultural heritage management sector.
- As a partnership develop skillsets, networks, arenas and competence for the employees in the four partner organizations (and beyond) within this field of expertise.
- Continue developing and strengthening partnerships on a local, national and international level through the use of open workshops, training, conferences and seminars.
- Continue to work towards improving data quality and promoting the use of open data.

One key challenge at the end of the *Heritage Here* project was making the transition from being a project group to becoming a more permanent organizational entity – without losing key competence and experience. This was resolved by having each agency employing one person from the project each and assigning this person in a 50% position to the *K-Lab* collaboration. The remaining time was to be spent on other tasks for the agency. This helped ensure the following things:

- Continuity. The same project group could continue working, albeit organized in a slightly different manner.
- Transfer of knowledge. Competence built during Heritage here was transferred to organizational line of the agencies involved.
- Information exchange. By having one employee from each agency meeting on a regular basis information, ideas for common projects and solutions to common problems could easily be exchanged between the collaboration partners.

In addition to the allocation of human resources, each agency chipped in roughly EUR 20.000 as 'free funds'. The main reasoning behind this kind of approach was to allow the new entity a certain operational freedom and room for creativity – while at the same time tying it closer to the day-to-day running of the agencies.

Based on an evaluation of the results achieved in *Heritage Here*, the start of 2016 was spent planning the direction forward for *K-Lab*, and a plan was formulated – outlining activities covering several thematic areas:

Improving data quality and accessibility. Making data available to the public was one of the primary goals of the Heritage here project, and one most important outcomes of the project was the realisation that in all agencies involved there is huge room for improvement in the quality of the data we make available and how we make it accessible. One of *K-Lab's* tasks will be to cooperate on making quality data available through well documented API's and making sure as much data as possible have open licenses that allow unlimited re-use.

Piloting services. The work done in the last year of Heritage Here with the map service mentioned above demonstrated to all parties involved the importance of actually building services that make use of our own open data. *K-lab* will, as a part of its scope, function as a 'sandbox' for both coming up with new ideas for services, and – to the extent that budget and resources allow for it – try out new technologies and services. One such pilot service, is the work done by K-lab – in collaboration with the Estonian photographic heritage society – in setting up a crowdsourcing platform for improving metadata on historic photos (https://fotodugnad.ra.no/).

For 2018, *K-Lab* will start looking into building a service making use of linked open data from our organizations. All of our agencies are data owners that responsible for authority data in some form or another – ranging from geo names to cultural heritage data and person data. Some work has been done already to bring our technical departments closer in this field, but we plan to do 'something' on a practical level next year.

Building competence. In order to facilitate the exchange of knowledge between the collaboration partners *K-Lab* will arrange seminars, workshops and conferences as arenas for discussing common challenges, learning from each other and building networks. This is done primarily to strengthen the relationship between the agencies involved – but many activities will have a broader scope. One such example is the intention to arrange workshops – roughly every two months – on topics that are relevant to our agencies, but that are open to anyone interested. To give a rough overview of the range of topics, these workshops were arranged in 2017:

- A practical introduction to Cidoc-CRM (May)
- Workshop on Europeana 1914-1918 challenge – co-host: Wikimedia Norway (June)
- An introduction to KulturNAV – co-host: Vestfoldmuseene (September)
- Getting ready for #hack4no (October)

- Transkribus – Text recognition and transcription of handwritten text - co-host: The Munch museum (November)

Third phase – "Samarbeidsforum" 2018 and beyond

Towards the end of 2017 *K-lab* was very much a work in progress, and its future direction depended on many factors. However, a joint workshop was held in September 2017 to evaluate the work done so far – and to try and map out a way forwards for the collaboration. Employees from all levels in the organisations were present, with invited guests from other institutions from the cultural sector – like the National Library and Digisam from Sweden – to evaluate, discuss and suggest ideas.

No definite conclusions were drawn, but there was an overall agreement that the focus on the three areas described above is of great importance, and that the work done so far by the agencies together had been, for the most part, successful. Setting up arenas for discussing common problems, sharing success stories and interacting with colleagues across agency boundaries were regarded as key elements in the relative success of K-Lab so far. This work will continue into 2018 with focus on thematic groups on linked open data and photo archives, and a new series of workshops is being planned. The experimentation with technology will continue, and hopefully new ideas will be brought forward and realised over the course of the next year(s).

Towards the end of 2017 the basic premise of K-Lab changed somewhat due to 'external' conditions. Throughout 2017 the Ministry of Culture has been working on a strategy for open data, and the conclusions were made available towards of the end of the year (page is in Norwegian): https://www.regjeringen.no/no/dokumenter/kulturdepartementets-strategi-for-apne-data/id2576038/. One conclusion – and goal – was to "establish a forum for open cultural data – focusing on defining common needs and suggesting common solutions". And further: "the form of the cooperation will be decided, in cooperation, by The National Archives, The Arts Council and the National Library". A later version also specified that "The Directorate for Cultural Heritage is invited into the collaboration as a partner". At present, the most likely outcome of this open data strategy will be that K-Lab will most likely be replaced by the suggested cooperative forum – but details are yet to be decided.