

Open Source Software to Manage Digitization Projects – The Kitodo Example

Frank Ulrich Weber; Zeutschel GmbH; Tübingen, Germany

Abstract

Zeutschel today has more than fifty years of experience in the field of developing analog and digital exposure systems. The time goes by and now the digital business displaced the analog. Besides just producing digital images it is more and more interesting how to manage the digitization and how to make a valuable source of information out of the digital nuggets. Those questions arise in all sizes of institutions like libraries, archives, museums and service providers. To offer them, beside just deliver the scanners, a complete solution for the whole range of digitization we decided to support the open source software suite Kitodo as one important part in our solution portfolio. That solution generates a valuable surplus for the client.

Joining the Kitodo Association

The whole world went digital and linked. To master the first challenge we have to develop and manufacture digital scanners besides the analog microfilm. On that basis the second challenge arise. In a linked world of digital content we have to offer our clients more than just a scanner. We realized that the digitization process itself can be a very painful process without the right software tools to manage and monitor it. And at the end of that process the digitized objects should be available and searchable for the interested audience. It was nearly ten years ago that we join the development team of the open source software suite Goobi (now renamed to Kitodo) and later the “Kitodo – Key to digital objects” association. Using, developing and supporting open source products is part of our company strategy. Zeutschel is a member of the Kitodo association and represented in the association board.

A Little Bit of History

The development of Kitodo started over ten years ago within a huge digitization project of the State and University Library of Göttingen founded by the DFG (German Research Foundation). It was always the goal not to use the system just as an in-house solution. The need for an easy and flexible tool to manage digitization exists within other institutions, too. That was the reason why in 2010 four big libraries and the Zeutschel GmbH signed a Goobi Release Management Agreement and started regular meetings as a Goobi Community Board to push the distribution and further development. Because it is a community based and driven open source system it is vital to include the institutions that are using it by organizing regular meetings. That was the beginning of the half year open user meetings in 2011. To establish a stable environment for the system an association was founded by twelve libraries and private companies in 2012. With the association it is possible to achieve legal and financial stability and independence. The most important thing about this point is to run a reliable release management and a controlled ongoing development. To resolve some legal problems with the name

Goobi the 2016 annual meeting of members decided to rename Goobi to Kitodo.

Current Status

Kitodo is:

- an open source software suite for the production and presentation of digital objects and collections
- a growing community of users
- a legal entity and association “Kitodo. Key to Digital Objects e.V.”

The fast growing international community of users (over 40 institutions and service providers), the Kitodo association and the release management offers some important advantages:

- support and contact via mailing lists
- documentation
- -meetings of users
- coordinated development
- continuous development
- feedback from many different users and usage scenarios

The different institutions, service providers and usage scenarios lead to a huge supported set of different media types:

- address books
- archive material
- letters
- prints
- photos
- graphics
- manuscripts
- books
- incunabula
- maps
- inheritances
- school books
- drawings
- newspapers
- magazines
- land registers

Flexible Architecture

The two independent layers of Kitodo offer a flexible setup of the system. If you just need a workflow tool or a tool for make your digital collections accessible it's up to you to choose. Both layers of Kitodo can be used completely independently. The interface between the two layers consists, simply spoken, solely of images and a METS file.

the system. The second aim you can achieve by using Kitodo.Presentation.

Accessibility

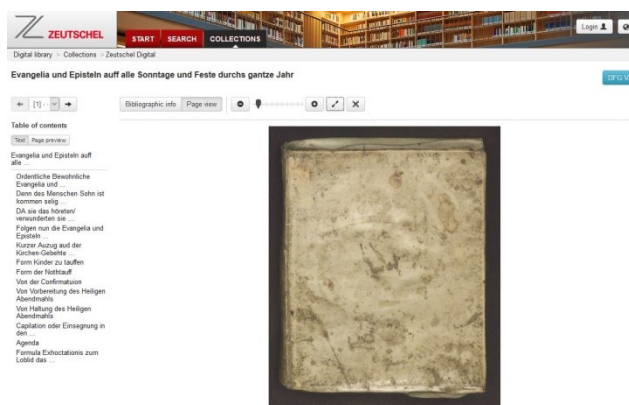


Figure 5: Kitodo.Presentation

Kitodo.Presentation provides a wide variety of functionalities:

- granular access control
- collection management
- fast search index (Lucene)
- visualization of structure, metadata and images
- based on the powerful CMS TYPO3
- free configurable metadata fields used for:
 - o indexing
 - o tag clouds
 - o sorting
 - o faceted browsing
 - o extended search
- OAI-PMH2 interface
- ALTO Support (for indexing, highlighting and displaying full text)
- Basket feature

Current Projects and Developments

The flexible architecture allows a great variety of different users and usage scenarios. Frequently we are confronted with the belief that Kitodo is only for the big institutions like state or national libraries. Sure, these institutions can effectively use the software to manage huge digitalization projects, but there are

institutions only one person uses the system to organize its daily work, too.

Within the first years of Kitodo (Goobi) there was a strong focus on the requirements of libraries. As time goes by many institutions with different material, but the same need to do a fast, well organized and effective digitization, came to the point that Kitodo fits to their need on the whole. So it is fact that today archives, land record offices, museums and service providers can use the system effectively, too.

Conclusions

To work with open source software you have to pass some challenges of a cooperative development community:

- development planning and controlling
- establish programming guidelines
- coordinate the different views of public institutions, private companies and free developers
- cooperation between public institutions, private companies and free developers
- sustainability (support and maintenance)

If the challenges are mastered you gain of the huge experience of all the different members of the community to create a sustainable environment of future development and success. A good example for that is the 1.3 Mio. Euro DFG project to enhance the possibilities of Kitodo.Production. This project started in summer 2016 and will be finished in 2018. Main focus is

- new system architecture
- improved usability
- advanced import and export routines
- more standardized interfaces and formats

References

- [1] <http://www.kitodo.org/en/>
- [2] <http://www.zeitschel.de/en/produkte/workflowloesungen/Kitodo.html>
- [3] <https://github.com/kitodo>

Author Biography

Frank Ulrich Weber studied business sciences with focus on business informatics at the University of Hohenheim. At this time he and his colleagues developed, as part of a study project, a document delivery system for the library of the university. Since over ten years now he is product and project manager of the Zeitschel GmbH. His focus is on creating the best solution for every client concerning digitization. .