

UX IDEAS FOR DATA INPUT WITH

# HYKU FOR CONSORTIA

SAMHÆNG \* HYKU FOR CONSORTIA

### UX ideas for data input with Hyku for consortia

Based on research and co-design with

Hyku for Consortia users in 2022



# **Purpose**

The purpose of this project and this report is to outline potential areas for UX improvements in relation to the staff data input interfaces used by Hyku for Consortia users.

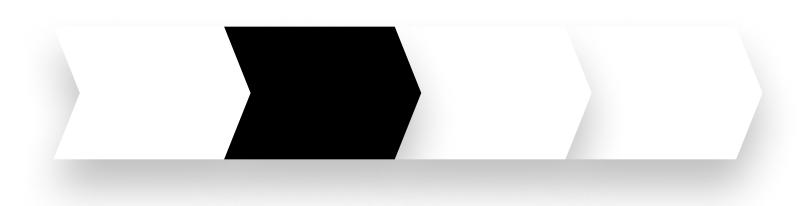
### Positive feedback

My general impression when talking to users about data input workflows, was that users were generally happy with using the software. This document puts focus on the parts of the software that can be improved, but many things already work well and to the satisfaction of users.

Examples of positive points of feedback include positive comments about: the general BE structure; Batch importing functionality; Visibility options, and the existence of or format of specific data input fields.

With this in mind, be aware that even though this report focuses on the many points of constructive criticism given by users, the overarching message from users was that the data input workflows in the software work quite well for them already.

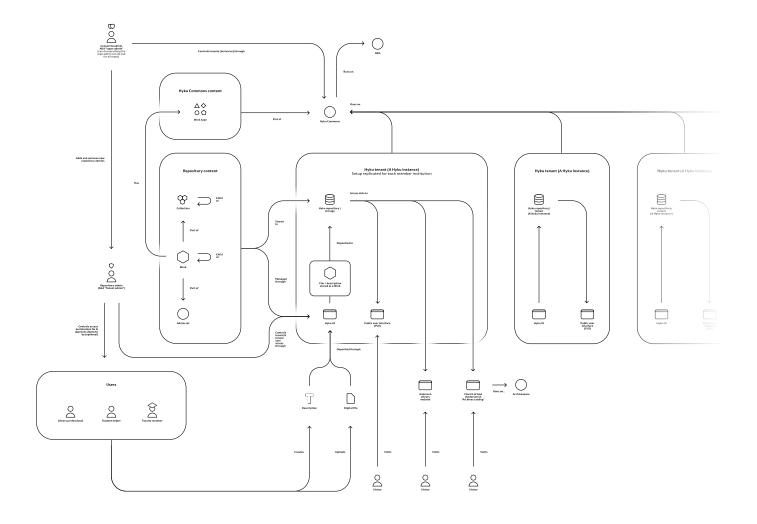
"...even though this report focuses on the many points of constructive criticism given by users, the overarching message from users was that the data input workflows in the software work quite well for them already."



### **Process**

The work to come up with ideas for UX improvements is being done through the following process:

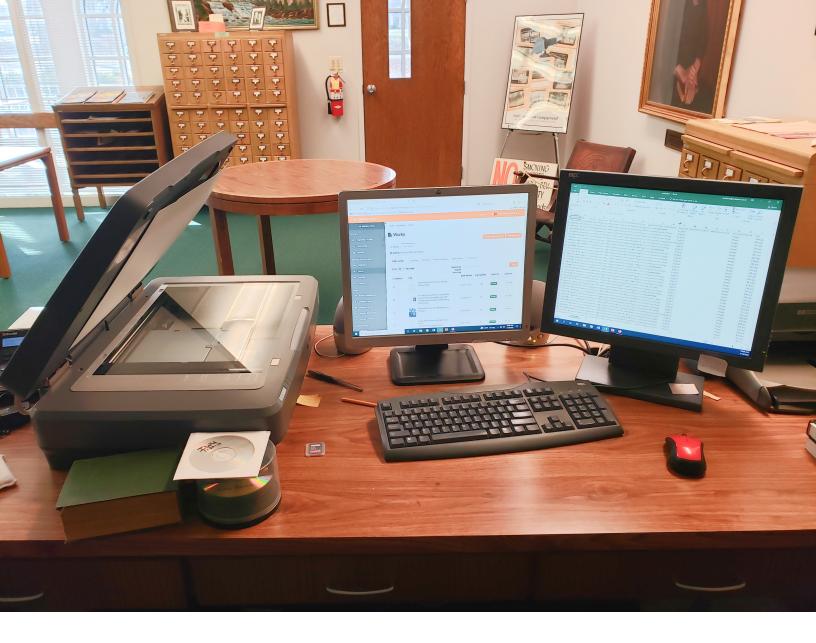
- The UX designer meets with the consortial admin to get an introduction to the UI, workflow, system and technical setup of the project.
- The UX designer has meetings with users to watch how they use the system; listen to their advice for improvements; and co-design solutions.
- Next steps TBD



# Software eco-system

Based on a discussion with the consortial admin, the above diagram was drawn, outlining the different users, roles, storage containers and data types relevant for a high level understanding of the system and the project. (This diagram is probably too small to view in print on a letter-sized paper, but when viewed as PDF, the reader is encouraged to zoom in and explore the diagram).

"...the above diagram was drawn, outlining the different users, roles, storage containers and data types relevant for a high level understanding of the system and the project."



# Worker setup example: Organization A

For an average student worker, the work looks something like this:

- Spends around 5 hours per week on depositing things to the system.
- $\bullet\,$  The work is often done in sessions of 45 minutes, in between classes.
- The work consists in scanning physical documents; combining scanned files into PDFs; uploading the PDF and adding its description. The user will let the scanner scan a document at 2000dpi while entering information about another document at the same time.

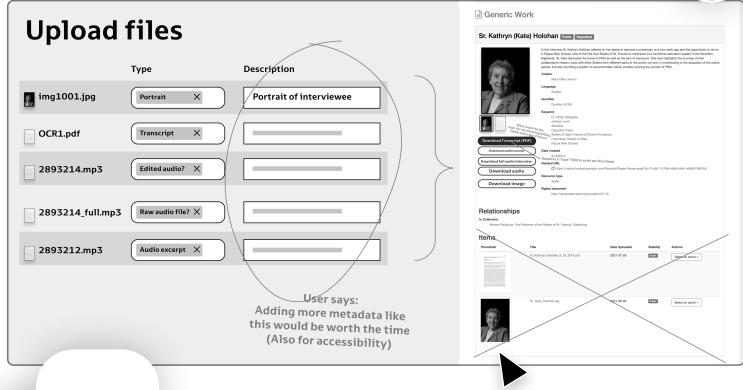
"The work is often done in sessions of 45 minutes, in between classes."

# Worker setup example: Organization B

- Deposit sessions last around 2 hours.
- During a session, around 5-10 items will usually be deposited, which have been prepared by a manager in advance.
- The workflow for each item looks sort of like this:
  - 1 pdf file is opened in a preview application on the computer.
  - The title is copied from the PDF; pasted into Hyku.
  - The same then happens for author
  - The same then happens for extract.
  - The file uploaded.
  - The deposited work is reviewed by a manager.
- Staff will often be adding faculty publications or "research day posters" which are publications with easily discernible metadata.
- It takes less time to assess documents than to do the work in the UI relating to those documents. Something like 40% of the time is spent reviewing and/or preparing data outside Hyku, and the remaining 60% of the work time is spent on entering the metadata into the system.
- (Part time staffers are asked to focus on manual input, because the Importer function is difficult to use, its results are unpredictable, and it takes a long time for it to finish its process.)

"During a session, around 5-10 items will usually be deposited, which have been prepared by a manager in advance."





# Research process

The research process has so far consisted of a quick review of the interface by the UX designer together with the consortial administrator; followed by a series of meetings between the UX designer and users from different institutions. Some of these users were assessing the system for production use, others were already using it. The meetings consisted in the UX designer observing how users used the system; discussing ideas for improvements; and — in some meetings — doing co-designed sketches (like the one above)

Some meetings resulted in codesigned sketches for improvements, which were then reviewed with other users for their thoughts on the proposed change.

# Initial thoughts from UX designer

In the first meeting with the super admin, upon first trying the system, a number of optimizations came to mind based on general UX/UI design principles. Some of these mights still warrant further exploration. For now, I mention them here to potentially be followed up on later. The ideas are mentioned one by one, followed by notes with my thoughts which have been added by myself after interviewing the end users.

### Ideas and thoughts

- Add ability to bulk drop files and then provide a good UI for describing them one by one?
  - Note added later: This might already be possible.
- · View image while describing
  - Note added later: This might still be relevant.
- Add a comma separated keywords list or other faster mechanism for input (or at least a keyboard shortcut to add another keyword)
  - Note added later: Still relevant. User requested this.
- · Navigate away from tab while uploading
  - Note added later: Might still be relevant
- Why am I getting a notification about my own submissions needing review? This is probably intended as an "updated successfully" message for the user.
  - · Note added later: This might still be relevant to review.

- One cannot see which collections are related on collections page problematic when
   e.g. two collections are called the same or something similar.
  - Note added later: This might still be relevant.
- Review and approve UI placed in an odd place
  - Note added later: This might still be relevant to review. A user mentioned it took
    them a bit of time to find this, but that they were doing a "hypothetical" approval
    flow not with real data, just testing out the system.
- No thumbnails or human readable names / labels in Notifications very confusing
  - Note added later: This is probably still relevant to review.



# **Meetings overview**

4 user interviews were conducted. The following pages cover the ideas and advice brought up during those meetings. The feedback mainly concerns the staff data input UI since that is the main focus of the project. However because the staff UI and its functions integrate heavily with, and to some extent overlap with, the public UI, some feedback is given on this as well. Some users also shared advice and ideas for the configuration and settings screens of the system. This feedback is also covered in the following.

The numbers in circles in the following lists indicate a particular user. I.e. all the advice marked with e.g. (2) indicates that the same person provided all of those pieces of advice.

### Points of feedback for

### **Public UI**

#### Front page

• A user would like to control which collections are featured on the front page. (1)

#### Header

• A user feels the top navigation bar ought to be consistent between front page and subpages  $\widehat{(1)}$ 

### Sorting

- A user would like to be able to sort by creation date (the date of publication, or the date the picture was taken, etc.) (1)
- A user would like to be able to sort by author (1)
- A user describes that sorting by "relevance" will display things in the order they were deposited. The user would like to be able to control the order of things manually (e.g. via a numbering system that lets the user assign a number to each thing, e.g.) (3)

#### Help/support

A user is uncertain about whether boolean operators are supported.
 Proposes adding a "help" or "indexing terms" link near search field (user says that at their institution, this would mostly be relevant for library staff, not patrons) (1)

#### Data storage and parsing

• A user uses italics in a description field, but the public UI simply displays the </i> html codes. (1)

#### Collections

• A user would like sub-collections to appear in an indented tree-like hierarchy in lists — preferably everywhere, but at least on the collection page itself. (2)

#### **Templates**

• A user feels the template for the public site is not displaying as intended (2)

#### Metadata rendering

• A user feels that it would be nice to be able to render the names of creators with a {first name} {last name} format rather than the other way around. They mention that their patrons are used to seeing the {first name} {last name} format from their old institutional repository UI (4)

#### Missing alt-text (accessibility issue)

• A user points out that alt-text is missing on the collection thumbnails on the front page of the system. (3)

#### "Work type"-level template

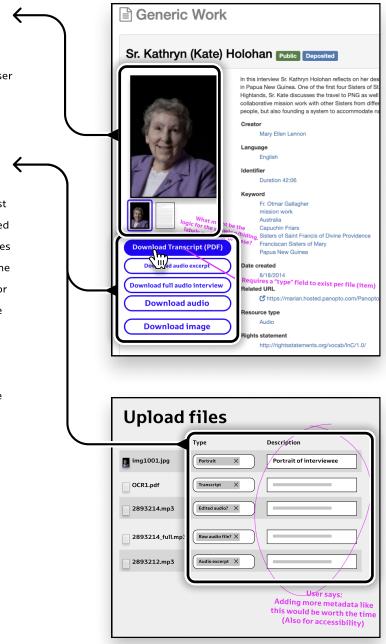
• Three users would like to be able to change the display and order of fields based on "work type"-level templates. This would allow for greater control of both data input and data display, without ruling out the ability to maintain a consistent data set, which might be relevant when needing to merge data sets in the future. This would e.g. allow users to e.g. move the "Related URL" field to the top for certain types of works that do not have an attached file; move the "Abstract" field to the top of works; or hide certain fields that are not in use for an organization (one of the organizations interviewed does not use "Keyword" field at all, but does use "Subject" field) ① ② ④

#### Multiple previews

 A user suggests providing a more prominent set of visuals at the top of the "work" page. If there are more visual assets added, the system could show one by default, but allow the user to click on thumbnails to preview others. Similarly to what is known from e.g. some online shopping platforms (1)

#### **CTA buttons**

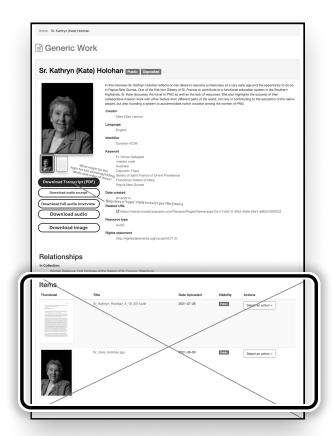
• 3 users would like the ability for the system to display more, and more prominent, call-to-action (CTA) buttons for the most relevant actions for a given work. E.g. "Download", "View related URL" or "View on publisher website". When there are more types of content — e.g. both a full audio interview and an excerpt, the public display would need to have more metadata available for each individual file. This would, in turn, require more from the staff data input UI: Namely the ability to add a type and perhaps a description to the items being uploaded. A user explains that this would be worth the time to input, also because it might aid in achieving a better accessibility for the platform ① ② ③



#### Items list

There is not a clear way to improve the Items list that will work for all users. From different users, different feedback was given:

- One user would like to remove the items list altogether, since implementing a thumbnail preview at the top of the page would replace any need for it for their institution.
- Another user would like to keep the item list and mentions that
  if the work e.g. is a pamphlet or book scan, the item list is
  essential to navigate the different pages; and in addition that
  the file names of each file may contain important data such as
  creation or publication date or similar.
- A third user wants to keep the items list.
- A fourth user would like to list items near the top of the page if
  possible. But would also expect that when visitors click on a file
  name, that the system would download the file in question
  rather than opening a new page.
- All of these pieces of advices are valid and relevant, but to arrive at a general solution or set of potential configuration options, this feature in general would benefit from a more indepth review and discussion before any changes are made to it.



### Points of feedback for

# Staff data input UI

#### "Show additional fields" button

• [Minor issue — not so important] Three users would like to get rid of the "Show additional fields" button since it adds an additional click to reveal all the fields. ① ② ④

#### **HTML** support

- A user notes that HTML tags can be used in the "Related URL" field, and explains that they would like to be able to use HTML in these fields as well:
  - Description
  - Source
  - Publisher
  - And more... (1)
- A user would like the "bibliographic citation" field to support HTML input.

  They explain that: "without being able to italicise things, citations are going to be kind of incorrect". (4)

#### **Abstract field**

• A user finds the position of the "Abstract" field confusing. The user will currently use the "Description" field to put in the abstract text, even though they know there is a specific field for abstract. They use the description field instead because they need the abstract text to appear at the top of the page. (4)

#### Identifier field

• A user notes that the "Identifier" field does not seem to work as expected. When adding a URL to this field, the user expects the rendered link in the public UI to lead to doi.org; but the rendered link seems to trigger a search for the clicked identifier inside the Hyku instance instead. Because the system seems to be have like this, the user puts the identifier (DOI) in the "Related URL" field instead. 4

#### **Description field**

• A user would like to be able to add two line breaks inside the "Description" field rather than having to press the "Add another" button in order to a new descriptive section. (4)

#### Language field

• A user likes that the "Language" field is free text rather than a controlled vocabulary because they feel it would be hard to provide a comprehensive list of languages that would work for all users. (4)

#### Files

• Two users would like to be able to deposit a work without having to attach a file.

Currently a placeholder file is added for works that do not have a related attachment

(when e.g. the deposited work is a link to a publisher website and the institution does

not have a license to upload the related material; or when the audio file in question is

uploaded to another service — due to its file size — and linked to from the institutional

repository) ① ④

#### Creator field

• A user would like to be able to add an additional piece of information about a "Creator", namely whether they are affiliated with the institution. Enabling such an option in the staff UI should result in a simple change in the public UI such as e.g. adding "({institution name})" in parentheses after the Creator name. Currently the institution stores this information in the "Description" field, which also means it appears in the "Description" field in the public UI, but the user would like this to appear in connection with the creator's name in the public UI. 4

#### Multi-value fields (e.g. keyword, creator, subject)

- A user would like to be able to input multi-values in a single field, separated by "," (comma space) or the like, rather than having to add each value in a separate field. This type of field includes e.g. "Keyword", "Subject" and "Creator" (sometimes e.g. science documents have 27 authors, which is frustrating to add in the current UI). In relation to this, the user sometimes needs to copy-paste e.g. keywords from an existing document, which cannot easily be done with the current UI. For certain fields namely the "Related URL" field, the user feels it is ok to have to add separate fields, because URLs can be hard to read if they are not on separate lines (4)
- A user is confused by the layout of the "add" and "remove" buttons for multivalue fields. Having just added a new field with a new value and wanting to add another, they instead delete the field they just filled in. This is because they are used to another software interface in which there are little + and buttons to the right of the fields rather than below them. (4)

#### Resource type field

• A user explains that it might be nice if this field was a dropdown instead of a select list. (4)

#### Subject field

A user explains that the Hyrax on which Hyku for Consortia is built has
built-in support for looking up LCSH (Library of Congress Subject
Headings), but that this is not available in Hyku for Consortia. They would
like it to be available since the institution uses LCSH to deposit things. (2)

#### Collection lookup

- A user explains that the placeholder/help text for the collection lookup is misleading. It instructs the user that they can "enter 2 characters", but does not explain that it will only search for whole words. The search is a "contains"-type search rather than a left-anchored "begins with"-type search, which is good and should stay so, but the text should be updated to indicate that only whole words can be searched for. (2)
- A user would like the interface to show list of all collections as soon as the field is focused, before the user starts typing. This can be helpful when an institution does not have many collections and the user cannot remember what the collection they are looking for is called. (4)

#### Vocabularies

• A user would like to be able to customize their vocabulary entries for e.g. "resource type". This is relevant because a file may e.g. be a photo ("image"), but it may portray an "object" — which is not currently available as an option. The ability to add to the vocabulary should be controlled via user roles — i.e. not everyone should be able to add new terms to the vocabulary. The user explains that the adding of terms would not be an every day occurence, but would happen once in a while. They also mention that they might want to use the terms in the "Digital Public Library of America" vocabulary. (2)

#### Visibility default

Three users would like to be able to configure which option is chosen as the default in the "Save Work > Visibility" section of the Edit work page. (1)
 (2)
 (3)

#### Bulk upload guidance

• A user explains that under "Importers" > "New Importer", a template spreadsheet that you can download would be nice. I.e. a spreadsheet for the given Work Type, which would contain headers for each field as well as at least one row of example data. (2)

#### Batch upload

• A user proposes a "New work by batch". More clarification needed. (2)

#### Batch edit via spreadsheet download—upload roundtripping

 A user would like to be able to perform a batch edit via downloading a spreadsheet representing a set of entities, which can then be edited and reuploaded. Upon re-upload, only the entities changed would be updated. (2)

### Points of feedback for

# Settings and configuration UIs

#### "Pages" section: HTML support

• Two users would like to have HTML support in the "Pages" input sections, to be able to e.g. add a link; using HTML formatting or adding images. (1) (3)

#### "Content Blocks" section: HTML support

 A user would like to have HTML support in the "Content Blocks" input sections, to be able to e.g. add a link; using HTML formatting or adding images.

#### "Appearance" section

- A user would like the colors to have more descriptive labels and/or visual examples, to show which parts of the UI they will impact 4
- A user mentions that it is not possible to see the uploaded logo in the user interface, in the same manner as "banner image" and "directory image" appears in the UI. (1)
- A user explains that the system will send the user to the "logo" tab after making a change in the "colors" tab. The user would like for the system to stay on the "colors" tab in this situation. (1)
- A user explains that they are confused about which fonts are available to use in the system: The dropdown list of fonts contains fonts that the user has never heard of, and the user cannot figure out where the fonts are coming from, and hence cannot predict or research which fonts might be available. The user proposes that the interface could mention where the fonts are coming from (are they system fonts? Google fonts? Etc.) ①

### Adding users

• [Minor issue] A user says adding users was fairly easy, but that they had to look up the role definitions to understand what each role allows the associated users to do. The user also says that "that is to be expected". 4

### Points of feedback for

# Non-UI aspects of system

#### Addition of non-public fields

 A user would like to have non-public metadata fields available in the system. E.g. for staff information, embargo information, e.g. "Staff member X emailed professor Y on date Z", "Staff member X is waiting for feedback from a student", etc. (4)

#### Hiding of "Source" field from public UI

 A user would like to be able to hide the "source" metadata field from the public UI (4)

#### **HTML** tags

• A user explains that they are migrating data from their old system to Hyku for Consortia. In the descriptions from their old system, they have tags in the data. Hyku for Consortia forces the user to remove these prior to importing to get rid of them, via OpenRefine. If the system could make this easier, that would be helpful to the user. 4

### Support for spaces in file names

• A user would like the system to support uploading of files with spaces in the file names when they use the batch upload feature: They explain that all of their files that they upload have spaces in them, which means they have to do a lot of renaming in order to upload to the system, which is frustrating for them. This goes both for .zip files and .csv files. They would like this to be supported throughout the system. (4)

#### TIF batch upload issue

• A user has an issue with uploading TIF images in batch: When the images are in greyscale, they get a red tint, as if a red color was applied to the image using a "multiply" blend mode. 2

#### General

• A user finds it frustrating that, when logged in, they will sometimes be directed to the public UI and sometimes to the staff UI. (2)

#### File upload size limit

• A user would like the file limit of 500mb to be bigger, since audio and video files can be bigger than this (2)

#### **API** access

• A user would like an API (non-graphical) interface that would allow them to create affiliations between works and files through Python scripts. This is relevant when e.g. having to add links to ArchiveSpace. (2)

#### **Custom CSS issue**

 A user trying to apply custom CSS styling felt like they had to apply certain changes in multiple places in order for it to take effect throughout the entire system. They wish the CSS had a clearer class naming structure; or better documentation of how to apply custom CSS; or both. 3

### Javascript support

• A user would like the system to allow for adding custom javascript to the site. They need this in order to enable a chat support widget on their site. (3)

### Missing thumbnails

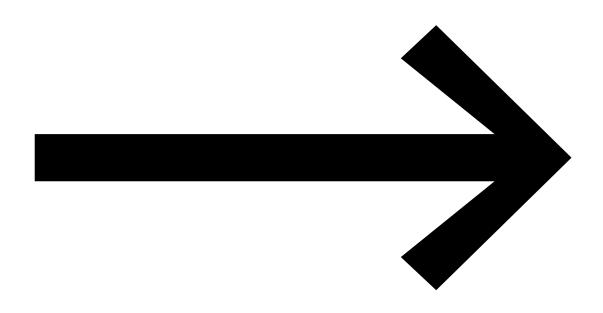
• A user uploaded thumbnails for their collections and is frustrated that they do not appear in the list of categories. (3)

### Video streaming

• A user points out that at some point in the future, students will need to add video works to their repository. When that happens, the system ought to support video streaming of uploaded videos. 3

#### Video embedding (maybe)

• A user points out that the system might need to support video embedding at some point in the future. 3



### **Proposed next step**

# Potential features to design

A lot of potential optimizations clear from feedback. A few things might

benefit from more prototyping and/or a survey with users. Candidates for this:

- "Work type" templates workflow
- "Work" public page layout
- Multi-value input workflow
- Workflow for adding of additional data for items
- Batch workflows

# Thank you

Thank you, dear reader, for reading this document.

Also thank you to everyone involved with the project at Hyku For Consortia who have been helping with logistics, answering technical questions and for listening to the feedback this report brings to the table.

A special thank you to the users for taking the time and spending the energy to participate in interviews, co-design sessions and email exchanges. It has been great to meet you all and learn about your work, depositing philosophy and approaches — thank you!

# Keep involving users

As much as reports like this can help you learn about user needs, wants and requirements, it is not a replacement for continuous involvement of your users. When this project concludes, I encourage you to continue running a process that gives users a central role in defining, reviewing and approving the features that are prioritized and developed.

"I encourage you to continue running a process that gives users a central role in defining, reviewing and approving the features that are prioritized and developed."

# **About Samhæng**

#### **About Samhæng**

Samhæng is a specialized UX consultancy designing digital tools for handling complex data. With a focus on work tools for libraries, culture and the arts. Samhæng co-designs software with the people who end up using it: Staff and patrons. Samhæng has led co-design efforts on library projects like FOLIO, ReShare, Share-VDE and the Library of Congress BIBFRAME Editor. More information can be found on <a href="mailto:samhaeng.com/about">samhaeng.com/about</a>

### The meaning of the name

A user once asked what "Samhæng" means, so for anyone else who is curious: It is a Danish word pronounced roughly like you would pronounce it in English. It can be translated into several English words including "cohesion", "connection" and "context" — all things that play a vital part in our design philosophy: We try to create meaningful connections in data and interface functions and create software products that feel cohesive, based on the context of the users.