

Measuring the Impact of Digital Culture

Deliverable 4.6

Development and Integration of CHI's Self Assessment Tool



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D4.6 Development and Integration of CHI's Self Assessment Tool

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inDICEs

D4.6 Public

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1. Executive summary

This deliverable focuses on the development and integration of the CHIs Self Assessment Tool initially conceived of in WP3 in Deliverable D3.2. The Self Assessment Tool (SAT) was first envisioned as an interactive resource where cultural heritage practitioners might learn how to 'convert digital ambitions into digital strategies' as well as gather data to evaluate their own performance. Concretely, the blueprint for the concept from WP3 would use a survey that covered specific thematic areas such as 'Embracing Digital Trends and Participatory Culture' and 'Empowering IPR for the Commons' and then based on the answers of the participants the tool would then provide participants with recommendations and enable them to see how their answers compare with the larger cultural heritage sector.

The Open Observatory and tools developed within Platoniq are based on the open source software Decidim. This deliverable will as a result explore the technical developments and adaptations implemented using Decidim to create the SAT. Decidim provides both technical software and a theoretical framework where the Decidim community is committed to principles of participation, open source code, and accountability. In addition, the features developed under the umbrella of the SAT have prominently involved partners in the conceptualization, design, and development. As a result this deliverable will discuss how the InDICEs consortium has been integrated so that the platform reflects the collective force of the consortium partners. The deliverable will end exploring the replicability and use of the SAT and the future of the SAT.

Finally, the aim of this deliverable is to shine a light on the progress towards developing a sustainable and open tool for participatory engagement that draws upon the collaborative orientation of the Open Observatory and its respective tools.

2. Glossary and Acronyms

2.1 Glossary

inDICEs Open Observatory (Platform), also: inDICEs Platform. An integrated digital space that functions as a participatory platform and provides spaces for collaboration along with tools and resources generated by the project for prospective inDICEs stakeholders. It consists of three interrelated components; the Participatory Space, the Visual Analytics Dashboard and various CHI Self-Assessment Tools.

Decidim Platform. A digital platform for citizen engagement and transparent decision making developed by the city of Barcelona and providing the underlying software used for the Open Observatory.

Visual Analytics Dashboard, also: inDICEs dashboard. A dashboard that is part of the webLyzard analytics platform and allows users to explore and visualise data from the webLyzard content and metadata repository along multiple metadata dimensions, based on a multiple coordinated view approach using visual widgets. The LITE version introduces a simpler data view that focuses on the individual visualisations.

CHI Self Assessment Tool (SAT). An inDICEs online tool developed with the CH sector in mind that can be adapted to various uses and contexts. The *Self Assessment Tool* created in partnership with Europeana's Enumerate initiative enables organisations to receive recommendations to improve their digitisation practices based on the outputs and resources based on the *CHIs DSM-readiness Assessment Methodology*.

Change Impact Assessment Framework. The Change Impact Assessment Framework was created to support cultural heritage professionals, cultural practitioners and policy-makers fully understand the social and economic impact of digitisation.

2.2 Acronyms

WLT

Cultural Heritage
Cultural Heritage Institution
Self Assessment Tool
Visual Analytics Dashboard

webLyzard technology

3. Introduction

The primary aim for the development of the inDICEs Self-Assessment Tool is to support CHIs in their digital transition and make the tools and resources developed for this purpose more accessible to them. From the outset, and as described in the project work plan, it was meant to assess the status of digitisation, digital strategies and digital participation among CH institutions. In particular, inDICEs was interested in understanding how digital collections provided by CHIs in Open Access could benefit uptake and reuse in the Cultural and Creative Industries. Starting points were the previous ENUMERATE surveys that shed light on the progress in digitisation efforts in the European Union. As however, the InDICEs consortium were in particular interested in reuse and participatory processes, it was clear from the onset that we had to develop a range of new questions hitherto not addressed in ENUMERATE. This process was done in the first year of the project, concurrently with the WP1 research on participatory data. Our lead question is "How can CHIs demonstrate their digital impact and performance?" What kind of data are needed so that CHIs can monitor whether they are achieving their mission goals through digital activities? This way, CHIs can convince funding authorities to use relevant criteria in judging proposals and subsidy requests.

Monitoring Digital Transitions

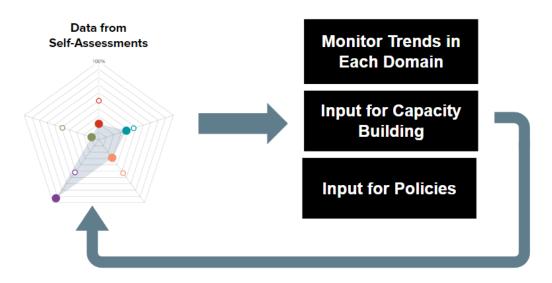


Figure 1: an early conceptual illustration of the SAT

While ENUMERATE was essentially a survey, it was clear that we wanted something that would allow a more continuous monitoring of performance data, so the concept of

self-assessment was embraced. Besides ENUMERATE, other sources were consulted, and a review was performed on other existing self-assessment environments in the CH realm. This study was presented at several conferences. In particular, we looked into the Digital Benchmarks of Collections Trust, the Digital Culture Compass, the Libraries and Museums Education Transformation Framework of Microsoft, the "Zelevaluatietool Digitale Maturiteit" and the Museums of Impact. A series of three draft surveys were developed to fine-tune the questions.

Ultimately, the software that was developed enabled the reproduction of the 'Self Assessment Tool' that would be able to meet the needs of the ENUMERATE survey. Additionally, it also supported the development of the 'SAT Lites' or other variations of the SAT that would incorporate questions, resources, and themes outside of the scope of Enumerate. The SAT Lite allows administrators to create their own self assessment tools in which users will be able to receive recommendations based on their their responses to customised surveys developed by the administrator

4. Concept and Functionality for the Self Assessment Tool

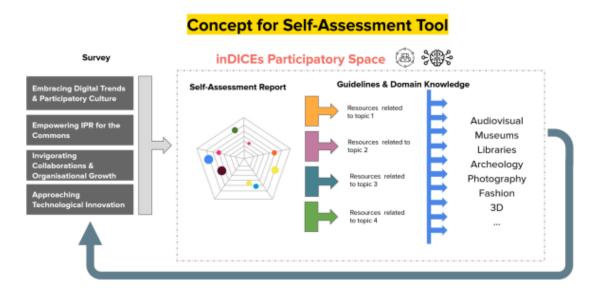


Figure 2 from Deliverable 3.2: Guidelines for CHI Digital Transformation

The three draft surveys contained an onboarding part, gathering participant organisation profile data, a Part A on Digitisation - largely based on ENUMERATE but also containing questions on IPR management, and a Part B focusing on social media and participation. However, what we really wanted to implement is a tool that would assess CHI readiness for the four following domains: Embracing Digital Trends & Participatory Culture, Empowering IPR for the Commons, Invigorating Collaboration & Organisational Growth and Approaching Technological Innovation. The concept was that users would get appropriate feedback with

pointers to resources for each part of the survey that they would fill out. This way the survey can act as a self-assessment and learning tool. It is also meant to be used iteratively.

Since an opportunity arose for inDICEs to collaborate with Europeana on a new release of the ENUMERATE survey, it was decided to join forces and integrate the newly developed questionnaires in a first version of the SAT tool, the ENUMERATE SAT, launched in early summer 2022. This SAT version however did not yet implement the full self-assessment functionality we had in mind for the inDICEs SAT, so at first an experimental SAT Light was developed in the late summer 2022 and tested in several workshops. This version included feedback i.e. recommendations that were customised to the participants responses.

5. Co-creation Process of the Self Assessment Tool

Co-creating the SAT involved each of the partners in the consortium whether it was to inform the creation of questions in the tool or to develop recommendations as feedback for participants. The co-creation was an extended process that was initiated by WP3 through the deliverable D3.2 Guidelines for CHIs Digital Transformation. Since the publication of this deliverable the tool has gone through several changes and iterations. For example, a milestone in the SAT creation was to integrate the tool with the Enumerate survey conducted by Europeana. The main advantage was to create a successful combination of different facets of each project:

- The added value of the open source platform of Decidim
- Recommendations and data developed by the InDICEs consortium
- Europeana's established audience and network

5.1 Co-creating with InDICEs Consortium

The first concept for the SAT was ideated and developed by WP3 with greater detail in D3.2 Guidelines for CHIs Digital Transformation. As stated in the deliverable, the intended main purpose and functionality of the SAT was:

'Survey - a questionnaire about the typology of the organisation along with questions to assess their digital transformation

Self-Assessment Report - a series of visualisations that communicate how CHIs compare in terms of the topics covered in the survey

Guidance and Knowledge - strategic guidelines as well as targeted, domain-specific resources to support digital transformation processes

Participatory Space - embedded within the participatory space to encourage community engagement and development among CHIs'

Using these speculative parameters, WP3 made a questionnaire and launched an initiative to collect resources from the consortium. Using the survey and the proposed resources WP4

created a paper prototype that was shared and used for a co-creation session in the October 2021 Project Management Board meeting (PMB). Using the personas developed in earlier deliverables, consortium partners were divided into groups who answered the survey and received the recommendations and resources based on their answers. The consortium partners were then asked to evaluate the experience and effectiveness of the tool to which they stated their satisfaction.

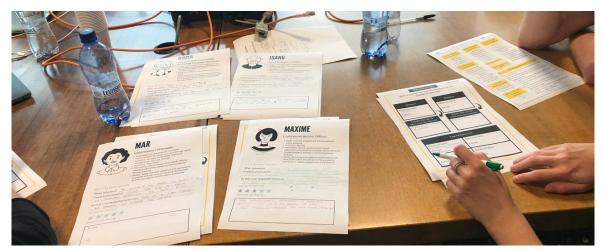


Fig 3: Partners participating in the workshop to validate the concept of knowledge and guidelines to be produced by the SAT at the Rome PMB in October 2021.

The paper prototype was developed with the constraints of the Decidim software and the possibilities for further hacking the component along with others. However, during this phase of the project the visualisation of the data had not been addressed because a baseline for the data was absent along with clear consensus on what should be visualised and why. Still the PMB had general positive feedback.

6. Implementation: Self Assessment Tool on Decidim

The self assessment tool is a hack and reuse of the Decidim survey component. The added functionality is that administrators can then give feedback for any survey implemented on the platform. Hacking the survey component allows for this new feature to be replicable and adaptable beyond a one off tool. Future administrators will be able to not only update a SAT but also recreate the tool and change the questions and the feedback through time so that the SAT stays relevant. Additionally the SAT can be adapted to specific contents from the project whether creating assessments from the Impact Areas developed in WP1, the policy recommendations in WP3 etc.

6.1 Modularity of Decidim

As mentioned in the introduction to use Decidim, it is necessary to create a new Ruby on Rails application. Then creating new functionalities is no different from developing any Ruby on Rails application. New features are incorporated through two main methods: by implementing them in a new instance or by adding an external module where the work is

delegated. The decision on how to proceed depends on a variety of factors, mainly related to the specificity of the feature itself. For instance, a feature very tightly coupled with the InDICEs project will be developed in the application code base but a feature that might be useful for other applications or communities can be extracted into a shareable module.

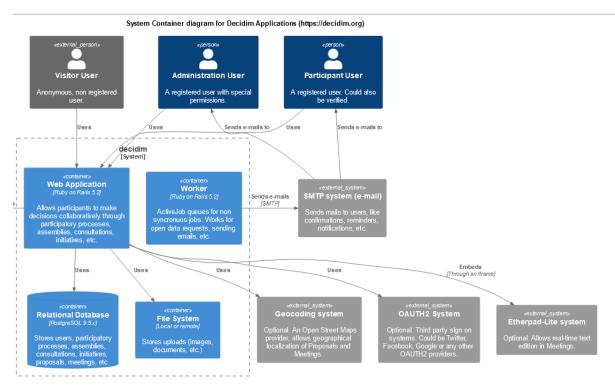


Figure 4. The system architecture for an instance of a Decidim Platform¹

Figure 4 shows which external applications and systems Decidim extracts to work. Inside, however, there are several interconnected modules based on Ruby on Rails that make up the platform's interactive applications.

Extract from D4.4. is the following simplified summary of how a user interaction works and what layers of code are involved with the Open Observatory including the WLT Dashboard:

- 1. User wants to perform certain action in the platform
- 2. Is it a custom feature provided by the platform code? Respond to the user if positive.
- 3. If not, look at any external module and check if it provides the feature. Respond if positive.
- 4. If not, look at the main Decidim module. Respond if positive.
- 5. If not, see if this is a standard Ruby on Rails feature. Respond if positive.
- 6. If everything else fails, this usually means a "not found" message.

¹ https://docs.decidim.org/en/develop/develop/guide_architecture

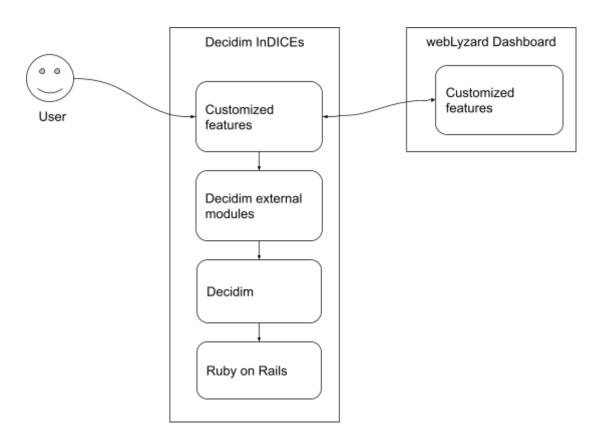


Figure 5 User interaction through the different application layers in Decidim InDICEs.

6.2 Centering Participation within the SAT through the Decidim Framework

As mentioned, the Open Observatory is not only based on the Decidim software, but also the theoretical framework for a more shareable and hackable open source technology, democratic decision making and participation, with the integrated principles of transparency, accountability and traceability.

The Decidim facets that are integrated into the SAT tool are the following:

- 1. Decidim is highly hackable; it has been created to be adaptable to various contexts and the code can be generally written over and repurposed as needed. More information is available in the following section.
- Decidim centres democratic participation and decision-making and as a result it offers a variety of tools and spaces focused on meaningful participant engagement and interaction.
- 3. Finally, Decidim is open source and thereby benefits from improvements and tools within the wider Decidim community.

Within the above framework, the SAT has been created by 'hacking' the surveys module and enabling a replicability so that the SAT can be incorporated into any participatory space on

the platform from Conferences to Assemblies. Finally, the code for the SAT is available on Github for the open source community to access, replicate and build upon.

6.3 Management on Github

As mentioned in Deliverable 4.4, Decidim is subject to the Affero General Public License v3 (AGPLv3) (https://www.gnu.org/licenses/agpl-3.0.en.html), a derivative from the traditional GPL licence that covers specifics of distributed applications such as web sites. To summarise, it forces any derivative work to be distributed in the same terms. All the Decidim derivative work follows the same licence, modules and the implementation of the InDICEs platform itself, except for the VAD Lite which is not open source; however, the application is served independently and integrated at the user interface level through API data exchange.

As a consequence of the multiple pieces that comprise the whole InDICEs platform, the development strategy is conditioned by the modular approach. This means that development is distributed through different repositories, mainly in different GitHub accounts/folders. Those that can have contributions as a result of the work in the Self Assessment Tool on InDICEs are:

- 1. https://github.com/Platoniq/decidim-indices Main Decidim InDICEs source code. Here is where all the customised features are developed.
- 2. https://github.com/decidim/decidim/ The source code for the Decidim module. As InDICEs, some work can be derived to this repository if it is strictly related to the Decidim generic platform itself (which in practice means bug fixes).
- 3. webLyzard privately-hosted GitLab: Specific changes made for the InDICEs project have been incorporated in the webLyzard technology stack but access is not public.

6.4 Customising the Survey Component

The Survey Component

The survey component allows administrators to create forms or surveys that both registered and unregistered participants can answer. Administrators using the survey component can create a survey with the following characteristics:

- Administrators can limit or set a time period that the survey can receive answers
- Questions can be answered in the following forms: short text (one line), long text (multiple lines), single or multiple options, sorting through a list, matrix questions, conditional questions etc.
- Questions can have a minimum and maximum characters of each answer
- Administrators can set the maximum number of options a participant can select

Exporting Answers

Answers to the survey can be exported by administrators in the following formats: CSV, JSON, XLSX, or PDF.

Decidim Awesome

Decidim Awesome is a plugin developed by Platoniq to support tweaks or needs beyond the constraints of the existing software. All the tweaks that are available are optional with granular permissions that let the administrator choose exactly where in the platform to apply the modifications.

Decidim Awesome: Saving User Answers

With this tweak or feature administrators can create an autosave feature on any form or survey implemented on the Decidim platform. It is GDPR compliant and works totally on the user side by using the Local Storage of the user's browser. In simple terms, the feature allows the user to fill in a survey, leave, and come back to it later with the answers from each of their sessions saved on the browser.

Form Templates

The need to develop templates came from issues encountered while putting the Enumerate survey on the Open Observatory. First the issue was that the survey would be conducted annually and second that uploading the survey took two working days to ensure the questions were correct. The time period to upload the survey was cumbersome and time consuming. It was believed that if the survey would be repeated year after year, that it would be useful to have the capacity to create templates and be able to replicate, build off of, or adapt surveys in the years to come. As a result, the template feature was developed. Administrators can create templates through the administrator dashboard. The template module allows admins to create and use templates across multiple types of Decidim spaces whether a process or assembly or even a conference, i.e. in any instance of the survey component.



Fig 6: A snapshot of the instructions to update a Decidim instance with the template module, available on GitHub.

Creating Recommendations or 'Assessments' for each SAT

The 'hack' to the survey to create the main facet of the SAT is the capacity to add feedback or recommendations to a survey based on the respondent's answers. Creating this feature

on the administrator dashboard was the fastest way to customise the survey component and reuse or adapt recommendations. At the administrator level, the process or assembly that hosts the survey can be selected to add the recommendations customised for that survey's questions. The originally conceived tool was a one off version or a component which is not replicable across other processes or assemblies. Currently, a list of recommendations can be repurposed to any single survey, that would eliminate the need to recreate lists which might be very useful considering the annual nature of the Enumerate survey.

Developing the Survey Set Component

When adapting the survey component for the Enumerate questionnaire (Enumerate is an initiative lead by Europeana annually to collect data on CHIs with a survey of more than 60 questions), more than just providing feedback it was important to divide the survey up into several sections rather than create one survey with more than 60 questions. Dividing the survey into sections also would make it easier for participants to answer only the sections relevant to them. However, to take the survey and divide it into multiple sections required creating multiple surveys and displaying them on a page through hyperlinks. This method of creating and posting the surveys was of a high level of complexity that could be difficult for a sustainable replication of the survey in the years to come.

To resolve this issue, Platoniq undertook the task of creating a new component or a 'Survey Set' component. This component allows the administrator to publish a group of surveys as a set that appears on a page. The order in which they appear is defined by a priority or weight set by the administrator. And finally the user can download their answers to their questions once any survey on the page is answered. Currently, Platoniq is testing the SAT Set component.

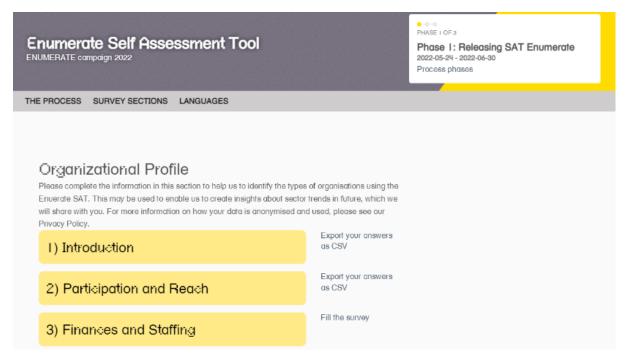


Figure 7 is a screenshot of one of the test pages created using the SAT Set component

Co-creating the Recommendations in the SAT

To create the recommendations for the SAT, several sources and tools were referenced for the design. One of the most relevant was the Tracker developed by Digital Culture Compass². The SAT was developed in tandem with the Open Observatory along with other features such as the VAD Lite

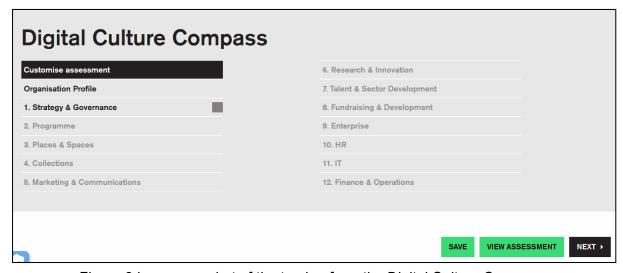


Figure 8 is a screenshot of the tracker from the Digital Culture Compass

Other assessment tools that were also considered were the following from D3.4:

- The **ENUMERATE** Observatory that aimed to provide a baseline of data on digitisation, digital preservation and digital access to CH in Europe.
- Digital Benchmarks Collections Trust³ is based on ENUMERATE. Collections Trust provides a downloadable benchmark tool⁴.
- <u>NEMO</u> conducted a series of surveys to assess Digital strategies in museums during the height of COVID 19⁵ pandemic.
- Microsoft's Digital Transformation Framework⁶: The tool uses 16 questions to assess digital transformation across four areas: Enhanced Visitor Experience, Advanced Discovery, Dynamic Operations and Intelligent Environments. A rating system allows to determine the current level of digital maturity and to define targets.

However, as mentioned earlier, in terms of the co-creation of the SAT, it was important to have a scoring system in tandem with the questionnaire. As a result, the SAT on a technical level would have the capacity to be very flexible and adapt to the questions along with

² https://digitalculturecompass.org.uk/using-the-tracker/

³ https://collectionstrust.org.uk/

⁴ https://collectionstrust.org.uk/resource/digital-benchmarks-for-the-culture-sector/

⁵ https://www.ne-mo.org/advocacy/our-advocacy-work/museums-during-covid-19.html

⁶ https://edujourney.microsoft.com/lam/etf-lam/

creating a smooth synthesis between the questions and the resources and tools provided by the entire consortium.

To create this system, the recommendations provided are matched to participants based on their answers through hashtags. Administrators can embed hashtags that are invisible to the survey participant in each of the answers (in any questions that are not open ended). Then in the feedback each recommendation is also tagged with hashtags, so that the feedback generated connects the tag from the answers to a specific recommendation. This system is relatively simple, however it can become increasingly complex depending on the ambitions of the administrator.

The following image was created by WP3 and shared in D3.4 as an aspiration for what the recommendation page that the SAT could look like:

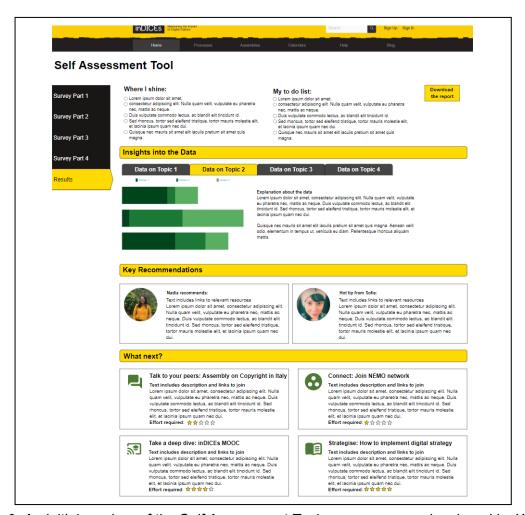


Fig 9: An initial mockup of the Self Assessment Tool response page developed by WP3

The current iteration of the SAT does not include the following sections:

- Where I shine
- My to do list
- The visualisation for Insights into the Data

The elimination of these three characteristics was due to the fact that there was not enough data or a conceptual framework to elaborate the answers and to know approximately where the participants are doing well or to suggest concrete actions to take to move forward. As a result, another iteration developed on the existing data, recommendations, and the software of Decidim was developed.

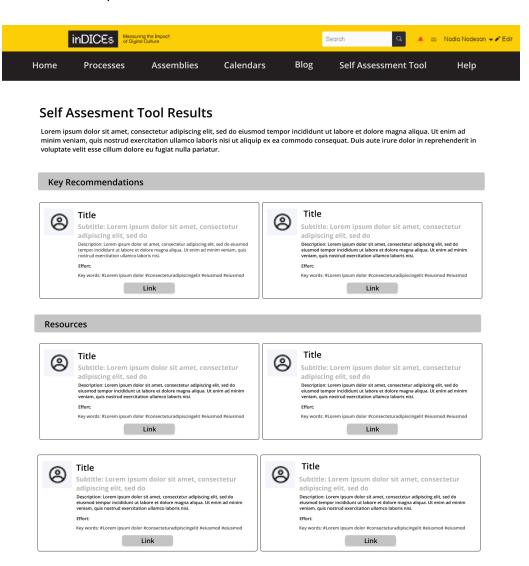


Fig 10: Second iteration of the Self Assessment Tool response page

Administrators can create as many recommendations as they see fit. There should be at least two recommendations for any SAT iteration (as mentioned earlier questions and recommendations are tagged with hashtags). Recommendations are prioritised and the administrator assigns the weight or priority, e.g. the administrator can assign a weight of 1 to a recommendation and it will appear at the top, a weight of 2 and it will appear second. The remaining recommendations will appear under the section "Resources". The resources and recommendations can be external or internal links, documents, or media.

The elements in each recommendation are as follows:

Thumbnail image

- Title
- Subtitle
- Description
- Keywords associated with the recommendation
- Effort, or an approximation of difficulty which can be expressed with words or emojis.

WP3 suggested an additional feature that would show the level of effort for each recommendation. As a result, the number of cog emojis indicates the effort required which appears in each recommendation.

```
module Decidim
module Admin
  class CreateIndicesSatFeedback < Rectify::Command</pre>
    def initialize(form, sat_set)
      @form = form
      @sat set = sat set
     end
     def call
      return broadcast(:invalid) unless form.valid?
      begin
         create sat set!
      rescue StandardError => e
        return broadcast(:invalid, e.message)
      broadcast(:ok, sat feedback)
    end
    private
    attr reader :form, :sat set, :sat feedback
    def create sat set!
       @sat feedback = Indices::SatFeedback.create!(
         sat set: sat set,
         title: form.title,
         description: form.description,
         hashtags: form.hashtags
     end
   end
end
end
```

Fig 11: A snapshot of the code to develop the Self Assessment Tool feedback system from Github (app/commands/decidim/admin/create_indices_sat_feedback.rb)

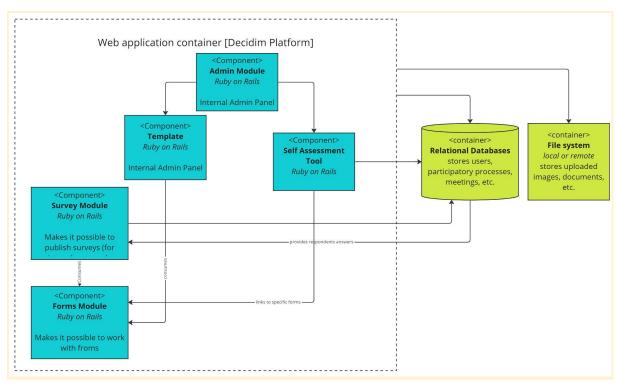


Fig 12: A simplified image of the system architecture of the SAT and Templates showing the relationship between the components and the new features

Further features of the SAT: Users Can Download their Answers

In addition to the features that allow administrators to create recommendations and templates, the SAT allows users to download their answers. The need for users to download their answers was also inspired by the pain points and needs of the Enumerate survey participants. The Enumerate survey is very long and requires multiple members of any staff from legal, financial, and communications to provide answers that build a picture of the organisation or institution. However, once answered, being able to keep track of how they answered is incredibly important to participants. One of the added values of the SAT is that participants are offered the opportunity to save their own data versus the generally extractive nature of most survey technologies that offer no further transparency or feedback.

7. Iterating with the Enumerate Survey

As mentioned earlier in this deliverable, there was a need for baseline data along with a communications strategy that would engage CHIs in participating on the SAT. A solution to these two challenges was to integrate the Enumerate survey and use the Enumerate questions rather than the questionnaire previously developed in WP3. The questions were very similar and in addition the Enumerate survey was already a cornerstone reference for the development of the SAT. However, perhaps most importantly, there is a large audience for the Enumerate survey along with a commitment to a communication strategy for outreach and engagement beyond that of the InDICEs project.

7.1 Launching the Enumerate SAT

The first iteration of the Enumerate SAT was launched in July of 2022. There were a series of online events organised by Europeana to attract a wide audience. Europeana organised a series of online 'cafes' (open digital events) and a dedicated email address to answer queries and concerns and to facilitate the submission of more responses. ENUMERATE was promoted as a SAT with the added value of providing feedback and recommendations.

7.2 Results

The Enumerate communications campaign generated 234 responses to the Enumerate SAT from CHIs belonging to 17 EU member states, including responses from first time participants in Croatia and Bulgaria.

The highest number of responses came from Poland with 91 responses, then Italy with 66 responses, and Portugal with 13 responses. The Enumerate SAT also attracted responses from Council of Europe/EU candidate countries that have previously not responded to ENUMERATE such as Serbia, Albania, and Armenia. However, the response rate was lower than in earlier years and is in line with a trend of smaller response rates to sector surveys.

7.3 Iterating the Enumerate Survey on Decidim

The Enumerate survey was very lengthy and had more than 50 questions. Surveys that are more than 30 questions begin to slow down the browser for the administrator. As a result, creating the survey on the platform could take between 12-16 hours to ensure quality and accuracy. Additionally, the survey was very lengthy for end users. Then to create a more usable survey WP4 improved the user experience of the survey by proposing to divide the survey into small surveys. After the first launch of the Enumerate survey, the long survey was transformed into smaller 'mini' surveys as a strategic decision between Platoniq and Europeana. To show the surveys in one place, the page component was used to style the appearance of the list of mini surveys.

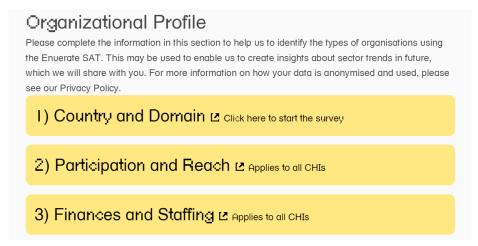


Fig 13: The Enumerate SAT with the first series of questions divided into sections and displayed on the page component

7.4 Adapting the SAT to the Open Up Museums Conference in Trento

To demonstrate the flexibility of the SAT, a unique version of the tool was implemented for the Open Up Museums Conference in May 2022. The conference was made up of Italian Museum practitioners. The tool was then implemented in Italian. However, the tool did not produce recommendations rather resembled a personality quiz that shared tools based on the persona that participants best matched with. This gamified version was relatively short to accommodate for the time period of the conference and was a unique activity that implemented storytelling to engage participants in the possibility of the tool and the overall Open Observatory. This example best illustrates the flexibility of the SAT mentioned throughout the deliverable. If the administrator is creative and innovative the possibilities of the SAT are endless.

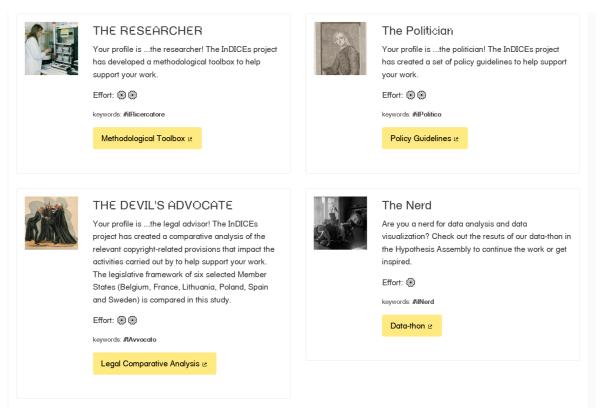


Figure 14 shows the different personas developed for the conference that are the results of their 'quiz' that lead to resources developed by InDICEs

8. SAT 'Lite'

The SAT Lite is a 'lighter' version of the SAT that focuses on specific resources with fewer questions to engage participants who may want to target specific aspects of their digital transition.

8.1 Developing SAT Lite

The SAT Lite is an iteration of the original SAT tool (SAT Enumerate) and its development was inspired by specific resources developed by WP3 in D3.3 DSM readiness assessment Methodology and the related Infocharts. As a result, the questions for the SAT Lite include images and strive for a more visual approach to surveys that might make it easier to engage with participants and provide more context to each question.

D3.3 is compilation of infographics designed in the project to support the CHI readiness assessment methodology, i.e. the SAT and its dissemination. The graphs share key concepts on participatory innovation. The infographics prioritise the four facets identified in the early conception of the SAT:

- Digital Trends and Participatory content: demonstrates the growing importance of participatory value creation in the CHI sector, and offers tools to monitor performance in this area
- Empowering IPR for the commons: addresses how the sector can turn the limitations copyrights pose on the achievement of their core mission to deliver open access to heritage into an asset and how assessing and documenting the rights status of digital collection representations can influence digitisation strategies and enable more freedom of action.
- Invigorating Collaboration and Organisation Growth: focuses on the reality that should build strong local networks as well as join international networks to build capacity.
- Approaching Innovation and Digital Strategy: encompassing digital strategies
 that not only start from the collections perspective but also integrates the heritage
 community viewpoint. It addresses methodologies for innovation and risk
 management.

The SAT Lite aims to use more visual questions to collect data and enable dialog between participants, as demonstrated in the demo organised for the Europeana Conference.

8.2 Implementing SAT Lite at the Europeana Conference

To apply the concept of the SAT, best utilise the tools and resources from InDICEs, and return to some of the initial theoretical concepts of the SAT the SAT 'Lite' was conceptualised with WP3. The SAT Lite was deployed in a workshop at the Europeana Conference in September 2022.

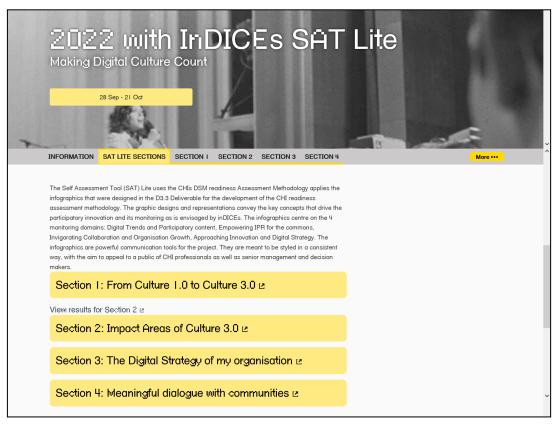


Fig 15: SAT Lite implemented at the Europeana Conference in September 2022

Participants received recommendations based on their answers that were directly tied to concepts in the deliverable 3.3. This was an acupuncture style assessment with a more specific focus and lighter approach.

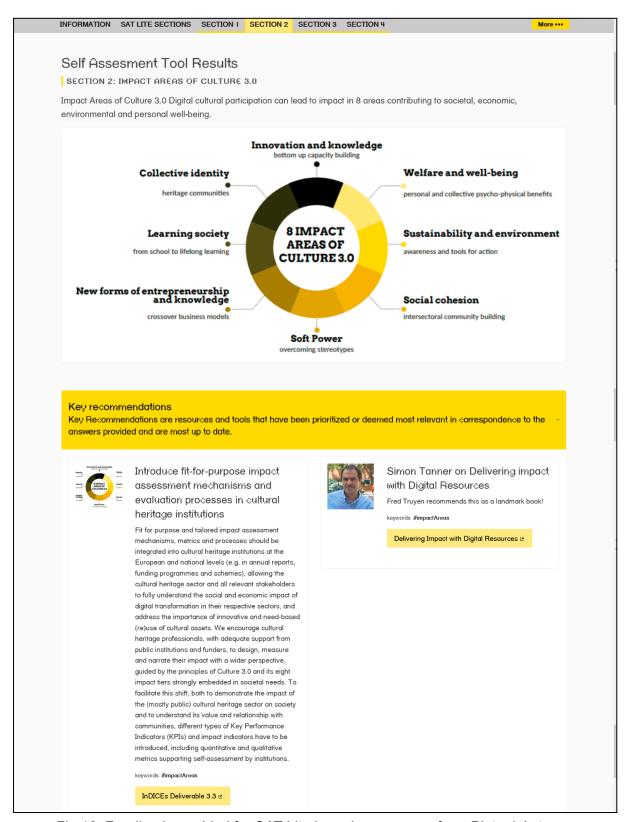


Fig 16: Feedback provided for SAT Lite based on answers from Platoniq's team

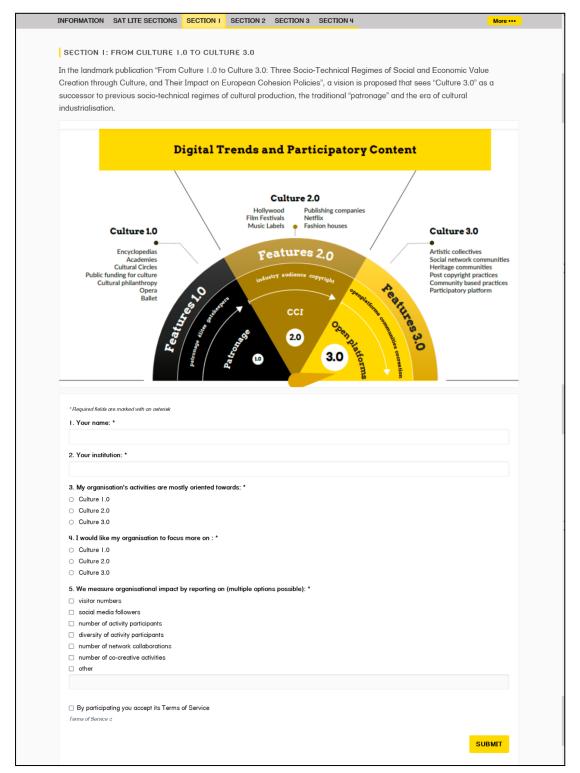


Fig 17: First section with only 5 questions and a more visual approach

Finally, in a mini experiment to test visualisations, a results page was included to show a sample of the data using responses from conference attendees using the SAT Lite.

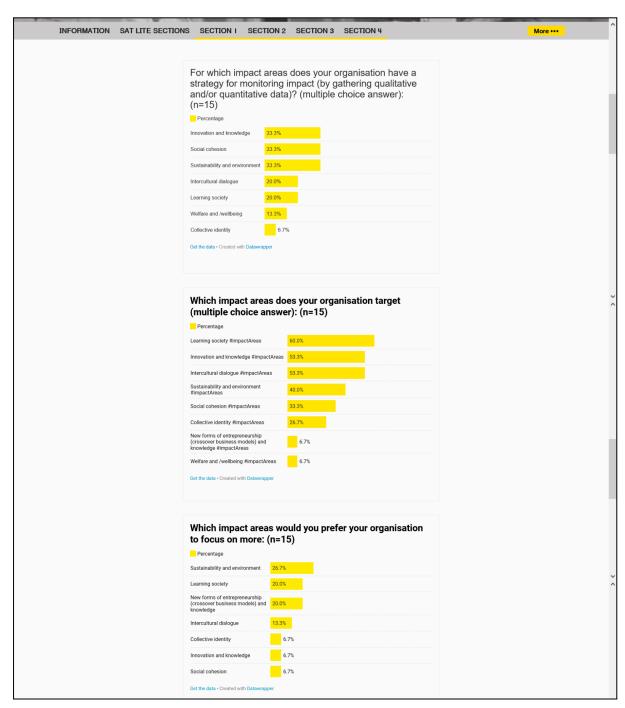


Fig 18: Visualisation produced from participant answers of the Europeana Workshop

The objective is to follow this line of work to find better ways to engage participants with the results and find a sustainable means to share data from the SAT.

8.3 Legacy

The legacy and reputation of Decidim as the go-to open source software for transparent, democratic processes has become very popular in the past years. With this vision of the platform, creating a tool that can be flexible and adapted over time has been made a high

priority as characteristic of the SAT. For example, even as the Enumerate survey evolves questions are changing along with the value exchange promised to users. Investing in a more flexible design was a cornerstone to the tool having a life beyond the end of the InDICEs project.

Redesign of the Administrator Dashboard for SAT Lite

With the revisions and iterations of the Enumerate SAT, there was an initiative in WP4 to create a more sustainable means of creating a SAT with multiple mini surveys that would be more user friendly. As such, the aim was to create a component that would allow the administrator to group surveys together on the same page rather than the current method of creating a page with hyperlinked surveys. The concept is that the administrator could define specific sections that would contain one or more surveys. This would allow the creation of 'mini' surveys through a simpler system that would be easier to pass on or replicate over time. In addition there is also the aim to also revisit how to incorporate more visual feedback with the possibility of visualising the answers in the recommendation section to have an image or iframe above to show the results of the survey. The development of this component is currently in progress at Platoniq. The aim is to create a more user-friendly administrator dashboard that enables future administrators and heads of CHI communities to more easily create a SAT for a more sustainable transfer of the platform to Europeana and CHI communities.

8.5 Best Practices for Incorporating a SAT into Events

After incorporating different SATs into events for CHIs, WP4 developed a few best practices for conducting hybrid event activities with the software. This section highlights the best practices developed so far.

To start, before any event participants should be informed that they should bring a laptop, tablet, or smartphone and register to the platform before so that they can participate.

When developing a SAT activity it has been observed that that shorter questionnaire would be best for sake of the rhythm of the workshop or event and engagement of the audience. The SAT Lite as detailed above had a total of five questions per section. The survey for Open Up Museums had less than 10. The SAT for events ideally communicates one or two strong messages about a project, tools, or resource that it is highlighting. For example the Open Up Museums event highlighted the types of stakeholders who would most benefit from the Open Observatory and tools or resources developed with them in mind. Consider that an event that incorporates a SAT is communicating something about the project whether highlighting resources or demonstrating the value exchange of participation with the Open Observatory.

Once the activity has been created, i.e. the questions and recommendations of the SAT, it is important to consider the overall workshop. Rather than just starting with the engagement of the Open Observatory and the SAT, participants should be given the context of the tool, open observatory, and the resources that will be made available to them. The following table is a breakdown of for how to organise a workshop activity using the SAT:

Activity	Description
Welcome Ice breaker	An ice breaker to warm up participants to engage in the workshop
InDICEs in a Nutshell	A short explanation of the InDICEs project that demonstrates how the project centres collaboration, co-creation, and more transparent dialog for CHI practitioners and actors.
Open Observatory	An explanation of the Open Observatory and its commitment to participation, transparency, and as a place to support conversations within and around CHIs in Europe.
What is a SAT	Describe that the SAT is more than a survey and allows participants to receive recommendations based on their answers with up to date resources and tools. Also describe what kind of tools or results they should receive and how those resources are relevant for the participants. For the Europeana Conference, Centrum Cyfrowe walked participants through the infographics and how it relates to the everyday work of museums, galleries etc. to ground participants in relatively abstract concepts.
SAT Activity	Ask participants to register if they have not already to the Open Observatory and use the SAT created for the event.
Open Discussion	Ask the participants about their experience and prepare questions that engage the participants in a deep dive into the resources or recommendations that SAT has given them. What can they do with these recommendations and what are some actionable steps beyond the workshop, should engage with policy makers, engage in internal discussions?
Post SAT Activity	Ideally this event sparks conversation. To engage participants after the event, prepare a discussion thread or meeting etc. with a component on the Open Observatory where participants can continue to share and connect. Or publish the results of the survey shortly after the event and engage participants with questions or concepts that pertain to the results. It is recommended that the post activity does not take place more than two days after the event while it stays fresh in a participant's memory.

Table 1 of a breakdown for a simple workshop utilising the SAT on the Open Observatory

The table demonstrates what has become common practice for WP4 when hosting or supporting events that utilise the SAT and the aim is to provide tools for the future of the Open Observatory.

A Manual for Administrators Using the SAT Lite

To support the use of the SAT by community administrators on the Open Observatory platform a manual has been developed to explain in simple terms with examples of how to create a SAT. The manual draws on the Open Up Museums SAT as a use case. It provides the reader with screenshots of step by step how to navigate the platform as well as a link to loom with a short video on how to generate customised recommendations based on a participant's answers. The full manual is available in the annex and will be updated in parallel with any technical changes to the SAT.

8.6 Using the SAT to guide users discovering the inDICEs Open Observatory

Due to the wide variety of resources available as well as themes addressed on the Open Observatory, a SAT will be designed that guides participants to materials relevant to their work and interests.

One of the early ideas for the landing that is in development was a 'landing quiz' or in other words a short survey that asks participants to let the Open Observatory know what they would be most interested in and then recommends relevant resources, tools, or participatory spaces that are on the Open Observatory.

The 'landing quiz' goes beyond what a normal search function on a website has to offer, because it will provide a contextualised and curated list of the Open Observatory's resources, rather than a list of items on the platform that at a glance might only be legible to the InDICEs immediate community. Finally, this SAT will enable new participants to get a brief introduction to the tool and allow possible community administrators to get a first taste of how they can go above and beyond with the participatory features on the platform.

9. Conclusion

This document 1) summarises the development and iterations of the Self Assessment from a concept to concrete tool 2) outlines the scope for the technical implementation of the tool 3) shares observations and recommendations for uses of the SAT beyond originally imagined as a highly flexible tool that creates added value to surveys through recommendations and the possibility of greater participation through the Decidim platform. In the development process there was an initial set of questions that were tested using google forms with the consortium partners and larger CHI community. However this was then shifted to build with an audience in mind that was already connected to the Enumerate project. With this approach, time was saved in generating a new audience that could connect to hundreds of

participants. Currently, the SAT has many instances on the Open Observatory all uniquely designed according to specific events, resources, or audiences.

In future, the aim is to improve the replicability of the SAT, create a stronger connection to the VAD and explore more visual tools whether static or dynamic. The idea of gathering participant data and sharing over all responses in the SAT is envisioned for the future. The aim is to allow for the creation of more data driven participation so that participants can analyse and visualise data related to their participation and support how they strategise their digital transition. The aim from these future iterations is to create stronger interactions from the community and inspire future communities on the Open Observatory to experiment and innovate with more open source digital tools at their disposal.

9.1 Engagement Beyond the SAT

Based on the experience with Enumerate and SAT Lite at the Europeana Conference what has become very evident is the need to develop not just technical tools but also a community and incentives for participation with the prospective audience of the SAT. The Open Observatory through activities such as meetings, proposals, debates, and assemblies offer the opportunity to create and develop networks that connect to and build off of the SAT. Connecting to aggregators and existing communities such as the Europeana network has facilitated the use of the tools developed by the InDICEs consortium and would be cornerstone to the sustainability of the project. Deliverable 5.6 by WP4 provides models for online community engagement on the Open Observatory.

Annex: Creating a Self Assessment Tool with Decidim

What is a Self Assessment Tool (SAT)?

The SAT Lite feature of the Open Observatory allows administrators to create surveys and provide recommendations to users based on their survey answers.

Creating a Survey for a SAT

To turn a regular survey into a SAT the first step is for administrators to evaluate their questions and answers. They need to create several keywords or hashtags based on the answers a user can provide. Note that these hashtags cannot be in open ended questions. These hashtags are then included in answer options so that when the user answers the survey they are actually selecting answers that have been tagged. Using this hashtag the software retrieves and provides the user with feedback also associated with that hashtag. An example might be the following:

What are you interested in?

- A. Evaluating impact #impact
- B. Intellectual property #IP
- C. Business models #businessModels

In the case of the Open Observatory when hashtags are included in the answers they are actually invisible to the user. So when the user selects an answer the software automatically retrieves feedback that the administrator has tagged with the hashtag.

How to create a survey

The following is a link to the Open Observatory that informs administrators how to create a survey:

https://participate.indices-culture.eu/pages/surveys

Creating a set of Recommendations

Each hashtag created to connect to a recommendation. To create these recommendations the administrator needs to create a 'Self Assessment Set'.

However before creating the self assessment set it is recommended that administrators before this step have a full set of hashtags and corresponding resources or recommendations. Each recommendation should include the following:

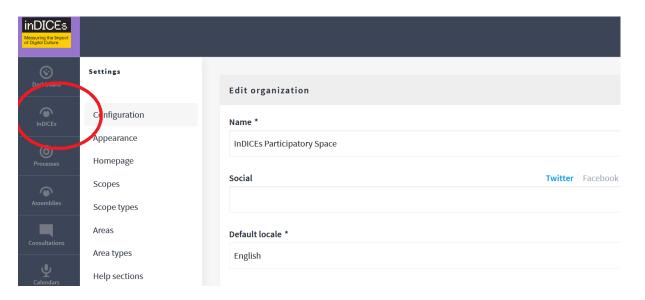
Title*

D4.6 Public

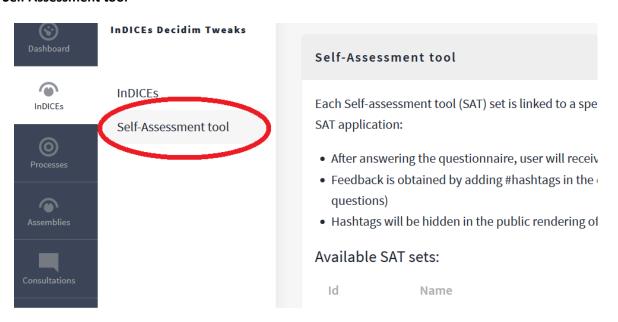
- Subtitle
- Description*
- Level of effort on a scale of 1-5
- Link label (label for the link to the resource)
- o Link URL
- Avatar or thumbnail image of the resource
- Hashtag*

To do so follow the following steps:

Click on the InDICEs icon on the administrator dashboard



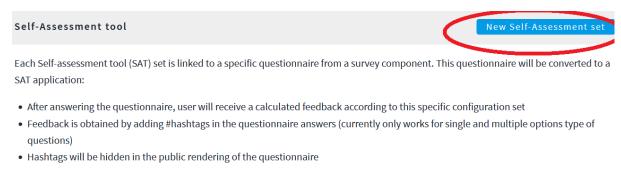
Click 'Self Assessment tool'



Click on create a new self assessment set

inDICEs

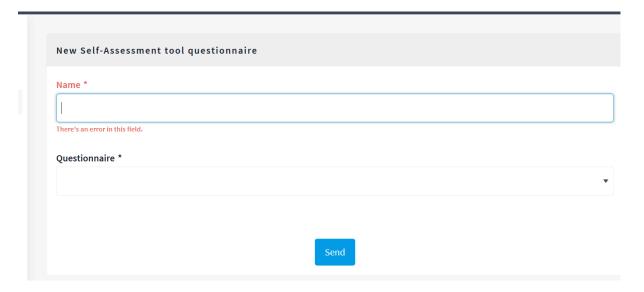
D4.6 Public



Available SAT sets:

Id Name Questionnaire Created

Give your SAT set a name and select the questionnaire or survey you have created



Click on create a new feedback to create a recommendation that corresponds to the hashtags in your survey

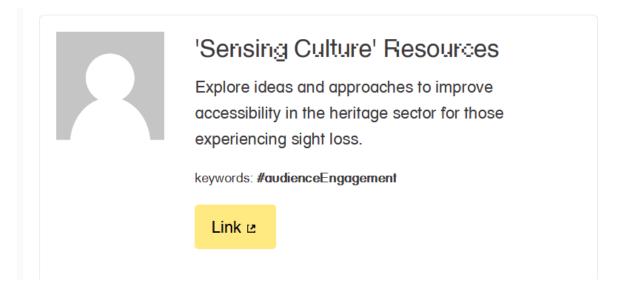


Each recommendation should include the following

- o Title*
- Subtitle
- Description*
- Level of effort on a scale of 1-5
- Link label (label for the link to the resource)
- o Link URL
- Avatar or thumbnail image of the resource

- Hashtag*
- Weight (the higher the weight the more relevant or higher on the list of recommendations it will appear)

Starred fields are mandatory however it is recommended to fill all the fields so that they do not appear blank on the page such as in the following example:



What do these Icons mean?

- The eye allows you to preview what the recommendations look like
- The list icon allows you to edit the feedback or recommendations
- The pencil allows you to edit which questionnaire or survey the feedback should apply
- The red x allows you to to delete your sat set

Example: Open Up Museums! Conference in MUSE Trento

To introduce new participants to the Open Observatory in a fun and engaging way at the conference in Trento the following short survey was created, it should be noted that the highlighted hashtags do not appear for the user in the questionnaire.

- 1. What kind of GLAM do you work in?
 - A. Archive
 - B. Museum
 - C. Gallery

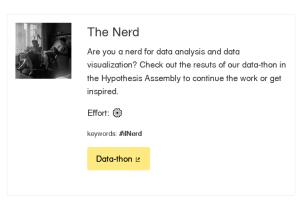
- D. Library
- E. Heritage Site
- F. Other, please specify
- 2. Which sector do you work in?
 - A. Public sector
 - B. Creative Industry
 - C. Education Sector
 - D. Research
 - E. Tourism
 - F. Private
 - G. Media
- 3. What best describes your work in cultural heritage institutions? (select all that apply)
 - A. Policy oriented
 - B. Management
 - C. Digitization
 - D. Audience Engagement
 - E. Legal and IP
 - F. Academic Research
 - G. Other, please specify
- 4. Are you interested in exploring the following to support your work? (select all that apply)
 - A. You want to improve your digital skills
 - B. You want to make digital collections more accessible
 - C. You want to have a more sustainable business model for your organization
 - D. You want to disseminate and include CHI communities in your project results and research
 - E. You want to connect and collaborate with transnational communities in Europe
 - F. Other, please specify
- 5. Which of the following topics are you interested in learning more about? (select one option)
 - A. Innovative policies for cultural institutions and digital #ilPolitico
 - B. Participation, Inclusiveness and the Impacts of Culture in the Digital Sphere.#ilRicercatore
 - C. Collect and visualize data #ilNerd
 - D. Digital communities of debate, exchange and insight #ilInfluencer
 - E. Know your cultural institution's level of digitization #ilManager
 - F. Copyright and new perspectives for digitized cultural content #ilAvvocato

The twist to the survey was the users would receive feedback in the image below. Only one of the questions was mandatory, the question with the hashtags embedded.









The image is a screenshot of the possible feedback depending on respondent's answers that would then link to tools and resources developed by the InDICEs project

How to create a Self Assessment Tool Feedback Set

https://www.loom.com/share/f2973e0c967c47a0b62077fd772d5be1