



D. 4.6 Open-access DIGNITY Toolkit

Date: 27/12/2022

Version: Final

Author(s): Elisabet Roca, Boris Lazzarini, Institute for Sustainability Science and Technology, Universitat Politècnica de Catalunya (UPC).

Contributor(s): Natàlia Carmona (UPC).

Project: DIGNITY | www.dignity-project.eu

Project duration: 01.01.2020 – 31.12.2022

Grant Agreement N°: 875542

Coordinator: Silvia Gaggi

Email: sgaggi@isinnova.org



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N°875542.



Executive summary

The increasing development of digital mobility solutions is leading to important changes in transport. Digital revolution has great potential to benefit many people, but may exclude others due to a lack of access to technology, a lack of digital skills or specific mobility requirements. This could lead to greater social inequalities in sustainable urban development.

To address this, the DIGNITY project developed the DIGNITY Toolkit, a set of tools aimed at helping policy-makers and public and private mobility entities to develop more inclusive digital mobility solutions.

The tools are organised in a multiphase process.

The process starts with the **framing phase**. This examines the existing mobility services in the region and develops a detailed understanding of which groups of users are most vulnerable to exclusion from these services .

The next step is the **bridging phase**. This aims to produce inclusive and user centred solutions that bridge the digital mobility gap. To do this, it uses proven inclusive design and co-creation methodologies. It also offers a scenario building approach to examine policy in the light of possible future scenarios.

Finally, there is the **evaluating phase**. This analyses the work done so far, to determine whether the proposed solutions are indeed more inclusive.

The toolkit is freely available at the DIGNITY Toolkit website: <http://dignity-toolkit.eu/>





Document History

Date	Person	Action	Status
27/12/2022	Boris Lazzarini	Final draft	Draft
09/01/2023	Boris Lazzarini	Full draft for internal review	Sent to ISINNOVA





Contents

Executive summary	2
Document History	3
List of Figures	5
List of Tables	6
1. Introduction	7
1.1. Dignity Toolkit	7
1.2. Objectives of this deliverable	8
1.3. Outline of this deliverable	8
2. Methodology: DIGNITY Toolkit	9
3. Results on the process	11
3.1. Framing	11
Literature review	11
Toolkit benchmarking	11
Stakeholder's map	17
Interview	19
3.2. Bridging	19
Co-creation workshop	19
Web architecture	20
List of requirements	21
Prototype	21
Final version	27
References	28





List of Figures

Figure 1. Process followed during the different phases.	9
Figure 2. Overview of the toolkit analysed.	12
Figure 3. Co-creation workshop	20
Figure 4. Web architecture	21
Figure 5. First prototype	22
Figure 6. Final prototype – Home page	22
Figure 7. Latest prototype – Tools	23
Figure 8. Latest prototype, example of tool description	24
Figure 9. Latest prototype - Decision support tool	25
Figure 10. Latest prototype - Decision support tool, detail of the Framing section	26
Figure 11. Video: DIGNITY Toolkit at a glance	27





List of Tables

Table 1. DIGNITY Toolkit Methodology	10
Table 2. Overview of toolkits' benchmarking.	14
Table 3. List of stakeholders, with respective needs and benefits that the DIGNITY toolkit can offer.....	18





1. Introduction

1.1. *Dignity Toolkit*

The digital development is causing a paradigm shift in mobility as in other areas of our daily lives. This shift has great potential to benefit many people. However, it may exclude those who do not have the digital skills or access to infrastructure leading to greater social inequalities and limit sustainable urban development in different dimensions. Some groups, such as people with low levels of education or with low income, elderly people, rural inhabitants, migrants, or disabled people (DIGNITY, 2020), may be vulnerable to exclusion due to the limits of access to and use of this technology.

Scientific literature identifies various digital gaps in the digital complex mobility systems, which prove that large parts of the population cannot access or properly operate in the current transport services, lacking the means or the required knowledge and skills (Hoeke et al., 2020). Understanding and promoting the aspects related to the integration of inclusiveness in digital mobility services is one of the research objectives of the DIGNITY H2020 initiative.

Co-creation helps to understand and address users needs by involving target users during the design process. It is a term whose usage and application have increased in many interdisciplinary fields. Co-creation indicates new modes of engagement between people to either create shared value or unleash the creative potential of diverse groups (Rill & Hämäläinen, 2018). This definition is aligned with the aim of the DIGNITY project, which considers the diversity of people for an inclusive mobility system.

Several methodologies were analysed and evaluated to contribute to the design of a tangible output: an educational toolkit addressed to different stakeholders, such as policymakers, researchers, and mobility providers, targeting different levels in the mobility ecosystem to meet the needs of the potential target users, especially the vulnerable to exclusion groups. According to the American Library Association's (n.d.) definition, toolkits are meant to offer practical advice and guidance regarding an issue of concern or importance, especially when the issue is emerging or evolving, and well established processes for addressing them are not yet widely adopted.





1.2. Objectives of this deliverable

This deliverable details the design process followed for the implementation of a co-created digital toolkit. Specifically, it describes the combination of methods that have been used during the process; such as interviews, benchmarking, and prototyping, among other tools. Overall, this process has been essential to better delineate the needs of targeted groups and to co-create the toolkit with several relevant stakeholders.

1.3. Outline of this deliverable

This deliverable consists of 3 sections, including this introduction.

Section 2 provides some background on the design methodology of the DIGNITY Toolkit. Section 3 examines the results of the design process until the final prototype of the toolkit.



2. Methodology: DIGNITY Toolkit

The design process followed a mixed research method. The overall process included user-centred design methodologies to define and understand users needs to design an online toolkit. The phases followed consisted in an integration of the DIGNITY approach, which was based on a three phases iterative approach. The three phases (framing, bridging and evaluating, see the details in Figure 1) have been maintained, since their aim fit into this project, but some other tools have been adapted or replaced by others more suitable for the final objective. Specifically:

- **Framing:** State of the art analysis, which can help to understand the context, gather information, and define the users and their needs.
- **Bridging:** Building the solution through co-creating an online toolkit with relevant stakeholders by collecting meaningful insights and feedback.
- **Evaluating:** Evaluate the co-creation process, test the toolkit by making sure that the toolkit addresses users needs and that helps to tackle the digital gap in the mobility ecosystem.

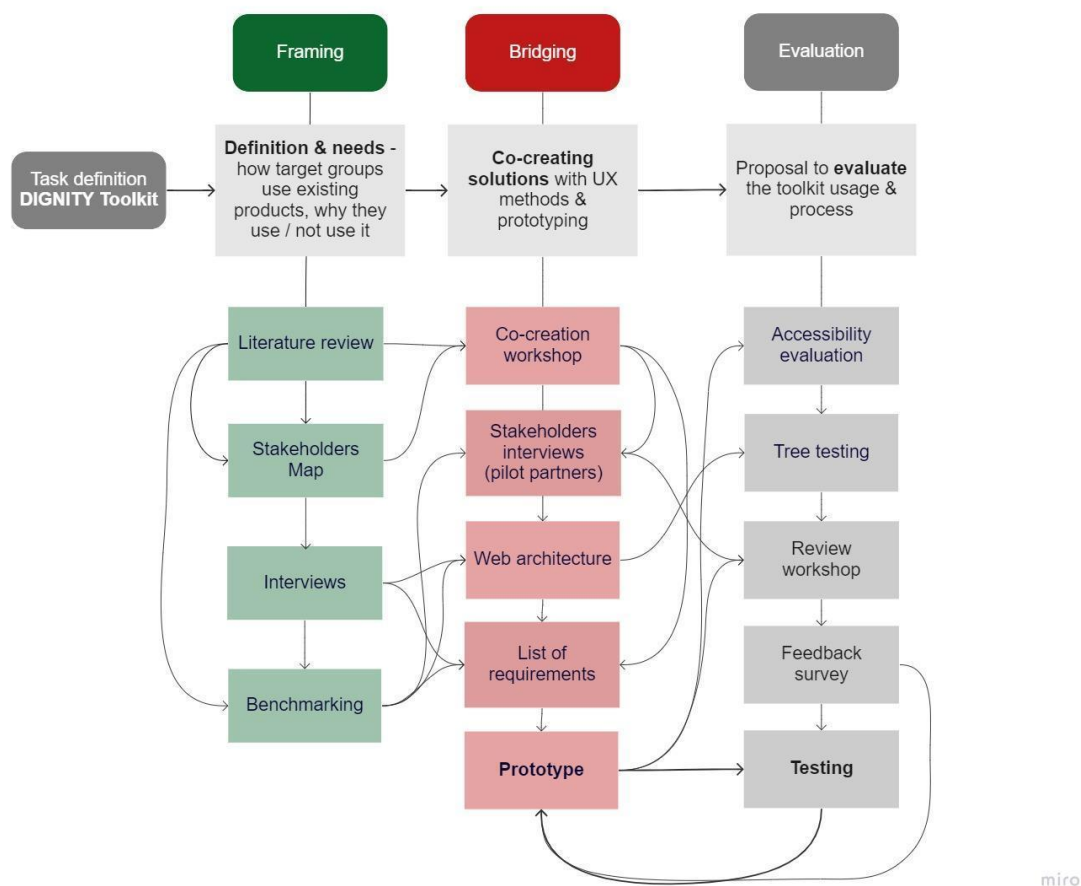


Figure 1. Process followed during the different phases.

Table 1 details the different methodologies that have been employed in each phase including respective objectives.

Table 1. DIGNITY Toolkit Methodology

Phase	Method	Objective
Framing	Literature review	Collect and synthesise research
	Toolkit benchmarking	Identify relevant existing toolkits, highlighting their good practices and pain points
	Stakeholders Map	Define stakeholders involved during the co-creation process
	Interview	Understand target users needs and requirements
Bridging	Co-creation workshop	Obtain feedback from different stakeholders about specific topics
	Web architecture	Definition of the structure of the website
	Interviews	Co-create the proposal and keep stakeholders updated about the development process
	List of requirements	List of questions about design specifications
	Prototype	Quick prototype of the toolkit website and its content
Evaluating	Accessibility evaluation	List of recommendations based on guidelines and standards
	Review workshop	Workshop to validate the DIGNITY toolkit proposal
	Feedback survey	Adding feedback features to obtain feedback from target users

3. Results on the process

3.1. Framing

Literature review

An initial literature review was performed in order to identify relevant concepts and insights regarding toolkits, inclusive design, and co-creation processes.

Specifically, a review of academic and grey literature has been done using keywords search of the different concepts: 'user centred design', 'co-creation', 'co-creation and toolkit', 'inclusive design', 'digital gap', 'policy making process', 'toolkit co-creation' and 'toolkit'. The research engine used is Google Scholar, and the publication sources were scientific literature sources. Many publications about user-centred design and co-creation processes in different contexts and knowledge fields were found, but there was a lack of literature about how toolkits are created.

Other relevant literature resources have been reviewed: Universal Design Methods (Martin & Hanington, 2012) and Delft Design Guide (Boeijen et al., 2014). Also, toolkit websites available online were reviewed and benchmarked.

Toolkit benchmarking

The benchmarking helped to identify several best practices of current toolkits. For this purpose, an initial review of 16 existing online toolkits (highlighting their strong and weak points), of which 9 were selected for a deeper comparison and analysis of their main characteristics (topic, targeted users, format, navigation, content, and functions). The toolkits analysed were:

- Design Toolkit (Universitat Oberta de Catalunya, n.d.)
- Design Kit (IDEO, 2015)
- Service Design Tools (Tassi et al., n.d.)
- UNaLAB Toolkit Tools for Co-creation (UNaLAB, n.d.)
- Going Digital Toolkit (OECD, 2022)
- Delivering the circular economy: a toolkit for policymakers (Ellen MacArthur Foundation, 2015)
- Inclusive Digital Mobility Toolbox (INDIMO, 2022)
- Inclusive Design Toolkit (University of Cambridge, 2017)
- Biomimicry Design Toolbox (Biomimicry Institute, 2015)

Figure 2 shows the home pages of the toolkits benchmarked.

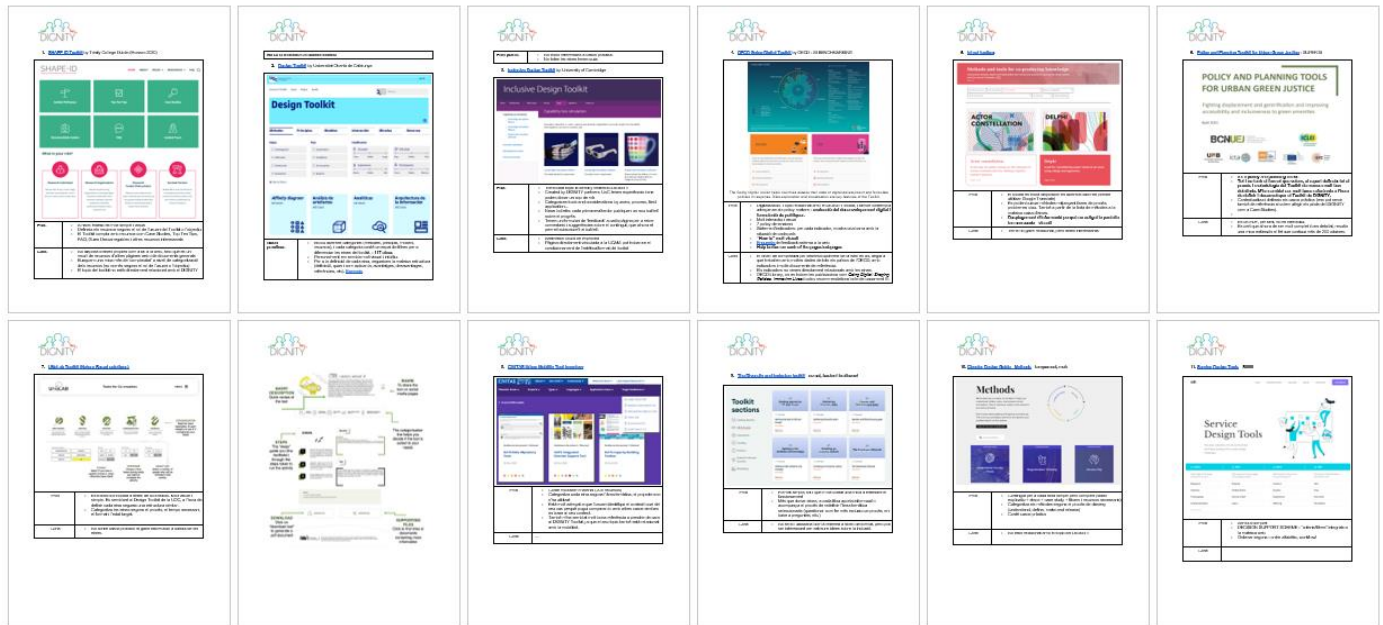


Figure 2. Overview of the toolkit analysed.

The result of this comparison showed that most toolkits with a wide range of methods and resources tend to have more complex functions and classifications (filter systems, content classified by stakeholders roles, duration, among others). Most of the toolkits analysed were addressed to specific targeted end users, such as designers or policymakers. This specification is translated into the need of a specific format and vocabulary adapted to each target group needs. Furthermore, all toolkits identified have an online website format, but some also provide downloadable versions, which can help to reach more users. This review also collected different functionalities, such as a web searcher, a translation button, user feedback questionnaire or social media share buttons. The most relevant function featured was an accessibility feature that allowed the user to change the text size, the colour mode or reset the accessibility options placed in the home page.










Figure 3 reports the results of the benchmarking of the different toolkit analysed. The main insights have been classified according to the criteria grouped by topics:

- **General**

- Regarding languages, most of the toolkits are only available in English (except one, being available in Spanish and Catalan).
- The toolkits analysed have different licences: six of them have Copyright licence, two under Creative Commons licence and one not specified.

- Toolkits with a wide range of methods and resources tend to have more complex functions and classifications (filter systems, stakeholders' roles...).
- **Actors**
 - Most of the toolkits are addressed to individuals or organisations with interest on the specific topic that the toolkit is related to. Other toolkits are addressed specifically to designers (or people who practised design methods) or policymakers, with a specific language and resources addressed and adapted to their profile needs.
- **Format and design**
 - Almost all toolkits use icons and visual resources to support the content.
 - Most toolkits have an online website format, and some toolkits also provide downloadable versions of the toolkit. Delivering the circular economy: a toolkit for policymakers was only available as a PDF file.
- **Content**
 - It has also been analysed how content is classified, and the structure that toolkits followed to present each tool/method (including description, phase, categories, step by step process and related resources).
- **Functions**
 - Functions that a toolkit can have were listed and checked if the toolkits benchmarked had them, such as a web searcher, translation button, feedback or contact forms, newsletter and social media share buttons

Table 2. Overview of toolkits' benchmarking.

Topic	Dimensions	Design Toolkit	IDEO Design Kit	Service Design Tools	UNaLab Toolkit	OECD Going Digital Toolkit	Delivering the circular economy: a toolkit for policymakers	INDIMO Inclusive Digital Mobility Toolbox	Inclusive Design Toolkit	Biomimicry Toolbox
General	Topic related	Human centred design	Human-centred design	Service Design	Nature-based solutions	Digital development	Circular economy	Inclusive digital mobility	Inclusive design	Biomimicry
	Author	Universitat Oberta de Catalunya	IDEO	Roberta Tassi & other	UnaLAB	OECD	Ellen MacArthur Foundation	INDIMO	University of Cambridge	The Biomimicry Institute
	Licence	CC BY SA	Unspecified	CC BY NC ND	Copyright	Copyright	Copyright	Copyright	Copyright	Copyright
	Language									
	Complexity (basic/medium/advanced)	Medium	Medium	Medium	Simple	Advanced	Medium	Simple	Medium	Medium
Key actors	Toolkit end-users (list of end-users)	Designers and design practitioners	Individuals and organisations	Designers	Individuals and organisations	Policy makers	Policy makers	Developers, policy makers and service operators	Designers and design practitioners	Designers
	Tools segregation by end-users (list of actors)	X	X	Experts, Stakeholders, Service Staff, Users	X	X	X	X	By user capabilities	X
Format and design	Icons usage	✓	✓	✓	✓	✓	✓	✓	X	✓
	Format (website, PDF)	Website	Website, PDF, and printed	Website	Website and PDF	Website	PDF	Website	Website	Website
Navigation	Main menu content (List of menu content)	About the toolkit, Guides, Maps, Help	Mindsets, Methods, Case Studies, Resources	Tools, Enhanced tools, Tutorials, About, Resources, Contribute	Tools, Toolkit (About), UnaLAB	Home, Policy Dimensions, Countries, Themes, Data Kitchen, Notes	-	Tools	Home, Introduction, About users, Process, Tools, Applied to, Contact us	Introduction, Core Concepts, Methods, References, About the toolbox
	FAQs	X	✓	X	✓	X	✓	✓	✓	✓
	User manual	✓	X	X	✓	✓	✓	X	X	X

Topic	Dimensions	Design Toolkit	IDEO Design Kit	Service Design Tools	UNaLab Toolkit	OECD Going Digital Toolkit	Delivering the circular economy: a toolkit for policymakers	INDIMO Inclusive Digital Mobility Toolbox	Inclusive Design Toolkit	Biomimicry Toolbox
Navigation	Visible accessibility functions	-	-	-	-	-	-	Text size, Colour Mode, Reset accessibility	Integrated accessibility, "Back to top"	-
	Responsive	✓	✓	✓	✓	✓	-	✓	✓	✓
Content and organisation	Content updated	✓	✓	✓	X	✓	X	✓	✓	?
	Number of tools available	117	67	45	29	-	11	4	4 (11)	-
	Classification system of methods (list of categories)	Methods, Principles, Models, Interaction, Perspectives, Resources	By Phase and By Question	When, Who, What, How	Need finding, Ideation, Strategy, Experimentation, Feedback	Policy framework dimensions, Countries, Themes	By phase	Not defined	Not defined	By phase
	Filters/tools categories* (how tools are categorised)	- Phase - Type (Quali. / Quanti.- With users / Expert) - Classification (Duration, Difficulty, Experience, Participants)	- Suggested time - Level of difficulty - Materials needed - Participants - Process phase	- When (by phase) - Who (by stakeholders) - What (by resource) - How (by channel)	Format, Timeframe, Group size, Facilitation level, Required materials	For each "Policy Dimensions": Access, Use, Innovation, Jobs, Society, Trust, Market openness	-	-	Capability loss simulation, Exclusion calculation, Managing the process, Personas & links	Overview, Tips and suggestions, resources (tools)
	Tool structure (what content is defined for each tool)	Phase, Type, Classification, Definition, Materials, When, How, Advantages, Notes, Guides, References	Description, Stats, Process phase, Steps, Downloadable material	Description, Categories, Also called, What is it, Use it to, Remember to, References, Case studies, Related content	Description, Categories, Steps, Benefits, Tips, Sources, Download tool, Supporting files	"Theme": Data, Description, Related Publications, Policy Guidance, Measurement roadmap, Related Links	Objective, End Product, Description, Steps	Description	Description	PDF sheet, depending on the tool: Description, Materials, Instructions, Suggestions...

Topic	Dimensions	Design Toolkit	IDEO Design Kit	Service Design Tools	UNaLab Toolkit	OECD Going Digital Toolkit	Delivering the circular economy: a toolkit for policymakers	INDIMO Inclusive Digital Mobility Toolbox	Inclusive Design Toolkit	Biomimicry Toolbox
Content and organisation	Downloadable material (templates)	✓	✓	✓	✓	✓	-	✗	✓	✓
	Relevant data related to the topic	✗	✗	✓	✗	✓	✓	?	✓	✓
	Case studies	✓	✓	✓	✗	✓	✓	?	✓	✓
	Policy recommendation	✗	✗	✗	✗	✓	✓	✓	?	✗
Functions	Translation button	✗	✗	✗	✗	✗	✗	✗	✗	✗
	Searcher	✓	✗	✓	✗	✗	✗	✗	✓	✓
	Feedback channel	Email	Email, Facebook Community, Submission form	Email, Submission form	Forms (not available)	Email	-	Email	Email, Submission form	Submission form (contact), survey (feedback)
	Newsletter	✗	✓	✗	✗	✗	✗	✓	✓	✗
	Social media share option	✗	✓	✓	✓	✓	✗	✗	✗	✗



Stakeholder's map

A stakeholders map has been done to identify the main target actors, as well as for clarifying each stakeholder's needs and roles. Furthermore, it has also helped to decide which tools had to be used depending on which specific information from each stakeholder was required for the toolkit co-creation development.






During the co-creation workshop, the DIGNITY partners defined who the targeted stakeholders of the toolkit should be. Additional stakeholders were identified with the literature review and the interviews.

Table 4 reports the of stakeholders, and summarises their principal needs and benefits that the DIGNITY toolkit may offer.





Table 3. List of stakeholders, with respective needs and benefits that the DIGNITY toolkit can offer.

 <p>Policy makers - End-users of the toolkit They are responsible or involved in formulating policies. They can play a key role in enabling and setting the direction for an inclusive transition in the mobility field to eradicate the digital gap.</p> <p>There are two profiles identified: technical and political policymakers. According to the interview's results, the DIGNITY toolkit is more aligned with technical profiles, as it is a practical resource.</p>	<p>Technically:</p> <ul style="list-style-type: none"> - Better interdepartmental cooperation to address complex issues like digital gap (i.e., between IT, social affairs, and mobility departments) - Online platform with an overview and the resources to understand the issue <p>Politically:</p> <ul style="list-style-type: none"> - Need of data to frame and quantify the issue - Lack of evaluation of policies implemented 	<ul style="list-style-type: none"> - Help to frame the problem and formulate policies and regulations to face the digital gap - Have tools to promote participative/co-creation processes - Having different levels of information will be useful: a level to get an overview and another to deepen - Decision-making can be done evidence-based with the data provided by DIGNITY Toolkit - Also provides KPI and tools to help to evaluate policies
 <p>Mobility providers and operators <i>End-users of the toolkit.</i> Operator of a transportation service or platform that provides or facilitates transportation of users.</p>	<ul style="list-style-type: none"> - Required to provide transportation related data and information to end-users - Successful case studies to implement the DIGNITY approach in their context 	<ul style="list-style-type: none"> - Insights on how existing gaps might be addressed, potentially leading to new innovations and new, specialised products and services. - Knowledge about challenges faced by vulnerable to exclusion citizens and practical knowledge on how existing systems could be improved.
 <p>Researchers & experts <i>End-users of the toolkit</i> Academic researchers or experts that have interest in digital gap and inclusivity.</p>	<ul style="list-style-type: none"> - Knowledge and data about the topic - Successful case studies 	<ul style="list-style-type: none"> - Resources such as literature and case studies - A systematic review of mobility gaps, and new research that can be built on regarding how to fill these gaps.
 <p><u>Vulnerable-to-exclusion representatives</u> - End-users of the toolkit People chose to act and speak on behalf of a wider group, in this case, those vulnerable groups.</p>	<ul style="list-style-type: none"> - Channels and resources to provide the concerns of their members to relevant stakeholders to create a truly inclusive digital transport system. - More accessible digital mobility ecosystems, including products and services 	<ul style="list-style-type: none"> - Lobby / put pressure to promote inclusivity in the complex mobility ecosystem - Co-creation includes them during the processes - DIGNITY end-users (not the same as the toolkit end-users) will also benefit from the DIGNITY approach application.
 <p>Toolkit developers A web designer and programmer will develop the final output of the DIGNITY Toolkit to ensure it addresses all the requirements.</p>	<ul style="list-style-type: none"> - Co-creation results to address users' needs - Specific toolkit system and design requirements and the toolkit content expected 	<ul style="list-style-type: none"> - A co-created process will help them to design and programme the toolkit and easily validate the results - The iterations will help to cover end-users needs



Interview

The interviews were a key insight gathering tool. The first interview was conducted with a senior designer who has expertise in creating toolkits. He explained how they co-designed their toolkit, its impact, and its limitations throughout the process. Then, a series of interviews were conducted with potential target users previously identified: political and technical policymakers. An interview took place with a former policymaker with expertise in mobility and promoting participatory processes, which helped to collect insights about which content and data the toolkit could provide according to her specific needs as a targeted user. Other interviews were driven to technical mobility policymakers from five mobility organizations, which also helped to understand and define their needs and interests.

These interviews confirmed the need to organise the content in different levels of deepness: a first overview of the tools highlighting the key information, and a second layer of information with all the content available related to the tool implementation process. Case studies were also suggested to be included by both interviewee profiles, due the importance of showcasing previous experiences to implement new strategies and tools.

3.2. Bridging

Co-creation workshop

A co-creation workshop was essential to capture meaningful feedback from several stakeholders. The workshop was carried out in Leuven (Belgium) and participants involved in this workshop had different profiles: mobility operators and providers, policymakers, experts, and researchers. The workshop methodology followed was inspired by the World Café (2022). Participants were split into groups, and each group was assigned to a table. Each table had a facilitator who guided the discussion and collected the feedback. Participants had to discuss four different topics:

- **Target users:** Helped to define the target users, such as policymakers, mobility providers, researchers, and vulnerable to exclusion representatives. Some of their needs and requirements were listed, such as involving different impact levels and departments of policymakers or to consider vulnerable to exclusion representatives since data and content can help them to put pressure to tackle the digital gap and create a lobby.
- **Content:** Such as the relevance of displaying the DIGNITY approach as iterative through a visual and interactive wheel figure placed on the home page's website. It was suggested as crucial to share relevant data to create urgency to tackle the problem framed. Some content proposals that were similar to those made by the previous interviewees were mentioned: guidelines and templates for each tool implementation, case studies, a literature list, and quotes from target users during the co-creation processes.

- **Format and design:** Discussion highlighted the need for a format that could be simple and easy to use to ensure the engagement of users, allowing an early overview of what tools can provide.
- **Inclusive design:** The main toolkit requirement mentioned was to be easy to navigate to the relevant information for a particular user by having a clear understanding of target users needs. Functionalities and actions to ensure the accessibility of the toolkit were suggested by stakeholders, such as screen readers and contrast ratios tools. Other available resources to evaluate the accessibility were WCAG guidelines (Web Accessibility Initiative, 2022) and the Inclusive Design Toolkit (University of Cambridge Engineering Design Centre, n.d.).

The results of the co-creation process were shared commonly at the end of the session by the facilitators (Figure 3).



Figure 3. Co-creation workshop

A first proposal of the format and main contents of the DIGNITY toolkit, based on the results of Leuven's workshop, was discussed in Barcelona during the final General Assembly. The partners agreed on the final version of the website, main contents and architecture.

Web architecture

All insights provided by the previous tools guided to define a first proposal of the web architecture, which provided the structure of the content organised. The process started by creating a content inventory through a mind map of the content considering feedback previously obtained from stakeholders. Then, this information was grouped and labelled,

according to the design requirements of the toolkit. After this first iteration, a new version was created in a collaborative online tool to co-create and evaluate this structure with several stakeholders (Figure 4).

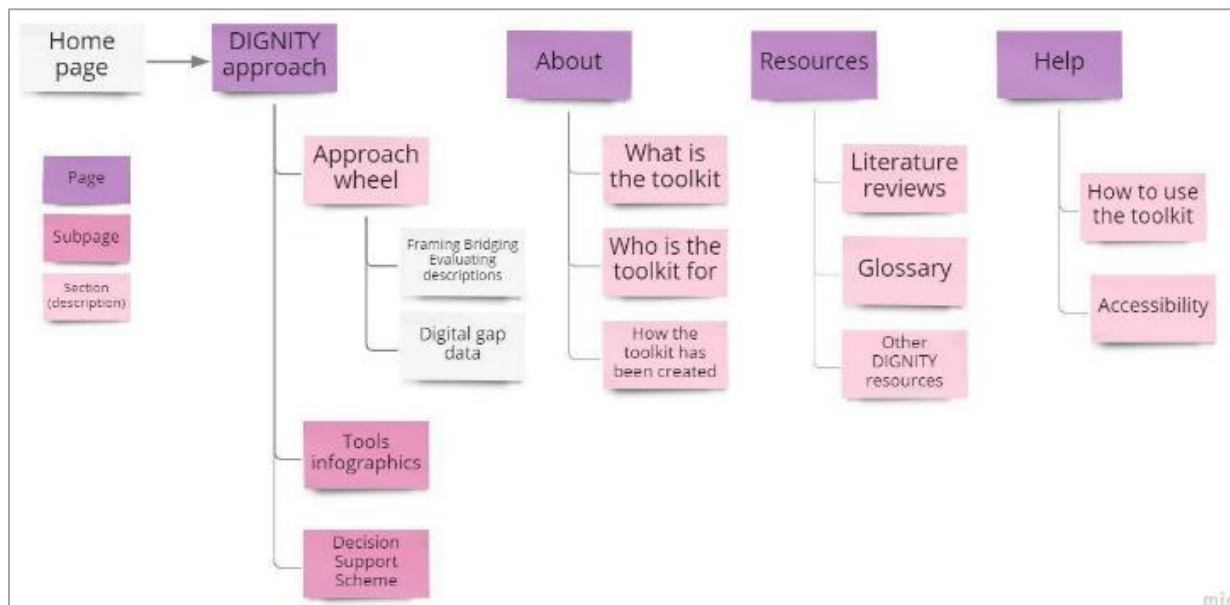


Figure 4. Web architecture

List of requirements

Another relevant tool used was a list of requirements (Boeijen et al., 2014) which consisted of a set of questions based on Pugh's checklist regarding different topics. This list helped to consider and debate with stakeholders some aspects that had not been previously considered throughout the design process topics such as the toolkit's maintenance, costs, safety, testing and standards, among other requirements.

Prototype

The first prototype was based on wireframes that represented an early model of the design of the prototype (Figure 5). Then, collaborative online groups helped to co-create the final prototype with different stakeholders involved in the process, that helped developing the final version of the toolkit, which evolved into an advanced website design (Figure 6).

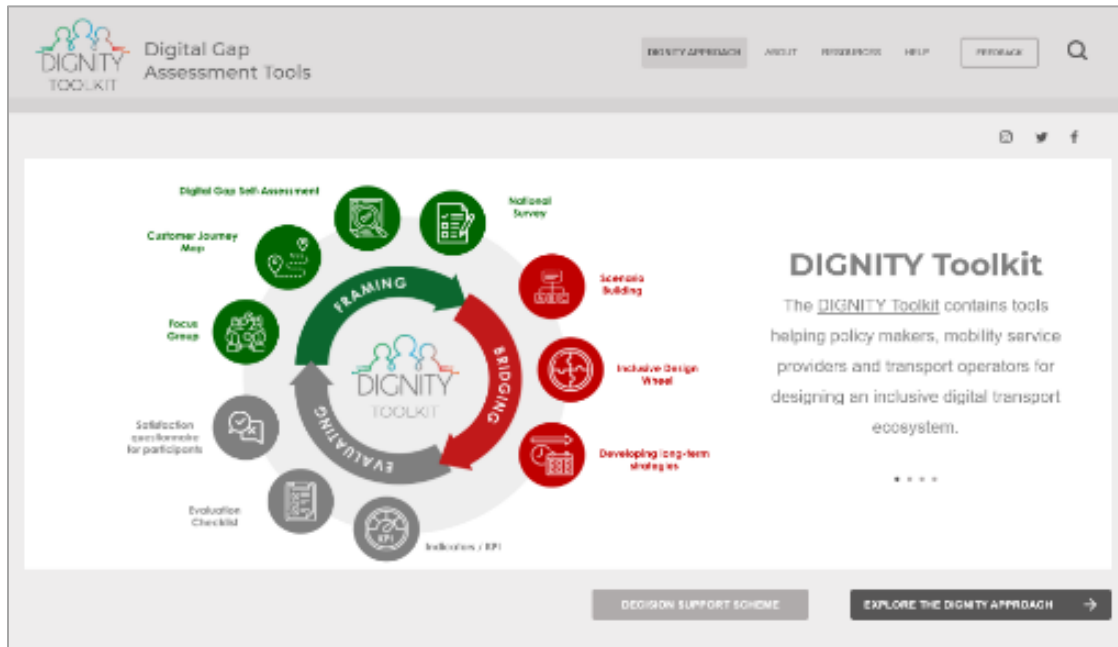


Figure 5. First prototype



Figure 6. Final prototype – Home page

In its final version, the DIGNITY Toolkit is an online platform that contains digital gap assessment tools. The toolkit is mainly targeted to policymakers, mobility providers, researchers, and vulnerable to exclusion representatives, but not excluding other target groups that could be interested in addressing the digital gap.

To start navigating and discover about the approach and tools, a visual and iterative wheel is displayed as shown in Figure 6. The webpage also includes relevant data about the digital gap to raise awareness about the urgency of the digital gap issue. Other website sections included are:

- About: To describe what the toolkit is.
- Tools: Access to the phases and tools to tackle the digital gap (Figure 7). Also, there is a description of each tool (Figure 8) with the possibility to download supporting files, guidelines, examples, etc.

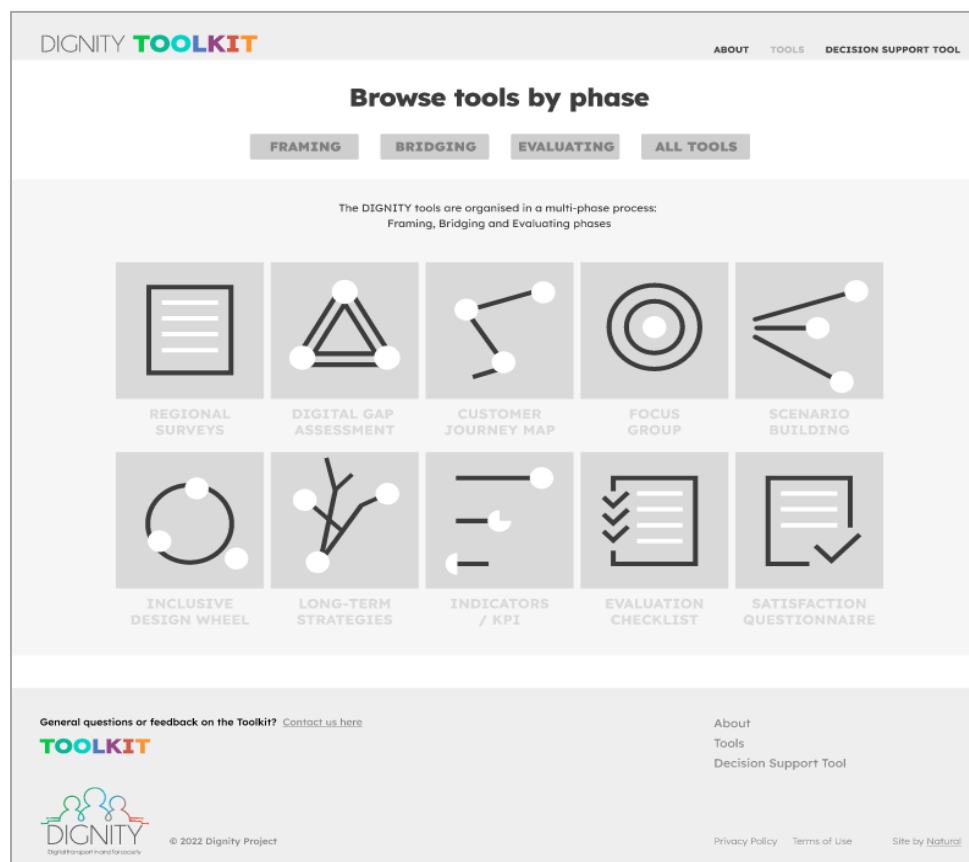



Figure 7. Latest prototype – Tools

LONG-TERM STRATEGIES



Share the tool

SOCIAL

Supporting files

Guidelines (generalized)

DOWNLOAD

Other related content

DOWNLOAD

A comprehensive, local strategy and corresponding action plan towards an inclusive digital mobility ecosystem.

DESCRIPTION

WHAT IS IT: The templates help to structure and give direction to the strategy development process. It describes the necessary elements for a comprehensive strategy.

WHEN TO USE IT: To develop a local strategy towards an inclusive digital mobility ecosystem. This method helps to structure the future plans, instead of starting from a blank page.

FLEXIBILITY: The tool can be adapted to different settings and geographical scale.

TYPE OF RESULTS

QUALITATIVE

RESOURCES

TIME / DURATION: Several weeks and multiple iterations to develop a strategy.

COST: PERSONNEL RESOURCES: To develop the strategy (at least several full working days per person).

OPTIONAL: Possible additions to the process could be designated workshops or brainstorm sessions, for which a suitable location and materials should be accounted for.

MATERIALS: Strategy templates.
Output/information about the local (digital) mobility system.
Scenario's about possible futures of the digital mobility system.

EXPERTISE: MEDIUM-HIGH. A proper understanding of local policy making, the working of the public administration and the (digital) mobility context is highly relevant to develop a local strategy.
Experience in strategy development is recommended.

STAKEHOLDERS INVOLVED: Policy makers, administration, mobility and IT providers, end users.

Nº OF PARTICIPANTS: Not applicable.

PROCESS (STEPS)

1. Composing the team that will work on the strategy and gathering all necessary material that informs the strategy.
2. Multiple iterations of completing the templates and refining the content of the strategy. Iterations can exist of collective sessions and individual work.

OUTCOMES

MAIN OUTCOMES: A strategy and action plan that describe the goals, steps to take, stakeholders to involve, etc to work locally on inclusive digital mobility.

The Explore phase of the IDW provides an understanding of the needs that need to be met. The Create phase provides ideas, concepts and prototypes for addressing those needs. The Evaluate phase provides feedback on how well the concepts meet the needs and how they could be improved. The Manage phase guides the process of managing the team.

Figure 8. Latest prototype, example of tool description

- Decision support tool: Is a short test aimed at defining which tools could be more suitable to end user's particular context and needs (Figures 9 and 10).

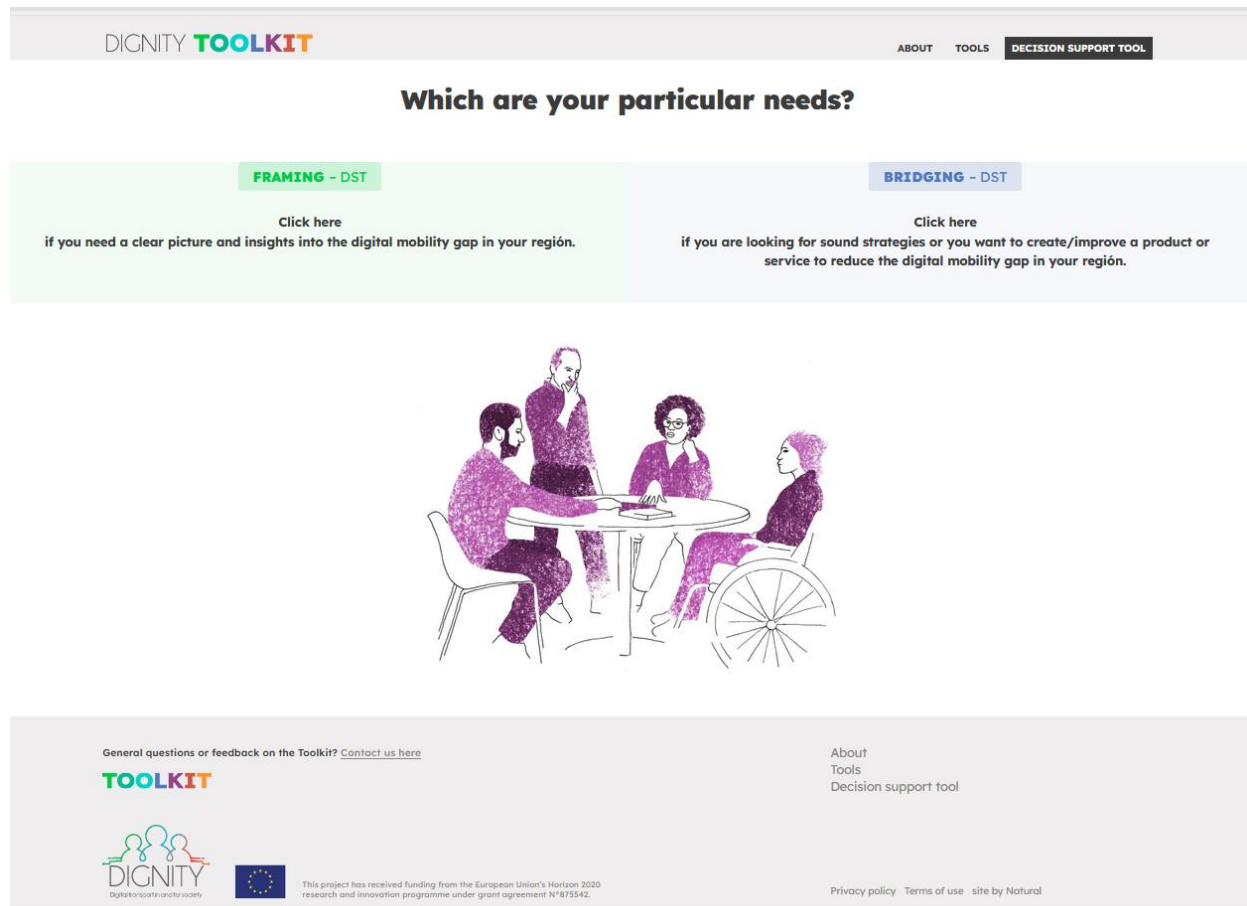



Figure 9. Latest prototype - Decision support tool




[ABOUT](#)
[TOOLS](#)
[DECISION SUPPORT TOOL](#)

Framing decision support tool

Check what you would like to know more about


A	B	C	D	E
<ul style="list-style-type: none"> The potential vulnerable-to-exclusion population in the region The digital access and skills of the population in the region The limitations that population experience in daily mobility 	<ul style="list-style-type: none"> The stakeholders relevant for designing successful digital transport products and services The current supply of digital transport products and services the governance structure and policy-making mechanisms in relation to inclusive 	<ul style="list-style-type: none"> The regulatory framework to address the digital gap The budget allocation for inclusive digital mobility transition 	<ul style="list-style-type: none"> A specific user-group experience during a daily journey 	<ul style="list-style-type: none"> None of the previous options

This is your tool's selection




REGIONAL SURVEYS

VIEW TOOL



DIGITAL GAP ASSESSMENT

VIEW TOOL





FOCUS GROUP

VIEW TOOL

Continue to the Bridging Phase

BRIDGING - DST

General questions or feedback on the Toolkit? [Contact us here](#)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N°875542.

[About](#)
[Tools](#)
[Decision support tool](#)

[Privacy policy](#)
[Terms of use](#)
[site by Natural](#)

Figure 10. Latest prototype - Decision support tool, detail of the Framing section

Final version

A final review of the Toolkit has been done during the last months of the project, involving the different partners. The last modification and improvements have been integrated in the final version of the toolkit, which is currently available at the website <http://dignity-toolkit.eu/>

A video, describing toolkit's functionalities and useful for a proper dissemination of this key result of the DIGNITY project is integrated in the toolkit webpage (Figure 13) and available at: <https://zonavideo.upc.edu/video/639c3edf674832328f0bcde2> .

The toolkit will help regional governmental institutions and mobility providers to tackle the digital gap and create more inclusive policies, products, and services.

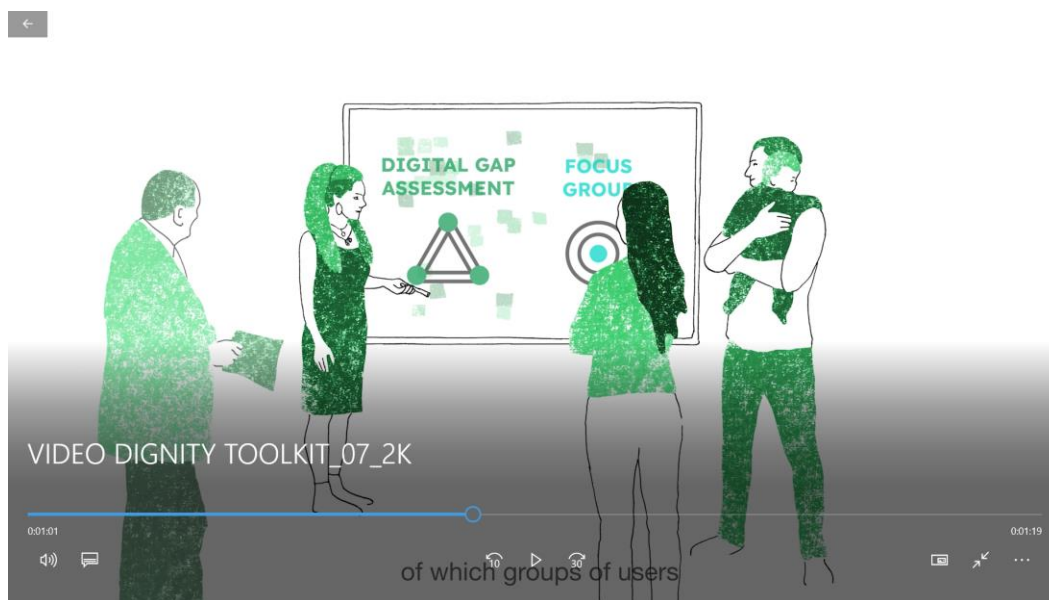


Figure 11. Video: DIGNITY Toolkit at a glance



References

- Biomimicry Institute (2015). Biomimicry Toolbox. Available at: <https://toolbox.biomimicry.org/>
- Boeijen, A. van, Daalhuizen, J., Zijlstra, J., Schoor, R. van der, & Technische Universiteit Delft. Faculteit van het Industrieel Ontwerpen. (2014). Delft Design Guide: Design Strategies and Methods (B. B. V. Uitgeverij (ed.); 2nd ed.)
- DIGNITY project (2022). DIGNITY - Digital transport in and for society. Available at: <https://www.dignity-project.eu/>
- Ellen MacArthur Foundation (2015). Delivering the circular economy: a toolkit for policymakers. Available at: <https://ellenmacarthurfoundation.org/a-toolkit-for-policymakers>
- Garcia-Lopez, C., Tesconi, S., Mor, E. (2019). Designing Design Resources: From Contents to Tools. In: Kurosu, M. (eds) Human-Computer Interaction. Perspectives on Design. HCII 2019. Lecture Notes in Computer Science), vol 11566. Springer, Cham. Available at: https://doi.org/10.1007/978-3-030-22646-6_7
- Hoeke L., Noteborn C., Goncalves M., Nesterova N. (2020), DIGNITY, Literature review Effects of digitalization in mobility in society (D.1.1.)
- IDEO (2015). Design Kit. Available at: <https://www.designkit.org/methods>
- INDIMO project (2022). INDIMO Inclusive Digital Mobility Toolbox. Available at: <https://www.indimoproject.eu/indimo-digital-mobility-toolbox/>
- OECD (2022). Going Digital Toolkit. Available at: <https://goingdigital.oecd.org/>
- Rill, B. R., & Härmäläinen, M. M. (2018). The Art of Co-Creation: A Guidebook for Practitioners.
- Tassi, R. et al. (n.d.). Service Design Tools. Available at: <https://servicedesigntools.org/>
- The World Cafe (2022). World Cafe Method. Available at: <http://theworldcafe.com/key-concepts-resources/world-cafe-method/>





UNaLAB project. (n.d.). UNaLAB Toolkit. Available at: <https://unalab.enoll.org/>

Universitat Oberta de Catalunya. (n.d.). Design Toolkit. Available at: <http://design-toolkit.recursos.uoc.edu/es/>

University of Cambridge Engineering Design Centre. (2017). Inclusive Design Toolkit. Available at: <https://www.inclusivedesigntoolkit.com/>

YALSA - American Library Association. (n.d.). Toolkit Creation Guide. Available at: <https://www.ala.org/yalsa/sites/ala.org.yalsa/files/content/ToolkitCreationGuide.pdf>

Web Accessibility Initiative. (2022). Evaluating Web Accessibility Overview. Available at: <https://www.w3.org/WAI/test-evaluate/>

The sole responsibility for the content of this document lies with the authors. It does not necessarily reflect the opinion of the European Union. The European Commission is not responsible for any use that may be made of the information contained therein.

