ACCESSIBILITECH

Advanced Methodologies to Identify, Assess and Transfer
Innovative Solutions for the Accessibility of People with Disabilities

Deliverable 3.1.d

Report of insights, findings and learning from the Knowledge Hub

January 2023

CONTENTS

1. Context and purpose of the present document

The present document is part of action 3.1 of the ACCESSIBILITECH project, which aims to set-up a Knowledge Hub (KH) on inclusive and accessible technology.

The strategic objective of action 3.1 is to create a multidisciplinary ecosystem together with the major European networks of technological businesses, services providers for people with disabilities and associations of people with disabilities to join forces and ultimately, to respond in a concerted way to the challenge of developing inclusive and accessible technology and to increase awareness of its added value for society. Ultimately, one of the core aims of the Knowledge Hub will be to establish connections and links between existing spaces (initiatives, working groups and hubs) specialised in accessibility.

The present document is a deliverable of the ACCESSIBILITECH project (Deliverable 1.3.d) which **reports on of insights, findings and learnings from the activities undertaken in the ACCESSIBILITECH to foster the development of a Knowledge Hub.**

2. Main lessons learnt and recommendations

2.1   Main lessons learnt from the Knowledge Hub activities

During the 2-year duration of the ACCESSIBILITECH project, it has become clearer that there is a need to create synergies between all key actors involved in making accessible technology in Europe, as there is still a lack of regular interactions and exchanges between them.

However, setting up a Knowledge Hub needs strong financial support to promote all those synergies and ensure their regularity so that it is possible to have the personnel and the necessary infrastructure to achieve it. It is also important that such a Knowledge Hub is preceded by an in-depth knowledge of the whole ecosystem. For that reason, the project not only mapped the key spaces, experts and projects on this topic in Europe, but also conducted a survey to learn more about the perceptions and approach on accessibility and accessible technologies of the different stakeholders.

Organising online workshops with the participation of accessibility professionals and representatives of persons with disabilities provides the opportunity to raise awareness on accessibility needs for persons with disabilities and good practices to developers, service providers and the technological sector and has been a very effective way to find a meeting point. But it is necessary to find engaging ways to continue with the interaction afterwards and promote exchange and debate.

The creation of a repository in the ACCESSIBILITECH toolkit to share knowledge on accessible technology between experts but also to make it available to the technological sector has also been a good strategy to encourage the sharing of information and expertise between the key actors,

however a more establishes Knowledge Hub with more regular collaboration would yield more results.

2.2 Recommendations on creating the conditions for an accessibility and accessible technology Knowledge Hub

When striving to create a Knowledge Hub as an ecosystem, it is not advised to create an additional new space, but instead to provide opportunities for the key spaces (networks, hubs, working groups, initiatives etc) and experts from the different sectors to come together to share knowledge to tackle the challenges faced regarding accessibility and accessible technology.

The project activities undertaken have been successful in providing some first steps towards this goal, through:

1. Mapping the key actors and spaces working in accessibility
2. Bringing some of these actors together through participation in the project activities and activities of the project partners
3. Organising activities to raise awareness on accessibility and begin the sharing of knowledge and information between actors.

While the materials and activities carried out have given way to a higher level of involvement, the project did not have the capacity to go a step further, however, which would be to facilitate a regular contact and collaboration between the wider spectrum accessibility actors and spaces.

To this end, from the learnings of the project, some recommendations to future endeavours to combat the difficulties in fostering the conditions to stimulate the functioning of a knowledge hub include:

- Specific funding for and staff dedicated to the planning and organisation of activities to stimulate the creation of a Knowledge Hub. Offering a series of regular activities on accessibility and accessible technology aimed at 1. Bringing the key actors and spaces together 2. Encouraging a continued collaboration of knowledge and information sharing between them. The idea is that these activities would gain traction among the actors and open up to greater participation as the Knowledge Hub begins to grow and expand to new actors.
- Specific funding to incentivise participation in the activities.
- A dedicated committee of actors (perhaps representing the different key spaces in the different sectors) to be consulted on priorities, interests and gaps to organise activities and events around these topics and how to involve the different actors.
- If an online collaborative platform/space is needed to foster continued knowledge and information sharing, this will need specific funding.
- Avoid the creation of mail lists and working groups and instead promote synergies with projects and experts with same interests.

3. Annex 1 – Learnings per Knowledge Hub Activity

3.1 ACCESSIBILITECH workshops

Learnings	Recommendations (if relevant)
Ensuring the accessibility of all workshops and project events was a key priority of the project and was well received by partners, speakers and event participants. Training those organizing the workshops in accessible meetings and events was key. FONCE provided training to project partners to ensure the accessibility of the events.	Specific trainings on accessible meetings and events to those responsible for organization of events in all future EU projects, not only those related to accessibility. Having a dedicated staff reference person.
The knowledge hub was useful to share knowledge and contacts on the different topics, which helped to organize a successful series of workshops with key actors as speakers.	Continue to foster the sharing of contacts of experts and engage them in future collaborations such as articles in the web
The organization of these workshops worked as a means of creating the conditions for a Knowledge Hub by acting as a first meeting point between representatives of the different agents participating in the technology sector, and those in charge of guaranteeing accessibility, that is, on the one hand with the people with disabilities to express their needs and experiences, and on the other hand the legislative entities, and the companies and developer profiles. There is interest in the topics covered and the target audience to which they were directed is correct, since both users and technological developers show interest in delving into these topics.	When organising workshops or similar activities guarantee that all groups of people with disabilities are represented by contacting associations at national and international level. The same with representatives of the technology sector SME are as important as Big Tech.
It is necessary to make the events interactive, including post-event interaction and exchange of knowledge and information. Previously used mechanisms for participation and interaction, such as forums, have ceased to be followed by the actors.	Look for new ways to achieve post-workshop participation and interaction, for example other channels such as social networks or articles in blogs or organiser's websites.

3.2 ACCESSIBILITECH Hackathon

3.1.1. Hackathon implementation and results

Learnings	Recommendations (if relevant)
The technological profiles that are going to be incorporated into the market and on which the future and trends of technology depend - to a large extent - have a great interest in knowing the needs of the population (including persons with disabilities) in order to create solutions that respond to them.	Greater awareness-raising of the technological sector on the accessibility needs.
To develop accessibility solutions, it is necessary to involve all profiles from the beginning, from UX, developers, designers, etc. so that they can work together in all parts, guaranteeing accessibility. It is necessary to expand the training offer in terms of accessibility and reach these profiles since many times they do not take accessibility into account in their performance simply due to ignorance.	More training to different profiles (UX, developers, designers etc) in the technological sector on digital accessibility and technical standards. This training could be organised by professional associations. Encourage the implementation of accessibility and design for all principles in the academical programs or engineering degrees most directly related with ICT.
Students and young workers are an important target to continue training and get closer to accessibility	Working with universities and educational institutions to encourage the involvement of students and young workers in accessibility and accessible technology

3.1.2. Hackathon organizational approach

Learnings	Recommendations (if relevant)
The Hackathon was a successful awareness raising activity among developers and students on how to tackle different challenges affecting the 3 thematic areas was an effective alternative. Access rights to solutions designed by the private sector is a challenge when organising a beta testing and prototyping for scale up/transfer/replication of solutions. Focusing the approach on presenting designs or mock-ups provided an alternative to this issue in the ACCESSIBILITECH hackathon. The joint collaboration among expert programmers, students, project managers, UX experts and end users produced positive outcomes and during the Hackathon, fostering the development of technological	Unless a hackathon is organised in close collaboration with the owners of the solutions, the approach should be focused on coming up with solutions to particular challenges instead of prototyping the scale up of existing solutions. It is also an effective awareness raising tool amongst programmers, students, project managers, UX experts.

Learnings	Recommendations (if relevant)
solutions promoting e-inclusion and accessibility, considering also user centred design, usability and other related concepts.	
Close collaboration with Microsoft in the organisation of the Hackathon was key to its success. Project partners directly working with Microsoft on the Hackathon organisation. They provided the licences and platforms for the hackathon as well as technical volunteers to help participants and materials for the training sessions.	There are great allies with whom productive collaborations can be developed, such as universities and the technological companies themselves to promote reflection and awareness exercises such as an accessibility Hackathon.
24 hours is sufficient for an online hackathon format and preferred by the participants. Though some participants even find it difficult to commit to a 24-hour hackathon due to work and other commitments. This direct collaboration also strengthened the Knowledge Hub connections and synergies.	A duration of 24 hours is more suitable for an online format than 48 hours.
Mixed teams with a combination of multidisciplinary profiles - with both students and seasoned professionals and at least one of the following profiles: programmer; UX designer; Marketing or Business or Project manager - meant the Hackathon resulted in a high commitment on the part of the participants, who worked together, looking for the best mechanisms for each group, being able to meet the requirements of the hackathon challenges.	When designing the call and participant's requirements for this kind of activity, ensure a combination of multidisciplinary profiles. A list of required profiles should be communicated and effort put in to ensuring that the team compositions reflect the diversity of profiles sought.
It is desired to ensure the participation in each team of an end user (in this case a person with a disability) showing the value of having end users involved from the beginning in the design of telework, telecare and eLearning solutions. Very few participants with end user profile registered in the ACCESSIBILITECH hackathon with only one team having an end user participant. Therefore, mentoring by professionals with expertise in user needs was provided to all teams	Ensuring that end users are involved in each team is important and efforts should be made to ensure a sufficient participation of end users in the teams. However, when this is not possible it is suggested to ensure the participation of experts who know well users' needs.

Learnings	Recommendations (if relevant)
Access to pre-Hackathon training and materials and practical sessions provided the participants knowledge on accessibility basics, users cases and design for all methodology.	Training materials and practical sessions by experts on the Hackathon's topic are needed to ensure a minimum required knowledge.
Partners has difficulties in reaching large numbers of the target audiences.	Having specific budget for subcontracting the hackathon organisation, including a service for dissemination though the relevant channels.
Microsoft Teams was the hosting platform of the ACCESSIBILITECH Hackathon. It worked best that each team had a channel for internal communication, meetings, document sharing, etc. and access to a dedicated mentoring channel with Microsoft mentors, where participants were able to ask technical questions related to the challenge development as well as pose accessibility-related inquiries.	It's essential to provide with technical infrastructure that foster communication channels for the teams and experts' support

3.3 Other Knowledge Hub activities

Learnings	Recommendations (if relevant)
Mapping of the key players in accessibility in Europe and creating synergies Contact through the Knowledge Hub activities with the different profiles within the sector has allowed us to know the different perspectives of each one of them, identifying the technological ecosystem at a European level and growing the mapping throughout the project cycle.	Set a systematic and simple mechanism to identify key actors and update the information
Involving the key spaces in information and knowledge sharing Collaboration of project partners with various key actors (existing networks, hubs and experts) to participate in the activities is important and has been encouraged. The involvement of the different entities is essential to achieve a correct deployment of the activities and the dissemination of all the activities carried out.	It is necessary to identify networks and groups that allow contact with the target public in a centralized way. It is necessary to find ways to engage the key actors and networks by providing activities of value and interest to them, that can be offered periodically on a continuing basis to grow a knowledge hub ecosystem. For this there is a need for a specific budget for dedicated personnel to organise these and ensure they are linked to the priorities of the existing spaces and actors.

Learnings	Recommendations (if relevant)
However, it is not always easy for a small project to gain the interest of the key spaces working on accessibility, who have busy schedules.	
Creation of an online collaborative space Forums and Teams spaces have not proved successful in creating an online collaborative space for the growing Knowledge Hub. Instead, ACCESSIBILTECH has relied on partners social networks and web media sources as a way to disseminate information and events and to launch campaigns. More information available in Deliverable 3.1.c	If the creation of an online collaborative space is foreseen in future projects, this should could on a specific dedicated budget and staff resources for its creation and maintenance to ensure that it fosters a regular and continued knowledge and information sharing.
Analysis of Active Listening Tool results The Active Listening Tool has identified a large number of solutions, with many interesting accessibility solutions in the project thematic areas. However, the analysis of the results is limited since the active listening tool is reliant on the owners of the solutions including the accessibility compliance information of the solutions themselves which sometimes was not enough, and it is out with the scope of the project to do a full accessibility audit on the solutions found	Find ways to encourage to developers and services providers to be more transparent about the accessibility information they provide
Survey 1 A first survey was designed to collect the views, knowledge and experience of stakeholders regarding accessibility and accessible technology to determine their approach to accessibility in technology. The survey was available in Spanish and English and it included close and open questions to obtain personal views and experience with accessibility, knowledge and training as well as accessibility culture in their place of work, among others. Only 11,5% of the answers came from the technology sector and 18% from engineering fields.	When disseminating surveys make sure to target the desired groups and keep a balanced representativeness of them.
Survey 1 34.4% of respondents claimed that finding information about accessible technology was not easy. Some of them said they didn't know where to look for while others	There is a need of reliable reference web sites that provide information on accessible technology.

Learnings	Recommendations (if relevant)
considered the information available insufficient and irrelevant to their needs. Most survey participants (52.7%) have either given or received training in accessibility before starting to work at their current place of work, and 47.3% has not. 91.8% said they would like to receive more training in accessibility	Encourage training programs in accessibility in ICT in public administrations and professional associations
Survey 2 A second survey has been sent to a selected group of solutions detected in the active listening tool in order to gain more insights into their views on questions such as: 1. Their motivations for the creation of their technological solutions addressing accessibility 2. their knowledge of and perceived level of compliance with accessibility directives and standards 3. the inclusion of persons with disabilities in the design and testing process. The 25 responses provided some interesting insights from the developers of some of the solutions found by the active listening tool. For instance, around 43% of them are not familiar with the EN 301549 and 41% do not know about the European Accessibility Act. 21,4% claimed it is difficult to get information about standards 28% it is not easy to understand standards,	Develop specific training programmes about the EU accessibility standards. Launch information campaigns to help further manufacturers, developers and other organizations knowledge of how to comply with European accessibility standards and laws. Better strategies to encourage companies to include people with disabilities in their development processes.
Collection of third-party accessibility materials for the Toolkit repository Concrete examples were given to avoid the reception of material from third parties that doesn't fit the desired content. In this regard, the guidelines and sources already designed have been used as references and examples.	Make it clear the kind of material to be provided by third parties showing samples or describing the required specifications.
Collection of third-party accessibility materials for the Toolkit repository While the campaign to collect accessibility materials was disseminated through the partner and associate networks and to the rest of the knowledge hub, many	Continue the collection of materials after the closure of the project. Include in the toolkit dissemination communications the offer to provide materials to be included.

Learnings	Recommendations (if relevant)
communicated that they did not have materials to contribute though there was interest in the toolkit and its resources	