

Deliverable 5.4

# Guidelines for capacity building tools for social innovation

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## DELIVERABLE

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## List of Abbreviations

|                          |  |
|--------------------------|--|
| <b>AIOSH</b>             | <b>African Institute of Open Science and Hardware</b>  |
| <b>AfricaOSH</b>         | <b>Africa Open Science Hardware</b>  |
| <b>AMN</b>               | <b>Africa Makerspace Network</b>   |
| <b>AMG</b>               | <b>Africa Makerspace Gathering</b>   |
| <b>APSOHA</b>            | <b>Association pour la promotion de la science ouverte en Haïti et en Afrique</b>                    |
| <b>CDO</b>               | <b>Communication, Dissemination and Outreach plan</b>  |
| <b>DG CONNECT</b>        | <b>European Commission's Directorate-General for Communications Networks, Content and Technology</b> |
| <b>DIH</b>               | <b>Digital Innovation Hub</b>  |
| <b>DI</b>                | <b>Digital Innovation</b>  |
| <b>EC</b>                | <b>European Commission</b>   |
| <b>Fab Lab BCN / FLB</b> | <b>Fab Lab Barcelona</b>   |
| <b>F.A.I.R</b>           | <b>Findable - Accessible - Interoperable - Reusable</b>  |
| <b>GA</b>                | <b>Grant Agreement</b>   |
| <b>GCAF</b>              | <b>GreenTec Capital Africa Foundation</b>  |
| <b>GIG</b>               | <b>Global Innovation Gathering</b>   |
| <b>GIZ</b>               | <b>German Corporation for Development Cooperation</b>  |



|                             |   |
|-----------------------------|---|
| <b>Horizon 2020 (H2020)</b> | <b>Horizon 2020 program of the European Union</b>           |
| <b>IIA</b>                  | <b>Integration, Inclusion and Attachment</b>                |
| <b>IAAC</b>                 | <b>Institute for Advanced Architecture of Catalonia</b>     |
| <b>IoP Alliance</b>         | <b>Internet of Production Alliance</b>                      |
| <b>J.E.D.I</b>              | <b>Justice–Equity–Diversity–Inclusion</b>                   |
| <b>LbD</b>                  | <b>Learning by doing</b>                                    |
| <b>LCM</b>                  | <b>Learner–centric MOOC model</b>                           |
| <b>LeD</b>                  | <b>Learning dialog</b>                                      |
| <b>LMS</b>                  | <b>Learning Management system</b>                           |
| <b>LxI</b>                  | <b>Learner experience interaction</b>                       |
| <b>LxT</b>                  | <b>Learning extension trajectories</b>                      |
| <b>mAke</b>                 | <b>African European Maker Innovation Ecosystem</b>          |
| <b>MOOC</b>                 | <b>Massive Open Online Course</b>                           |
| <b>MOODLE</b>               | <b>Modular Object–Oriented Dynamic Learning Environment</b> |
| <b>OER</b>                  | <b>Open Educational Resources</b>                           |
| <b>OET</b>                  | <b>Open Education Tools</b>                                 |
| <b>Open AIR</b>             | <b>Open African Innovation Research</b>                     |
| <b>REF</b>                  | <b>Ripple Effect</b>  |



|                     |   |
|---------------------|---|
| <b>RS</b>           | <b>Reflection spots</b>   |
| <b>UCT/Open AIR</b> | <b>Open African Innovation Research, University of Cape Town</b>  |
| <b>UNIDEP</b>       | <b>United Nations Institute for Development and Planification</b> |
| <b>UX</b>           | <b>User experience</b>  |
| <b>WP</b>           | <b>Work Package</b>   |
| <b>ZSI</b>          | <b>Centre for Social Innovation</b>                               |





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## Executive Summary

The goal of this deliverable is to develop the capacity building guidelines for social innovation, which is a fundamental part of the process of capacity building. The aim is to develop the makers' capabilities over time to achieve societal and economical goals, including through improvement of knowledge, skills, systems, and institutions.

By analysing the existing social innovation capacity building tools from open source hardware innovation, design and maker initiatives we determined a set of design guidelines, templates and how-to's made available to the project and its stakeholders.

The deliverable starts with the analysis of existing social innovation for capacity building tools and, after assimilating the social innovation values, principles and methods, we establish and implement a strategy for the capacity building tools, which are then applied in specific capacity building activities and finally determined the design guidelines, templates and how-to's.

There are a total of 4 steps, as shown in the figure below:

- Social innovation
- Capacity building tools
- Capacity building activities
- Templates

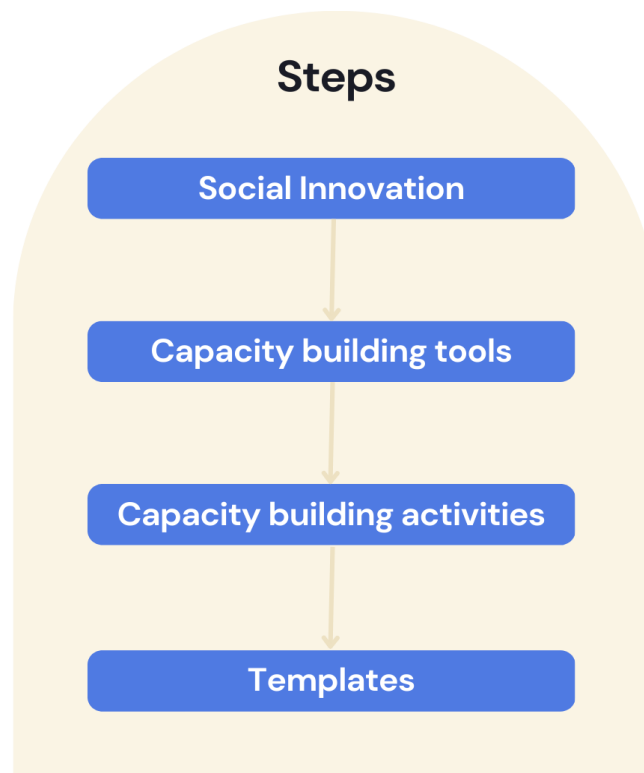


Figure 1: The process behind the deliverable



The first section is an introduction to the deliverable, with a focus on the objectives, cross-cutting tasks and sharing and embedding location which are then linked as a cross-cutting WPs effort to the Capacity building tools for social innovation.

The second section aims at establishing the social innovation principles and values for the mAKE project, to create social innovation we transfer the values explained into guiding principles and add specific ones for the specific purpose of mAKE.

Having the social innovation principles in mind, we develop a strategy for the capacity building tools, by selecting and identifying the capacity building tools in section 3, which are used in several capacity building activities listed in section 4 and implemented by the mAKE partners and community, analysing outputs and ideas.

Thanks to the implementation of the capacity building activities, the use of the capacity building tools for social innovation and the social innovation principles, we develop a set of design guidelines, templates and how-to's made available to the project and stakeholders, which are described in section 5. In order to fully understand and be aware of the multiplicity and diversity of actors and stakeholders within the mAKE project, we highlighted the importance of these guidelines in terms of usability and user experience, as shown in section 6. Usability and user experience, in addition to language and cross-cultural communication, transcription and translation are explained in more detail in order to better understand the process of creation behind the templates, the assets and all the outputs created by WP5.



# 1. Introduction

## 1.1 Context and background

The mAKE project places a focus on tailoring knowledge transfer and capacity building solutions for target stakeholders across DIHs ecosystems in the EU and Africa, in order to enrich these ecosystems from the bottom-up. Cultural sensitivity, co-design and cross-continental feedback loops are crucial to ensuring that communication tools and processes that are developed by IAAC are appropriate for all project partners and to global innovation communities. The mAKE project aims to develop 100 open resources and provide access to 700 additional open resources for DIHs across the project including Blueprints, Toolkits and Open Source Business Models. It places a strong emphasis on developing processes that are ecosystemic, inclusive and embedded within existing communities and networks.

## 1.2 Purpose and relevance of the capacity building tools

The maker movement is about democratising innovation, research and development in the digital manufacturing sector. In this context, mAKE is a community-oriented and bottom-up project that engages makers and makerspaces as co-creators and co-researchers during the course of the project term.

Because of that, the main purpose of this deliverable around capacity building is to build tools that will be available to the project and its stakeholders for best practices when designing project outputs and self-learning tools. As described per Grant Agreement, the other objective of this deliverable is to:

“Equip makerspaces with the capacities to sustainably foster digital innovation and maintain a EU-Africa start-up ecosystem by offering training and skill building (WP3)”. This objective is reached through targeted training and the creation of a digital learning space for Pan-African and European entrepreneurs and makerspaces.

Even though this objective is mainly associated with WP3 and WP5 in the Grant Agreement, the capacity building tools are developed as a cross-cutting effort across the WPs of the project. Therefore, in table 1 found in Appendix O1, we have listed the WPs from each partner, their relationship to the task, the final objective, and the embedding and sharing location accordingly.



## 2. Social innovation

### 2.1 Definition

Social innovation can be defined as “novel or more effective practices that prove capable to tackle societal issues and are adopted and successfully utilised by individuals, groups and organisations concerned” (ZSI working definition). The maker movement and maker communities have been studied by scholars looking into their social innovation potential for some years now and they have assigned this new culture of local manufacturing certain social transformation power and great potential for social innovation (Kieslinger et al. 2021). These social and community actions are taking place in educational contexts as well as in working environments and social businesses.

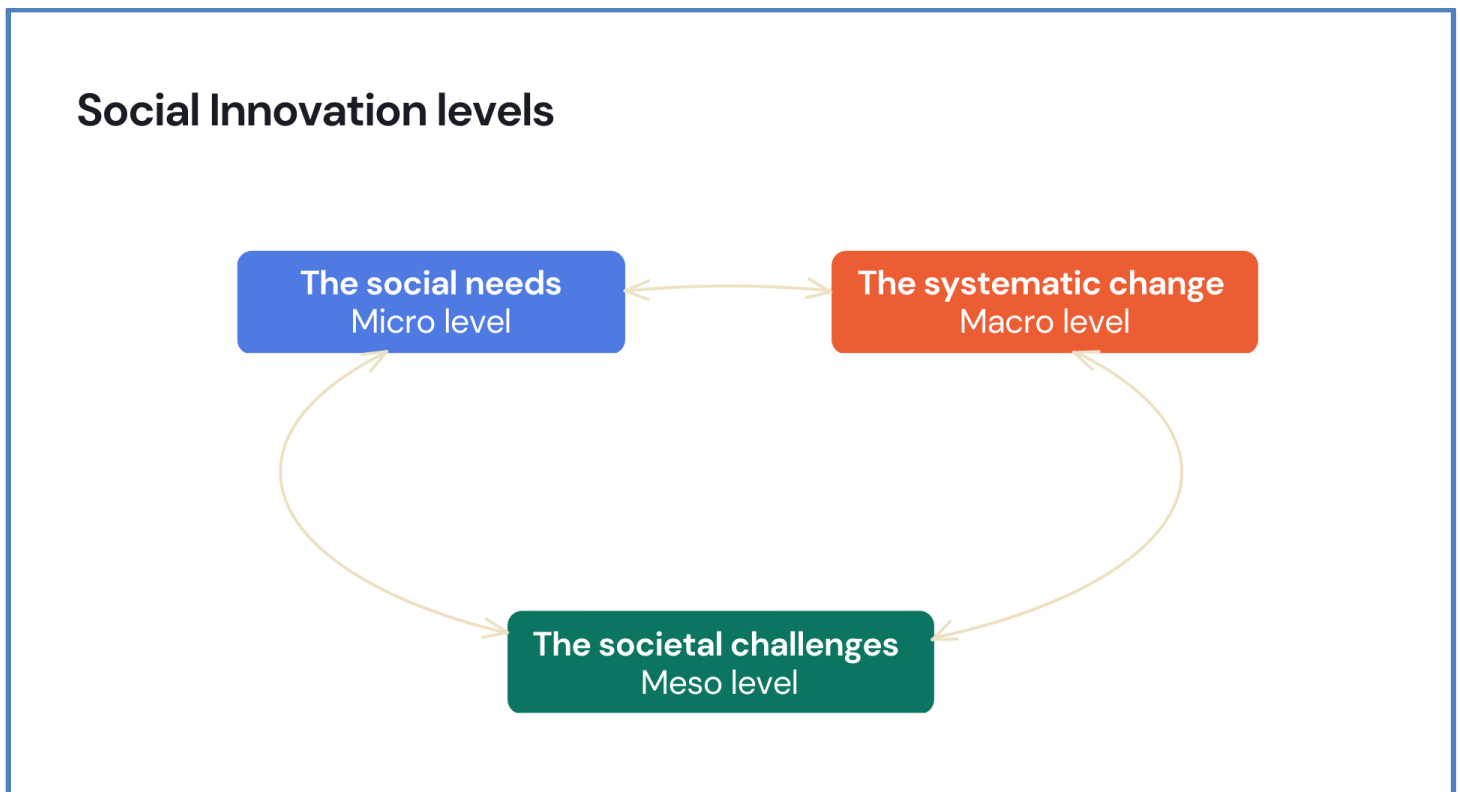


Figure 2: Social innovation levels

Social innovation takes place at the three interconnected levels, namely the social needs (micro level), the societal challenges (meso level), and the systemic change (macro level). We find social innovation at micro level responding to local social needs and demands. It responds to specific problems on the ground that are not met by the market or public institutions in a bottom-up approach. At the meso level, social innovation addresses societal challenges at large social scale or across whole sectors by combining social, economic, environmental, and cultural factors. This also usually requires new forms of relations between actors. At the macro level, social innovation generates system change and is associated with fundamental



transformations in society, including a reform of underlying structures, changes in the relationships and powers in society.

For mAKE and the maker community we want to build on this social innovation potential, mostly at micro level and possibly also on meso level as we do not see the macro level being able to change in the course of this project. What we have learned from previous work on analysing the social innovation potential are four main perspectives (Kieslinger et al. 2021):

- A value perspective
- A network perspective
- An educational perspective
- A legal perspective

In mAKE we are building our capacity building tools on these perspectives, however with a broadened angle. We need to see the legal perspective embedded in a wider set of tools that are necessary for makers and maker communities, which are included in WP2 and the business model perspective. The educational perspective is very well covered in mAKE, especially WP3. The same applies for the network perspective, which is also at the core of WP6. Finally the **value perspective** is related to ethical aspects and the code of conduct. We believe that in order for social innovations that are beneficial for a wide group of society certain core values and an ethical commitment are important.

## 2.2 Principles & Values for social innovation

We believe that core values are important for the type of social innovation we want to foster. These values are inspired by the sustainable making values of GIG as well as the 6 core values of Critical Making<sup>1</sup>, which are defined as:

- **Open:** promoting open collaboration, including the sharing of skills and knowledge. It boosts creativity in the ecosystem of makers by making processes and results accessible.
- **Local & connected:** it is happening locally, working on the ground and adapted to a particular socio-cultural context. Thereby, critical making implies an engagement with local communities as well as global networks – thinking globally and making locally.
- **Social & Diverse:** reflecting on the social dimensions of making, the living realities of those persons involved and concerned, as well as the ethical implications of their work. It thereby addresses societal challenges and needs. That's why it is so important to strive for diversity and inclusiveness.
- **Reflexive:** re-thinking and re-constructing the dominant mainstream maker culture from a critical stance, reflecting on underlying power structures and their implications.
- **Impactful:** aspiring to really make a difference. It seeks to improve life and build a sustainable future.

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<sup>1</sup> <https://criticalmaking.eu/>



- **Joyful & meaningful:** it is still about the joy of and in making, but adds meaning to it. What is made critically is made with a specific purpose of individual or social kind.

In order to create social innovation, we transfer these values into guiding principles and add specific ones for the specific purpose of mAKE. These guiding principles are the following, which have been described in more detail in the Ethics deliverables (Deliverable D9.1 and D9.2), the Project Handbook (Deliverable D8.1), as well as the Data Management Plan (Deliverable D8.2):

- **Co-design and co-creation:** for engaging the various communities and stakeholders from the onset.
- **Open source:** open source hardware, open source platform (e.g. Moodle), open standards, open maker passport.
- **Community building:** for connecting at local level as well as at global level.
- **Social inclusion:** for promoting diversity and inclusiveness in any of our activities.
- **F.A.I.R principles (Findable – Accessible – Interoperable – Reusable):** for data handling.
- **Social impact:** for reflecting on the impacts of any technological innovations also in terms of their impact on society.
- **Language and cultural sensitivity:** for cross-cultural communication.

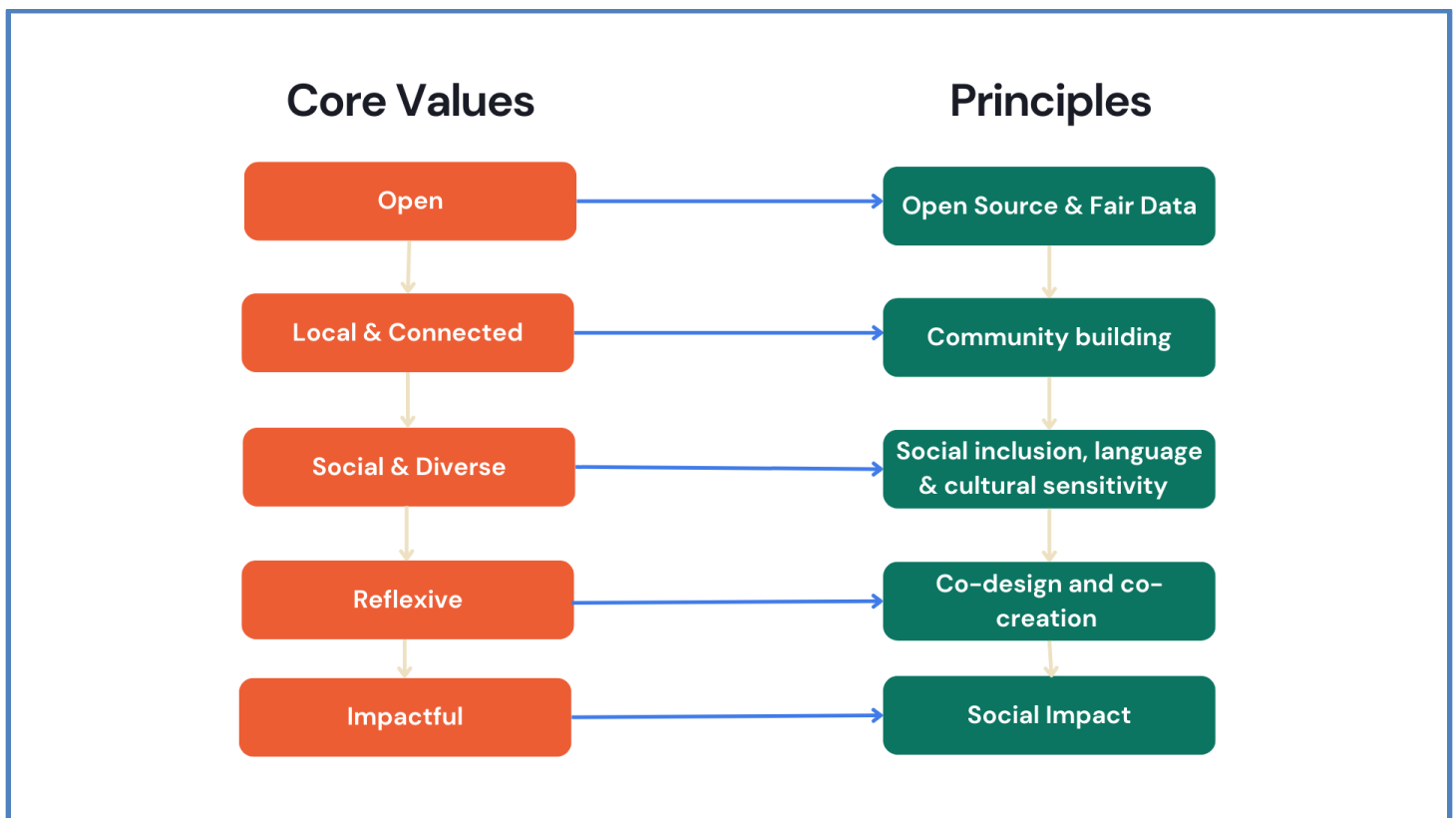


Figure 3: Social innovation values & principles





## 3. Strategy of capacity building tools

### 3.1 Definition of capacity building

Capacity building (or capacity development) is the process by which individuals and organisations obtain, improve, and retain the skills, knowledge, tools, equipment and other resources needed to do their jobs competently or to a greater capacity (larger scale, larger audience, larger impact, etc).<sup>2</sup> It is the process by which people, organisations and society systematically stimulate and develop their capability over time to achieve societal and economic goals, including through improvement of knowledge, skills, systems, and institutions – within a wider social and cultural enabling environment.<sup>3</sup>

The mAKE project aims at creating capacity building through a cross-cutting approach of several WPs, whose various outputs that will be developed e.g. MOOCs, open business models, train-the-trainer, etc., which will be conceived through the capacity building tools and the capacity building activities, to finally develop a set of design guidelines, templates and how-to's.

### 3.2 Capacity building information

In this section 3 we have developed the strategy for the capacity building tools based on values and principles of social innovation in section n.2. The capacity building tools consist of several tools used in capacity building activities, from which derived consequently the design guidelines, templates, how-to's and other tools that are used during the project in order to create engagement, build the mAKE community and disseminate mAKE content to the exterior world.

Each consortium partner will embed and share the information on their respective websites through shared links, blogs, actual maps of machinery (WP4) and through activities such as webinars (WP6) which will be captured and hosted on the dedicated mAKE YouTube channel. Toolkits and items such as the open catalogue of business models will be available for download from the mAKE website as well as Case Studies (D2.1), Open Makerspace in a Box Toolkit (D3.1), Training of Trainers Report (D3.2), Open Educational Resources (D3.3), MOOC platform (D3.4), Machinery: mapping of machinery in and near makerspaces across Africa and Europe (D4.2), Skills: Developing mutual recognition of hardware DIH users' skills using maker passports (D4.1). The sharing and embedding location and more information on each WPs tasks can be found in table 1 in the Appendix O1.

<sup>2</sup> [https://en.wikiversity.org/wiki/Capacity\\_Building](https://en.wikiversity.org/wiki/Capacity_Building)

<sup>3</sup> UNDRR definition:

<https://www.undrr.org/terminology/capacity#:~:text=Capacity%20development%20is%20the%20process,sustaining%20capacity%20growth%20over%20time>



### 3.3 The strategy for capacity building tools

We have adopted a strategy by aligning with the two previous deliverables of WP5, namely the deliverable 5.1 “Communication, Dissemination and Outreach plan (CDO)” and the deliverable D5.2 “Project identity, website and social media”. This strategy was followed in order to keep the consistency in the design, assets and main values of the project. Taking those two deliverables as a starting point and in alignment with D6.1 and D6.3, the capacity building tools were chosen and selected according to social innovation principles, such as open source, social inclusion, community building, social impact, the F.A.I.R. principles, language and cultural sensitivity, as explained in section 2 Social innovation.

In the following paragraphs we will analyse all these capacity building tools, which are divided into practical tools and community tools. The principles above mentioned are reflected in the choice of using a practical open source platform for instance, or the community building principle is reflected in the community tools, such as online and offline meetings, calls with the mAKE community, workshops and so on.

### 3.4 The capacity building tools

We identified two main categories of capacity building tools for social innovation:

- practical tools
- community tools

These tools have been used and implemented in several activities which are described in the next section 4 Capacity building activities.

#### 3.4.1 Practical tools

Practical tools of capacity building are those platforms, applications, programs that aim at improving skills, capabilities of the partners and the mAKE community, as well as share and create knowledge and enhance the mAKE community.

Some of the practical tools used in the first year of the project are the following:

- **Jamboard:** jamboard collaborative sessions were useful to reflect and brainstorm, ask questions to partners to grasp their knowledge and understanding the WP5 workflow, how to go through the folders, where to find the information they are looking for in terms of communication, assets they might need, etc. This tool was used also at the beginning of the project, as a kick-off session.





Figure 4: mAKE kick-off Jamboard collaborative session

- Canva:** Utilising open-source tools such as [Canva](https://www.canva.com/), a graphic design platform that allows to create, modify and download your own design products. The mAKE assets were created in this platform and are available to partners in order to adjust the templates easily and in autonomy, making the process of internal communication and collaboration smoother and simplify the procedures. This allows as well to use different types of formats rather than uniquely powerpoint presentations, png format or general google sheets. For more information on the templates, see paragraph 5.4 Editable assets.

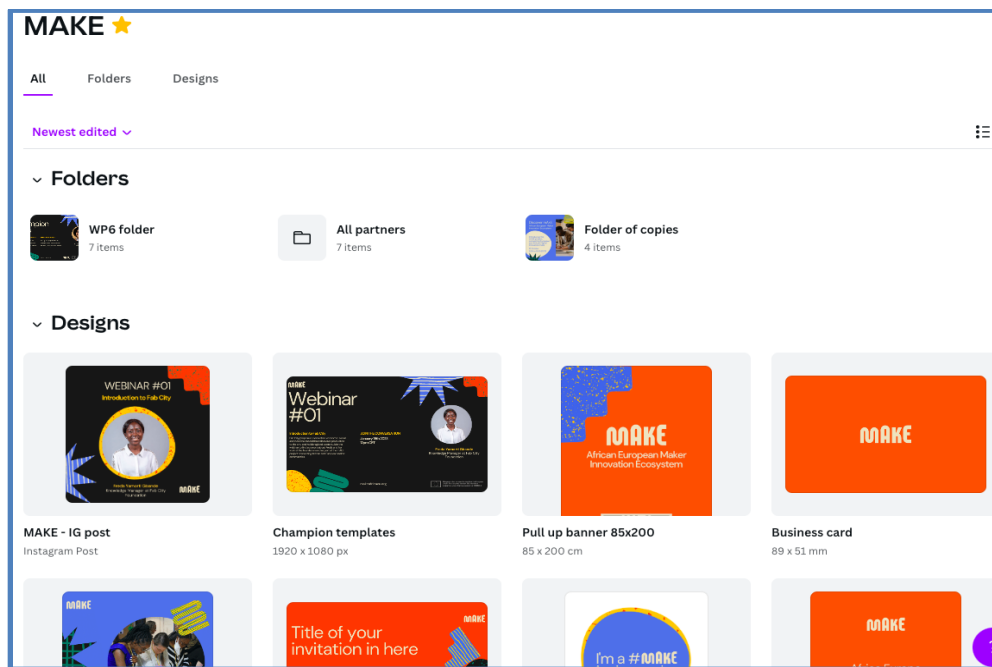


Figure 5: mAKE profile on Canva



- **Discourse:** [Discourse](#) will be used as a platform for community discussion. There are many forums that may be geographically, project, or topic-specific, there is, therefore, an overlap between the separate Discourse forums. One community member could be subscribed to 5–6 different forums eg. for upcoming events or opportunities of interest which is a valuable opportunity for communicating, sharing and embedding outcomes of mAKE.
- **Moodle:** in the early 2000s, the raising of open source software as well as the web 2.0 technologies, impacted the educational learning system by enabling users to create knowledge which became ubiquitous. The new concept of Open Educational Resources (OER) has emerged, but while OER include usually full courses, focus more on content and resources, Open Education Tools (OET) refers to tools produced with free, open and adaptable software, which remove various barriers on its production or adaptation.

The guiding ideology of Open Education Tools is social constructivist learning theory, which is characterised by interaction. Knowledge construction is obtained through interaction with other people and learning materials in social situations. Indeed, constructivists believe that people can learn better when they interact with the materials they learn, construct new materials for others, and discuss material with others.

Moodle (Modular Object-Oriented Dynamic Learning Environment) is among the most widely-used Open Education Tools basically because it is a cost-free online Learning Management system (LMS) that enables educators to create their own online courses easily and free of charge, with the possibility to extend learning, any time, anywhere. Key features provided by Moodle can be sorted into two main categories:

- activities (facilitating communication, evaluation and the execution of complex pedagogical processes);
- resources (means for the distribution of didactical materials in a structured format, such as documents or presentations).

The full features of Moodle can be found in table 2 in Appendix O2 and at this link: <https://docs.moodle.org/310/en/Features>. Some of the main features are represented in the figure below:



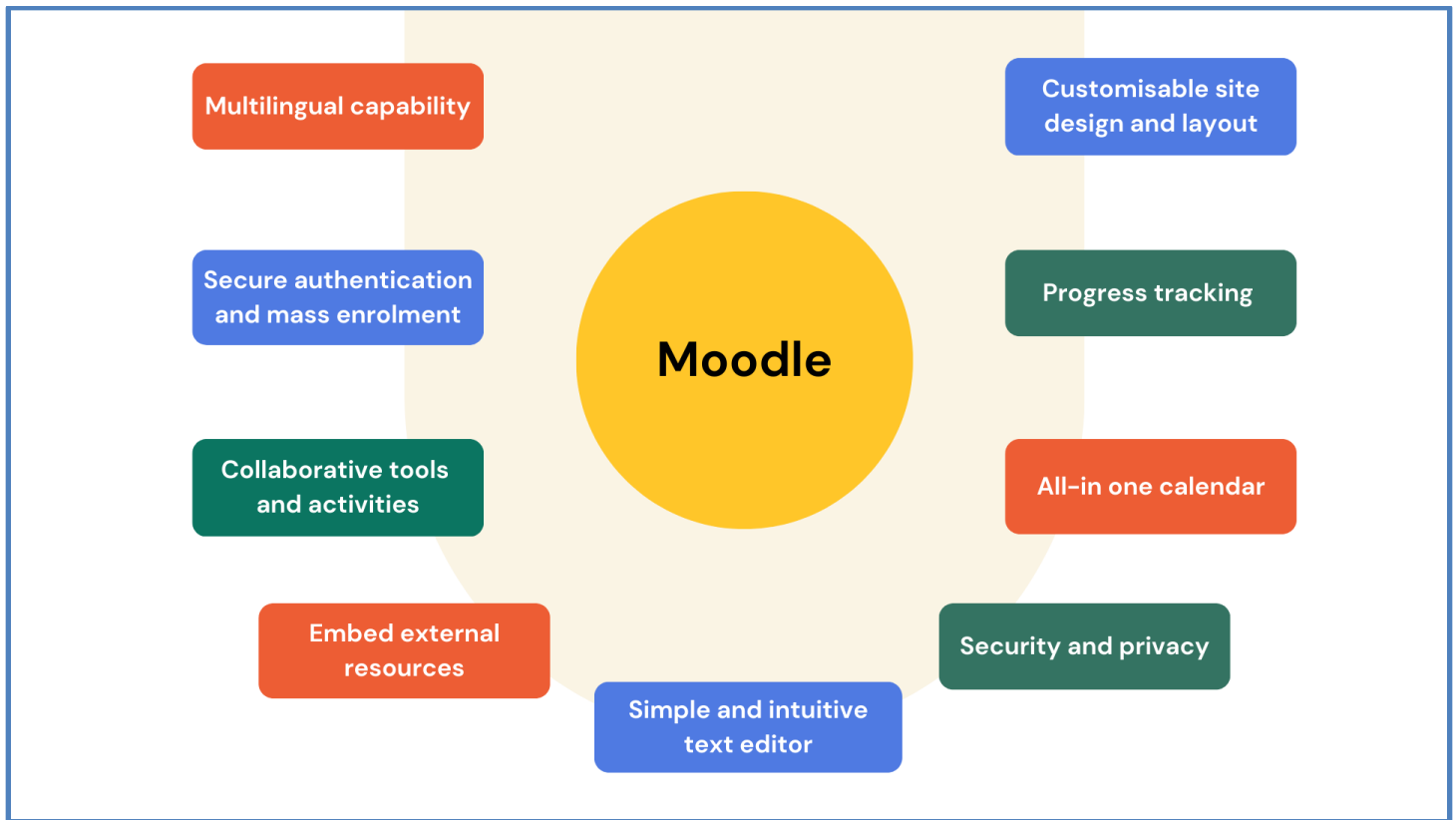


Figure 6: Moodle features

Moodle has an easy to use interface, it provides collaborative tools and activities, an all-in-one calendar, it can embed external resources and it has a customisable site and layout. In addition, some of the advantages of the Moodle tool are the followings:

- A. Open source tool.
- B. Complete ownership and control of everything, from data privacy and security to the site's functionality.
- C. Fully customisable, with 1,900 open source plugins that can extend the platform.
- D. Translated into 100+ languages: it can be used with one language or multiple at once.



- **Particify:** a workshop through this platform was implemented by WP5. Particify is an open-source platform where you can build polls, presentations and tailor them according to your needs.

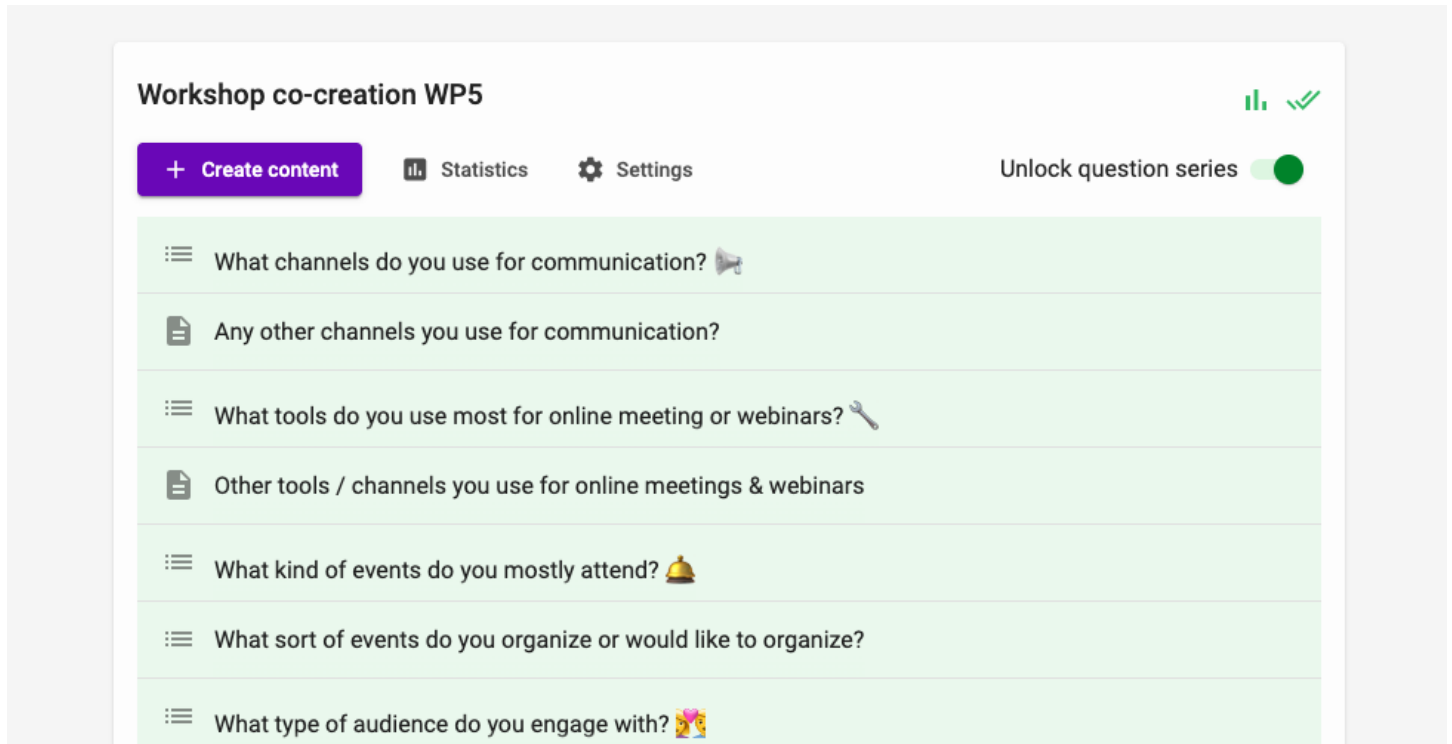


Figure 7: Particify poll questions

In the first months of the project Particify was used as a participatory tool, for instance used to create a poll destined to partners to know better about their habits in terms of social media, what channels of communication they use in their daily work, what type of audience they usually address, etc. This was a useful exercise to get to know more about the work of other partners, their use of tools and of communication means, whose answers have been taken into account from that moment on. The answers reflected and confirmed as well the multicultural aspects and diversity of voices within the mAKE project, important aspects to consider and to keep considering all along the project to respect and depict the multiplicity of stakeholders' needs and find a common ground on which to establish then the design guidelines. For instance, analysing what kind of platforms are used in Africa for webinars, which are not necessarily the same in Europe and adopt the option for future mAKE webinars that is mostly used in the two continents, or find a compromise for it.

Particify was a positive exercise for the beginning of the project; however, we noticed that is not a good tool to use for in-person workshops, since in terms of engagement and to start a conversation with partners was not the ideal tool, as it lacked a face-to-face level of engagement, for which is preferable to use other types of workshops' methodologies. Workshops are described in the next paragraph under Community tools.



- **Blogposts:** useful tools to spread knowledge, tell the stories of the mAKE project members, talk about their activities and about makerspaces and Digital Innovation Hubs (DIHs), the challenges, the business models for makerspaces and events. Blogposts are found on the mAKE website with a dedicated section and are periodically promoted through social media, newsletter and through the partners capabilities and circle. The blogpost can contain photos and links to the partners' local web pages, with topics such as "The future of makerspaces in Africa" or about past events where mAKE participated or the different communities thriving within the mAKE project. The direct link to the blog section is the following: <https://makeafricaeu.org/blog/>.

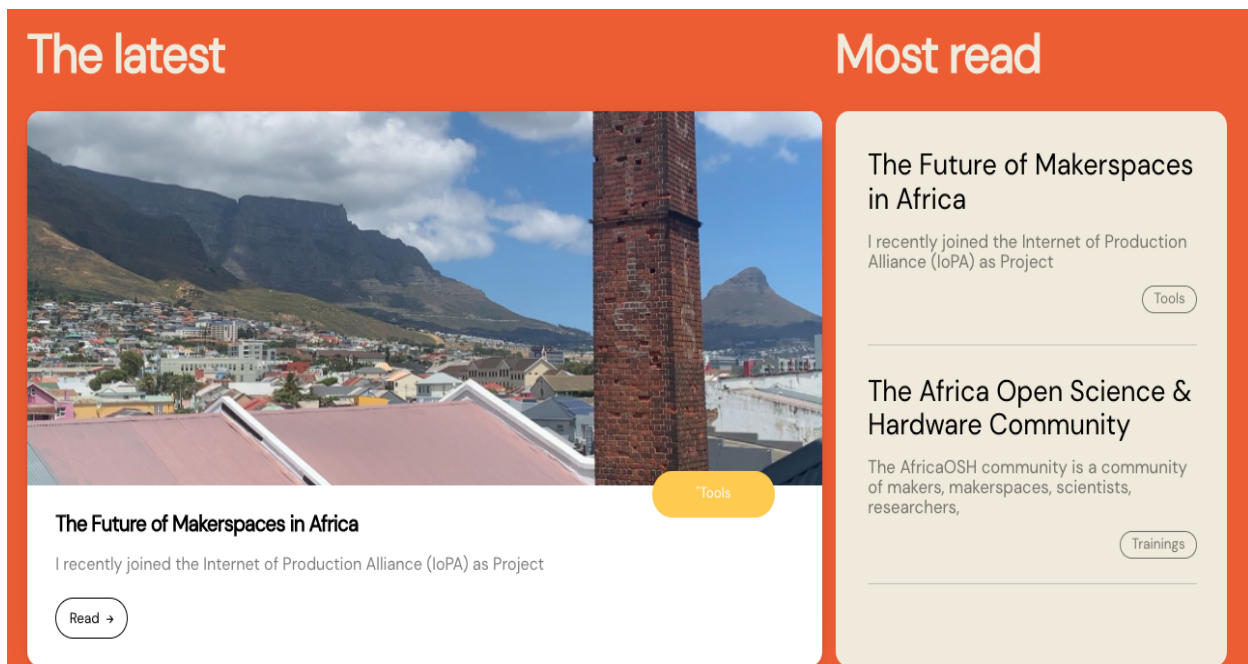


Figure 8: Blogposts



### 3.4.2 Community tools

- Workshops:** Workshops are a well-tested methodology used for capacity building. Workshops can be divided into several steps, activities or questions, giving to each section a certain time for the participants to discuss the topic, who are normally divided into groups and which continue then to move around to answer all the questions. For instance, in one of the last mAKE workshops in Cape Town, there were three main activities, each of them starting with a question to initiate the debate and actively discuss on the question posed. For instance, activity 1 started with the following question: “How do we become an active community?”. Participants were asked to reflect on the topic and put down their thoughts. The inputs by each group were at the end collected and resumed in a document available to partners and useful to be used for mAKE research.

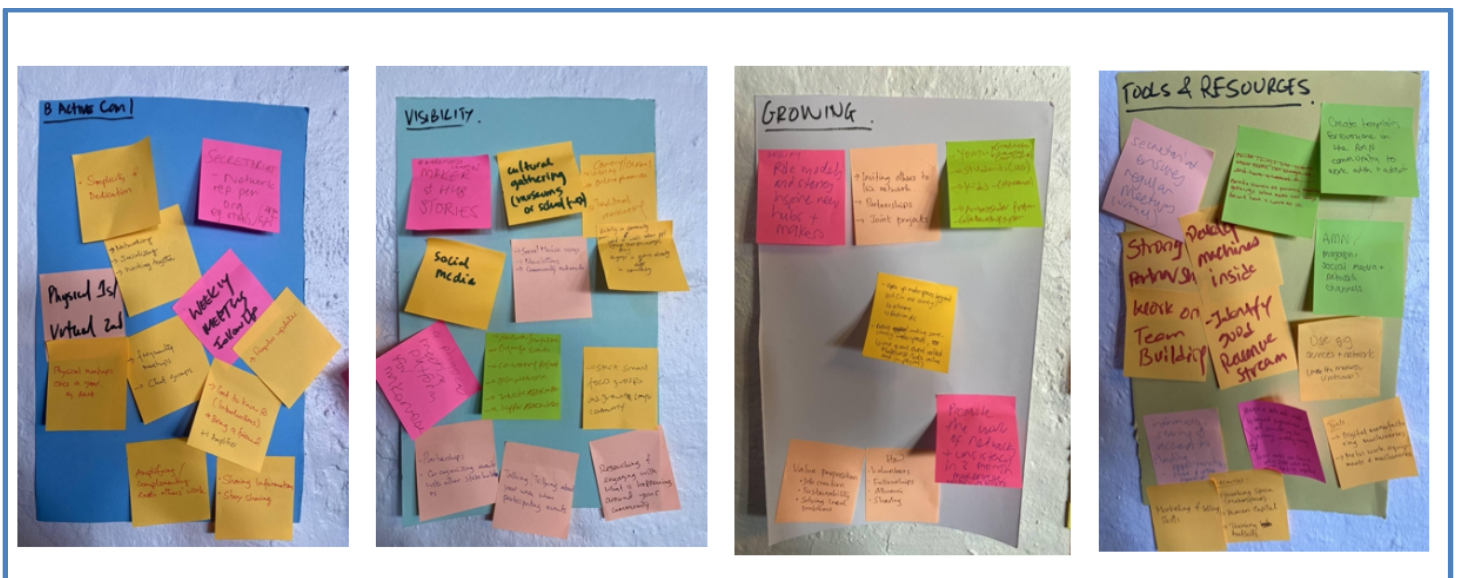


Figure 9: GIG and Rlabs workshops results collection

- Stickers Canva session:** a co-creation sticker session was implemented with the participation of partners during a collaborative online call, to brainstorm on ideas, slogans, makers and makerspace identity, colours and visuals to adopt. Stickers are catchy, little and easily transportable cards that immediately transmit and communicate the identity of mAKE, using also the logo sometimes as part of the slogan, as in the second sticker here below “I mAKE it”. Three elements were important to be shown according to partners: mAKE logo, the website URL [makeafricaeu.org](http://makeafricaeu.org) and a short and effective slogan.





Figure 10: Sticker results from the co-creation session

- Co-design sessions:** in order to find the real soul of mAKE and considering the plurality and diversity of the mAKE project participants, several co-design sessions took place at the earliest stages of the project, in order to create a clear, unique and immediately identifiable visual identity. A collaborative way was the path followed, making the partners choose and vote among different Moodboards, voting the moodboard that represented and reflected the mAKE project, as shown in the below image 11 on the right side. In the second image, members of mAKE were asked to share some photos of their workspace, as an inspiration for the visual identity.

Branding proposal

### What Moodboard speaks to you?

A moodboard is a visual tool that communicates our concepts and visual ideas, that is intended to evoke or project a particular style or concept. Add a dot over the dual axis where you would position the each moodboard.

The second moodboard has been the one that has more points in common between taste and representation of the project.

**A Minimal Geometric**

**B Colourful Playful**

**C Organic Abstract**

MAKE

06

Figure 11: Moodboard: co-design session example



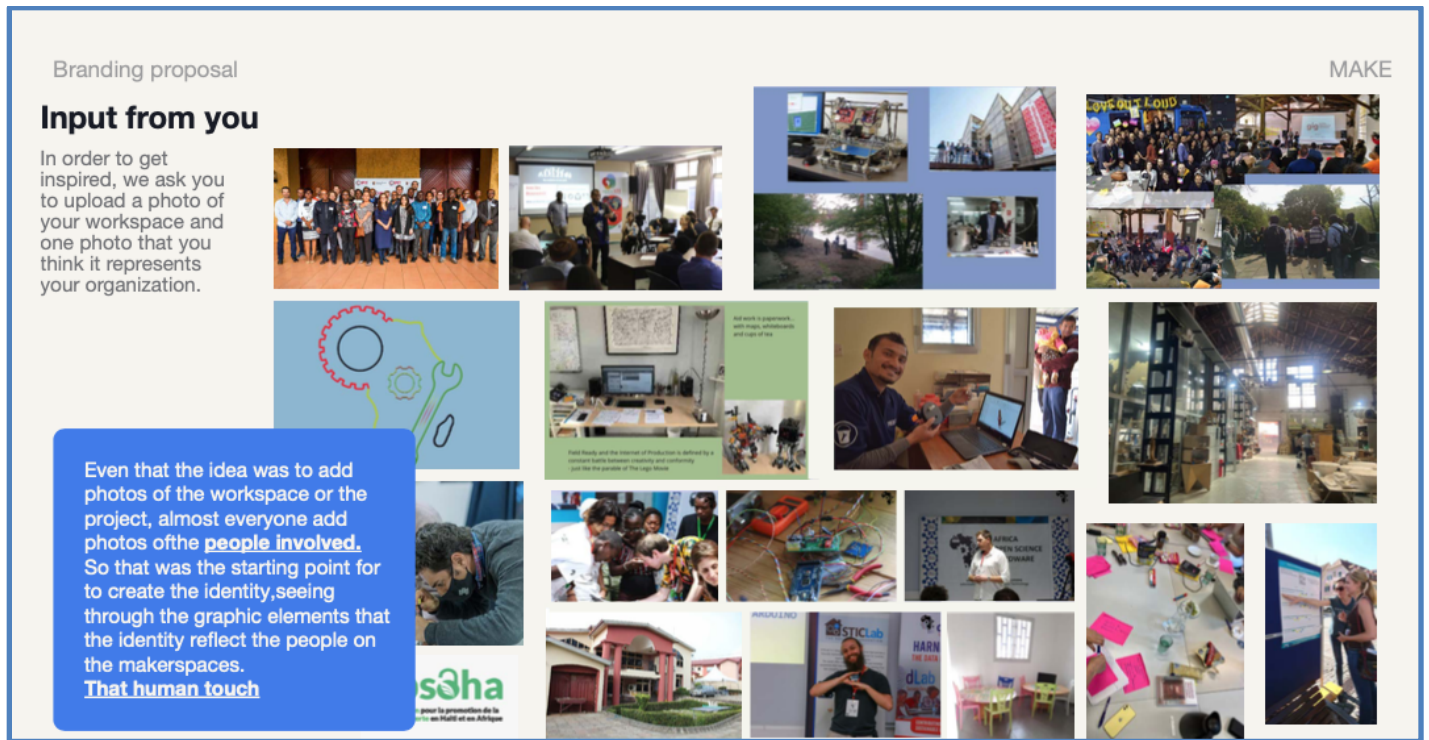


Figure 12: Photos: co-design session example

- Online and offline meetings:** online meetings take place in different forms, such as the monthly Consortium Call, where the presence of the partners is required with regularity and it is mandatory. In each meeting session, updates are given by each WP and a focus is given on challenges, achievements, collaborations and next steps. It is a fundamental time to update and share among partners, create synergies and for capacity building.

Other types of online meetings are the community building calls, as for instance the IOP Alliance Call at the beginning of 2023, with a focus on mAkE and the community network.



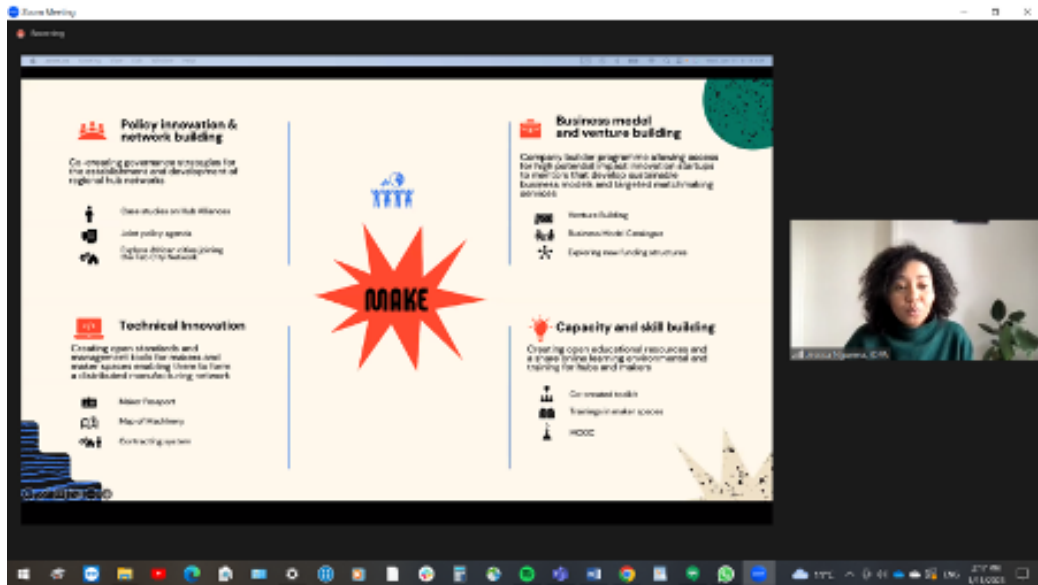


Figure 13: Presenting the mAKE project in the Community Call



Figure 14: Maker passport presented in the Community Call



### 3.5 MOOCs as a tool

Massive Open Online Courses (MOOCs) are large-scale, open-access classes taught via the internet, expanding avenues for providing free, credible information to the general public. MOOCs have revolutionised the boundaries of modern learning by making high-quality education available to a much vaster pool of learners and without no geographical boundaries. These classes offer a route to efficiently improve in depth education for a larger group of learners and provide instructional and learning opportunities to a broad audience. Moreover, MOOCs have tremendous potential for the promotion of life-long learning beyond the traditional classroom; it is an efficient way to gain new skills. The COVID-19 global pandemic has highlighted the importance of the classes. The mAKE MOOC aims to provide practitioners, policymakers, innovators, promoters of hubs, makers, and the interested public with skills in design and prototyping, digital fabrication tools and ICT usage, equity and inclusion as well as entrepreneurship and business.

#### 3.5.1 Principles

The mAKE MOOC is embedded in J.E.D.I (Justice–Equity–Diversity–Inclusion) principles and aligned with F.A.I.R principles (Findable – Accessible – Interoperable – Reusable).

- Justice: it refers to identifying and dismantling barriers to resources and opportunities in the maker ecosystem, so that all stakeholders and communities can take advantage of maker movement. To achieve this vision, mAKE will work to break down barriers and address inequalities rooted in differentials of power and privilege related to the “isms” in society: racism, classism, sexism, etc. We consider our MOOC as an open knowledge repository to empower citizens in a collective manner;
- Equity: mAKE recognizes that advantages and barriers exist, especially with individuals that are underrepresented in the maker ecosystem and underserved in society at large. That is why we work to allocate resources to ensure everyone has access to the same opportunities. That is why, our contents are aligned with the F.A.I.R principles (Findable – Accessible – Interoperable – Reusable);
- Diversity: we believe that diversity is not just about racial differences, but can be related to age, race, ethnicity, gender identity, sexual orientation, physical or mental ability, socioeconomic status, religion, and national origin, among others. Considering all these aspects, our MOOC provides an environment enabling diversity. The mAKE, we ensure to have a good mix of gender balance and geographical representation;
- Inclusion: it is the way we create environments in which an individual or group can feel accepted, respected and valued. Inclusivity strives to create a sense of belonging for all individuals, regardless of different identities. Our MOOC contributes to amplifying the voices, perspectives and styles of those who experience more barriers based on their identities, disabilities. Our MOOC takes into account the visually and hearing impaired people.



### 3.5.2 Training approach

The mAKE MOOC uses a variety of techniques such as weekly lecture videos/webcasts, online assessments, discussion forums, and even live video chat discussions and help sessions. Through this, we promote active learning participation and enhance engagement with learning content and peers through fostered interactions. Specifically, we are committed to encourage reflection, enable dialogues, foster collaboration, apply theory learnt to practise, create a community of peers, enable creativity, and motivate the learners. That is why, we have chosen to adopt the Learner-centric MOOC model (LCM)<sup>4</sup> which presents actionable guidelines for content design and activity formats for all critical pedagogical features of MOOCs. The core structural elements of the LCM model are: the Learning dialog, Learning by doing, Learning extension trajectories, Learner experience interaction.

#### Learning dialog (LeD)

LeD are interactive MOOC short videos (5–10 min) aimed at promoting meaningful learning of the concept through learner interaction. Indeed, videos are an integral part of instructional design in MOOCs which provides learning flexibility to participants, and ease of content delivery to instructors for varied topics. LeD provides conceptual knowledge to learners through short videos and provides interactivity through explicit spots called reflection spots (RS).

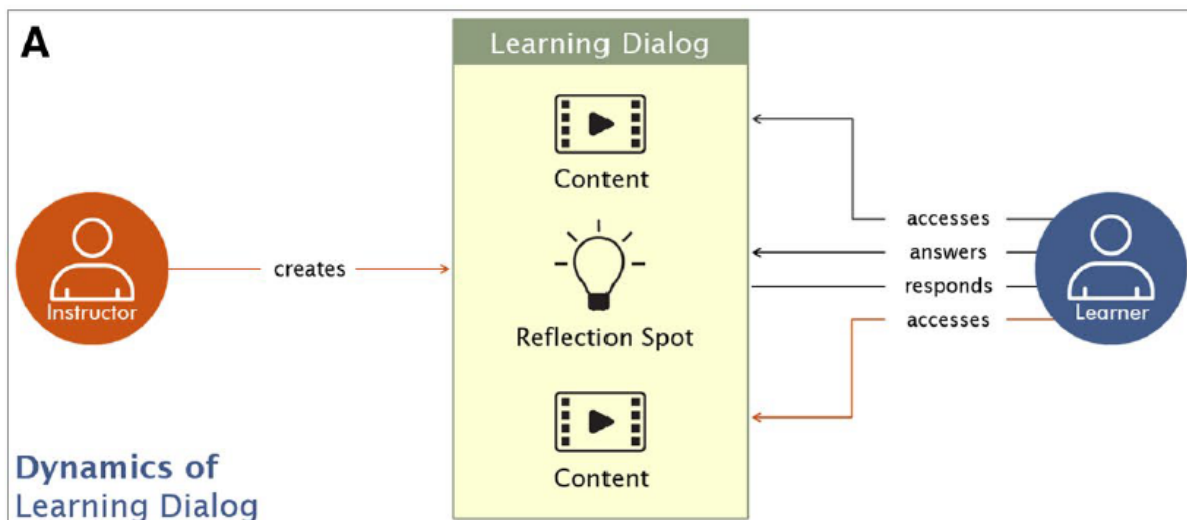


Figure 15: Learning Dialog

<sup>4</sup> Shah, V., Murthy, S., Warriem, J. *et al.* Learner-centric MOOC model: a pedagogical design model towards active learner participation and higher completion rates. *Education Tech Research Dev* 70, 263–288 (2022). <https://doi.org/10.1007/s11423-022-10081-4>

### Learning by doing (LbD)

Here the learner performs ungraded activities and receives immediate feedback on their work. The LbD activities intend to provide multiple opportunities for concept attainment, retrieval practice and integration of knowledge and provide immediate constructive and customised feedback to clarify learners' misconceptions.

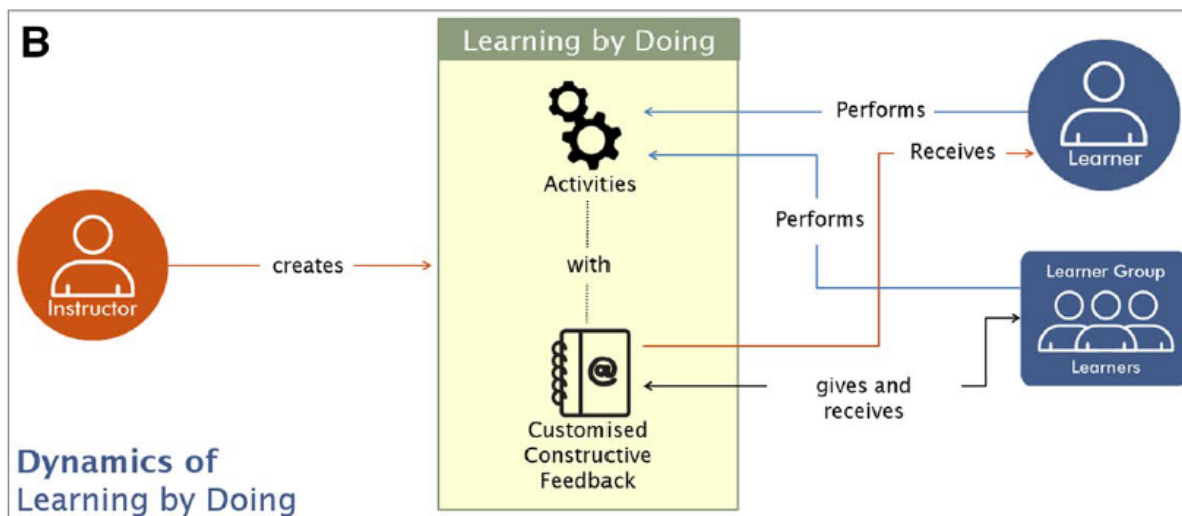


Figure 16: Learning by Doing

### Learning extension trajectories (LxT)

The Learning extension trajectories (LxTs) aims to cater to varied learning goals and diverse levels of learning; enable the learner to increase the depth and breadth of their existing knowledge and to ensure learners' engagement with the resources and assimilation of key concepts.

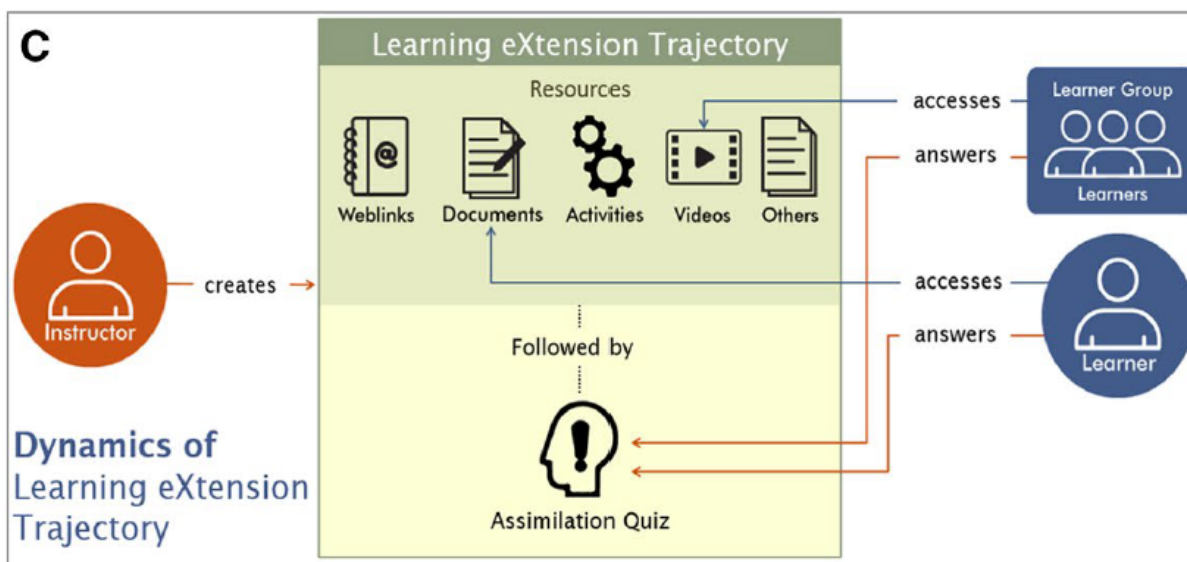


Figure 17: Learning extension trajectories



### Learner experience interaction (Lxi)

The key goals of an Lxi are to provide an environment for focused discussions where peer learning is engaging and productive; and ensure learner participation and peer interaction on the forum.

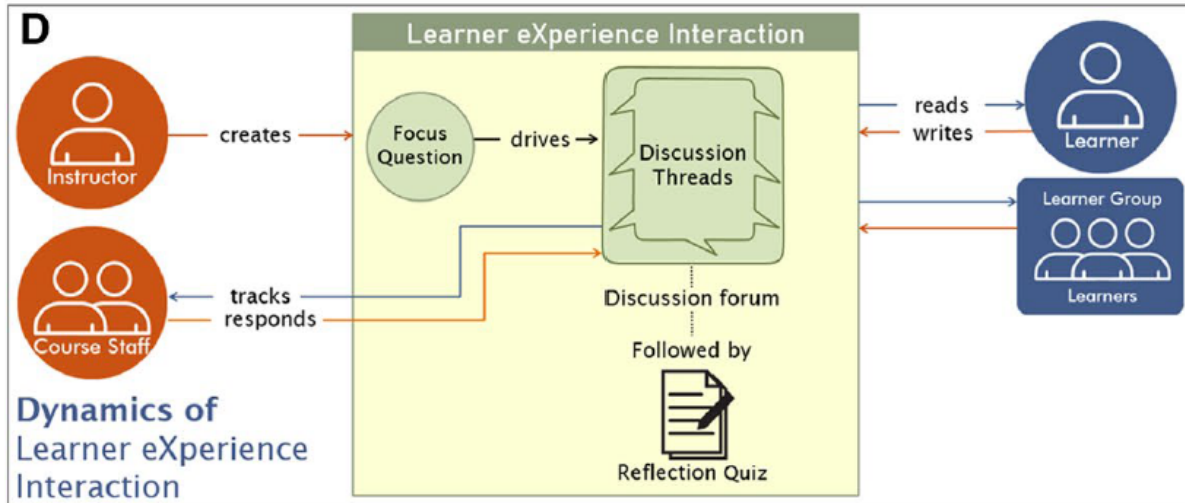


Figure 18: Learning experience interaction

### 3.5.3 Practical organisation of the MOOC

#### An overview of the pedagogical scenario

Our MOOC comprises several courses from design and prototyping to entrepreneurship and business. Each course will be delivered for five weeks including one week for the final evaluation. The course will be moderated asynchronously on a weekly basis and participants are required to participate in the weekly on-line discussions. The lessons are designed in a way that learners are also able to self-assess their understanding through practical exercises which will be in the form of case studies that will support active learning. Additional resources such as bibliographies, web links and optional readings are provided for participants who wish to deepen their knowledge of the course topic.





Figure 19: MOOC outlook

### Sustainability of the MOOC

The MOOC will not end with the end of the project. The African Institute of Open Science and Hardware (AIOSSH) located in Cameroon, in collaboration with the United Nations Institute for Development and Planification (UNIDEP) located in Senegal or P2P University will keep managing the platform of the MOOC.<sup>5</sup>

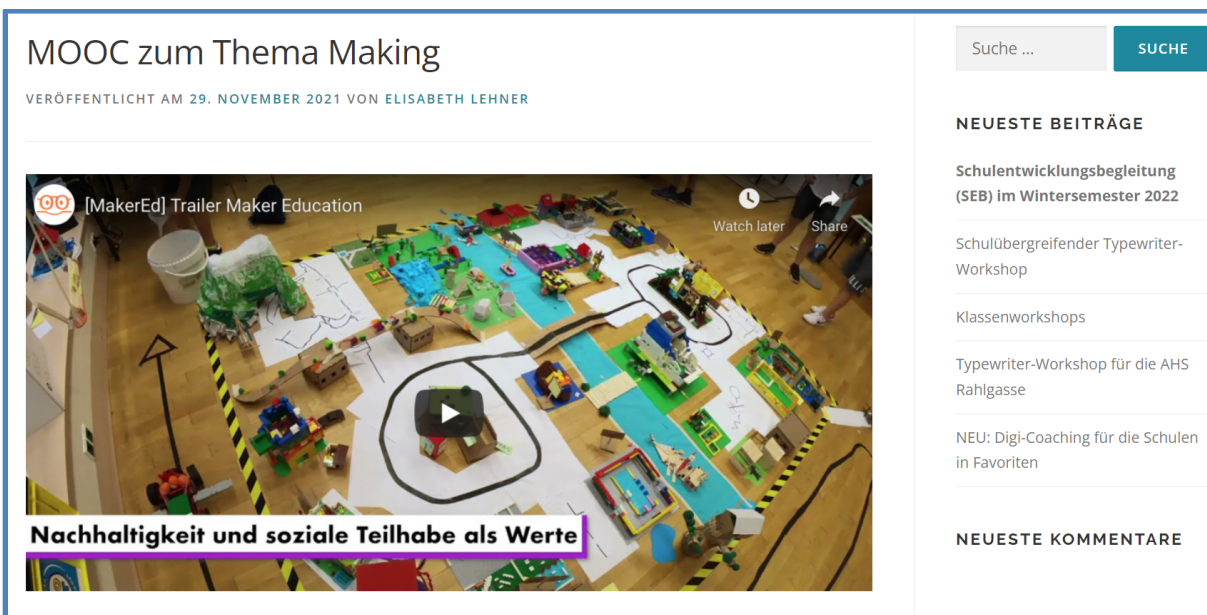


Figure 20: MOOC outlook example

<sup>5</sup> <https://edumakerspace.fl.wien/allgemein/mooc-zum-thema-making/>





## 4. Capacity building activities

### 4.1 Interfacing levels for capacity building

For the capacity building, mAkE considers building out the social innovations taking place on three different yet interconnected levels herein alongside the larger spectrum of the 'mAkErverse' as outlined in T6.1:

- The micro level focus on individuals (namely "Community Connectors")
- The meso level – team and organisation within community hubs and makerspaces
- Higher-level observations of larger ecosystems (e.g. Fab Lab and Fab Cities networks) in order to leverage circular ecosystem vision, such as the 'layers of networks' for circular urban models
- Embedding and sharing (T6.3) of resources created within the project should be shared across the consortium members e.g. websites as well as through disseminating information using platforms like events, whether online or physical

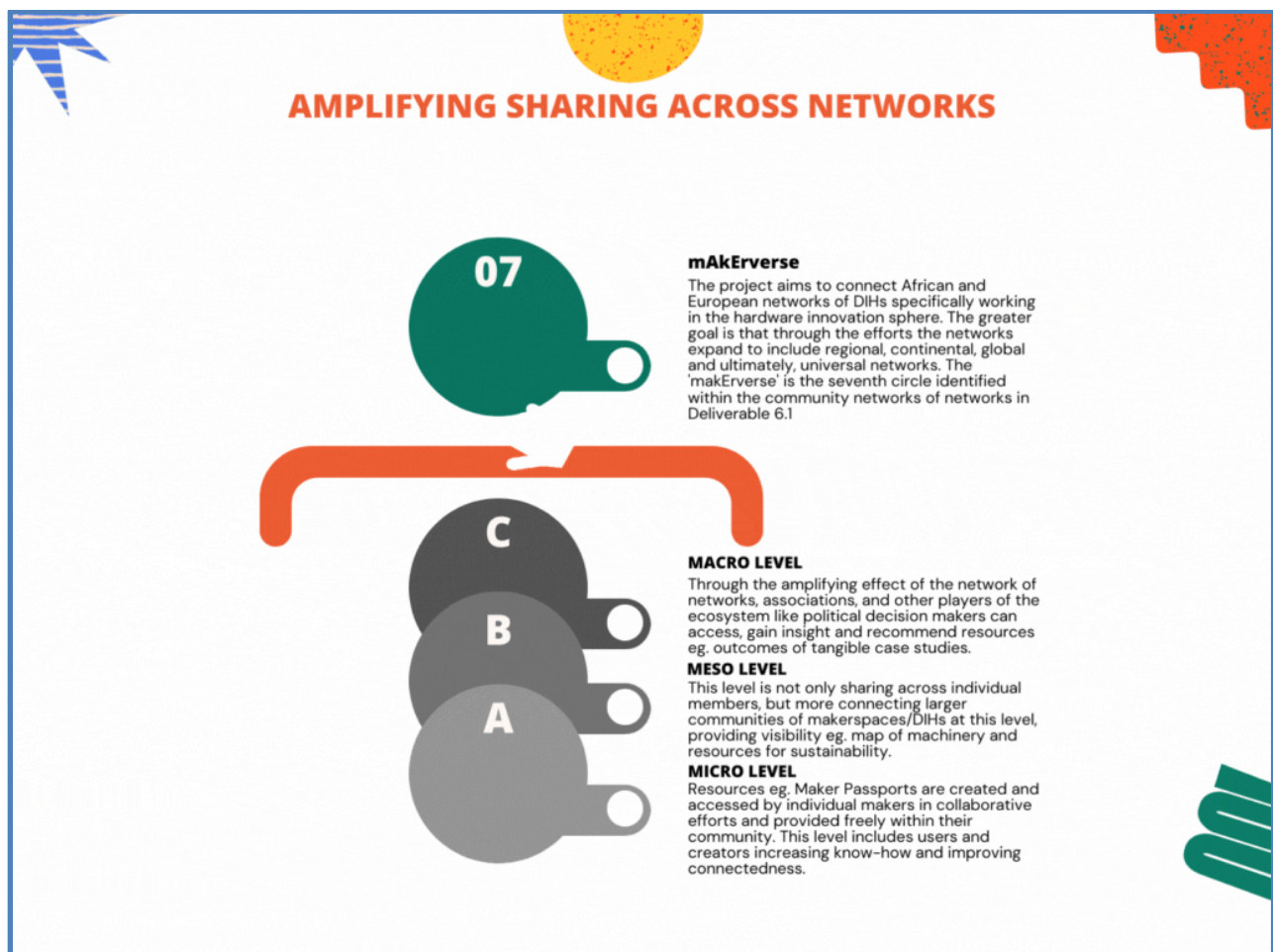


Figure 21: Interfacing levels for capacity building



## 4.2 Capacity building activities

The capacity building activities are all those activities in which the capacity building tools described in section 3 have been used and implemented, activities that will continue all along the project lifetime.

The capacity building activities are several activities with the aim of enhancing and creating knowledge, through the collaboration between the different partners of the mAKE project, in order to stimulate and develop systems, skills and processes that are ecosystemic, inclusive and embedded within existing communities and networks. These are collaborative activities that help with decision making within WP5 activities for communication and dissemination, in which all the partners are involved and are also responsible for contributing to. A community approach was therefore fundamental to adopt and build from the start of the project, thanks to the active participation of partners and the different types of inputs they could bring to the table, highlighting the richness and inclusivity of diverse methodologies and approaches that characterise mAKE for being a cross-cultural project between Africa and Europe.

### These capacity building activities include:

- Monthly WP5 meetings: monthly meetings have taken place, sometimes in collaboration with WP6, to give updates on the work of communication and dissemination, teaching how to correctly use EU and logo citation, how to write blogposts and where to find all the assets and material of WP5. In addition, requests are addressed, and support is given to other partners' activities for the visual and communication side. The WP5 monthly meetings are a good occasion also for planning and developing the communication strategy, which is optimal to do at the beginning of the year and to continue to update in the content calendar throughout the year. More information on the content calendar can be found in paragraph 5.5 Other tools.
- Consultations
- Online (workshops, webinar, knowledge pills): According to the objective, different types of webinars have been established in 2023 for capacity building and communication & dissemination purposes, which are two:
  1. Knowledge Pills series
  2. Business models webinars

**1. Knowledge Pills series:** the Consortium members established, led by the work of WP6, a year-long program of a format that we decided to call "Knowledge pills" as a pecha-kucha format (20 slides x 20 seconds) that will be run each month by different partners of the project. Even though these webinars are addressing mostly internal audiences, it is an opportunity for knowledge exchange with the community of makers and makerspaces, as the Knowledge Pills recordings will be made available on the YouTube channel afterwards. A broader audience is therefore targeted afterwards through mAKE communication official channels, as the social media and the website of mAKE.



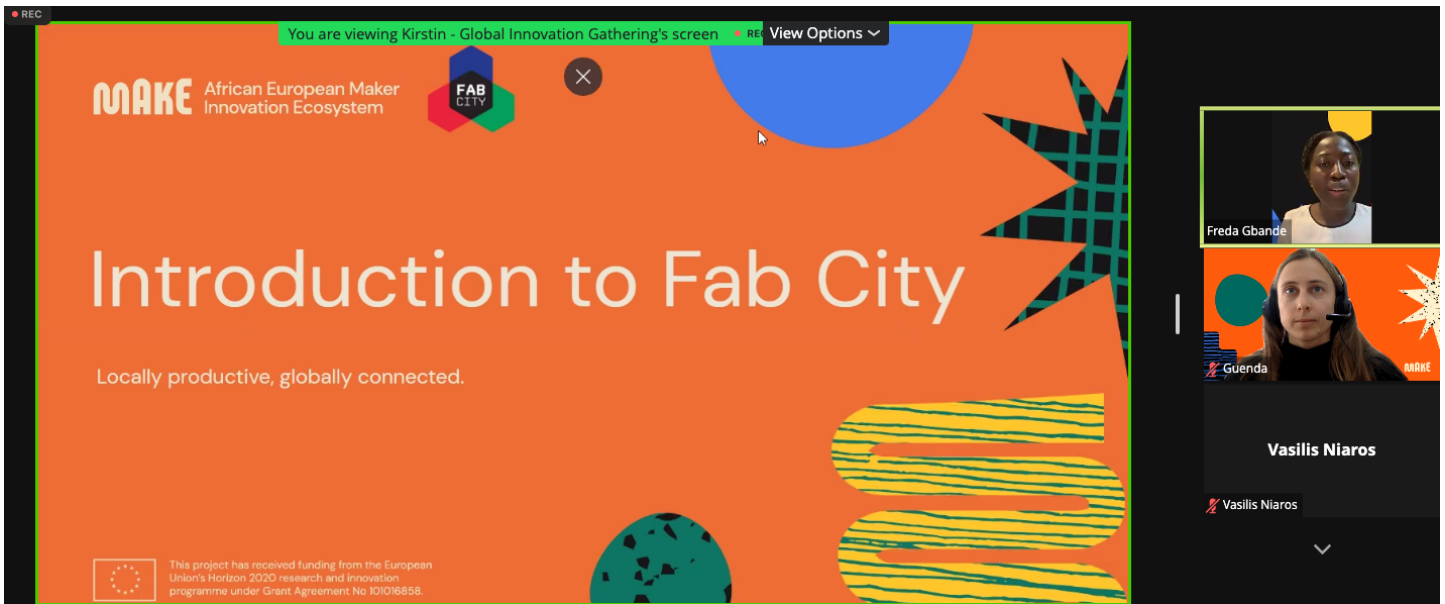


Figure 22: First Knowledge Pills series with Fab City (snapshot 1)

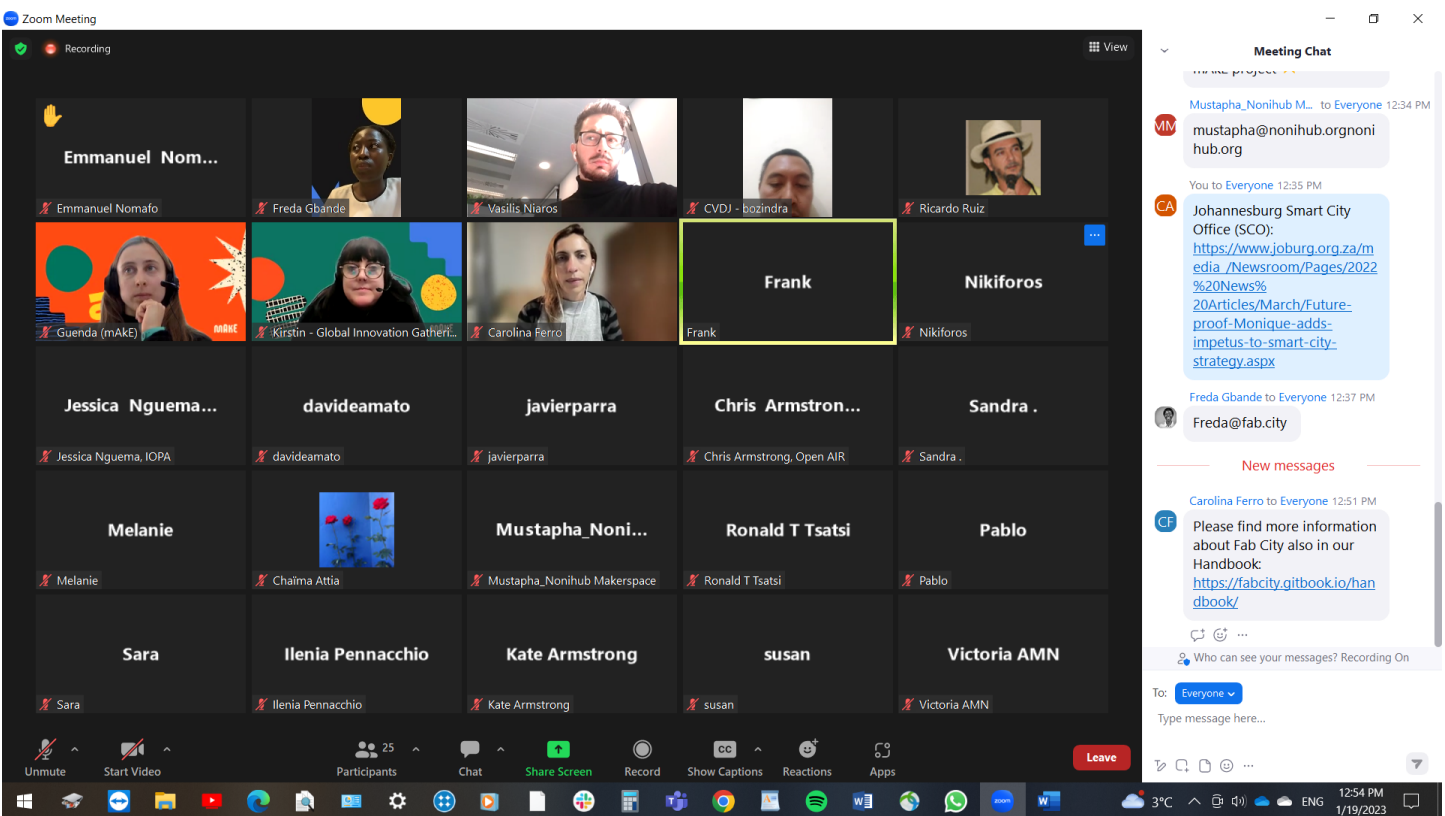


Figure 23: First Knowledge Pills series with Fab City (snapshot 2)



**2. Business models webinars** have started in 2023, under the work of WP1 on the catalogue of business models, the first of the series being on consultancy as an element for business model for makerspaces. The business models webinars are public webinars that have the aim as well to engage a broader audience, therefore are promoted publicly across mAKE and partners' social media and newsletter. Registration to the webinars is mandatory for participation and therefore WP5 will take the opportunity to gain new subscribers for the newsletter and analyse the type of audience that we will have with specific and targeted questions. The recording of the webinars, as well as for the Knowledge Pills, will be published on mAKE YouTube Channel, as well as hosted on the website.

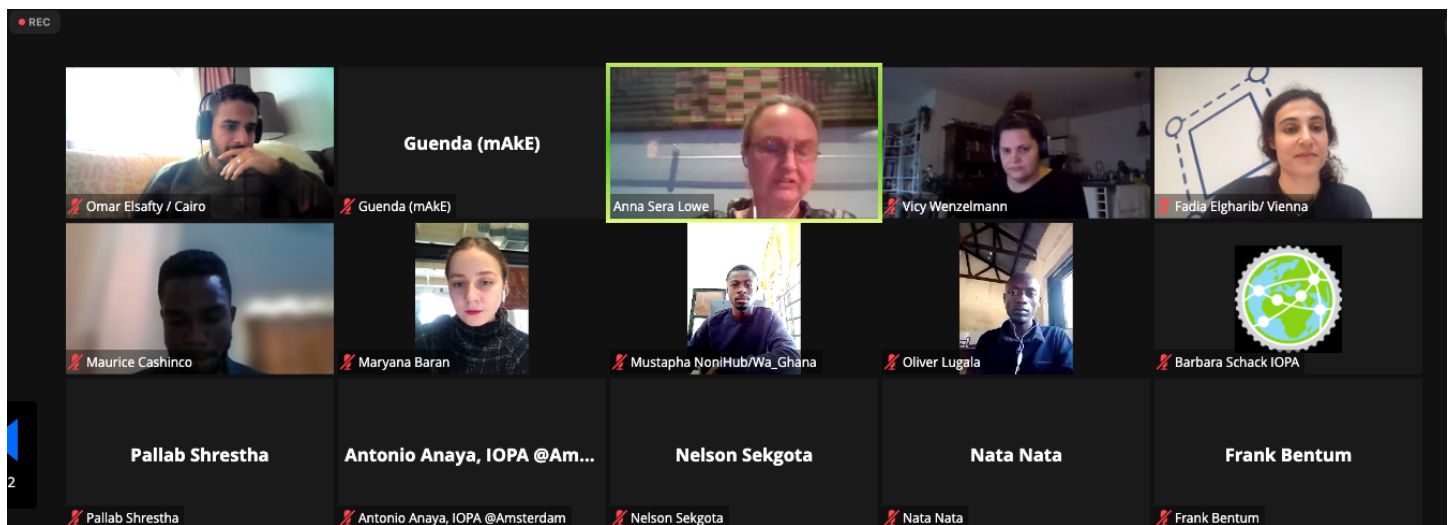


Figure 24: First Business Models webinar series



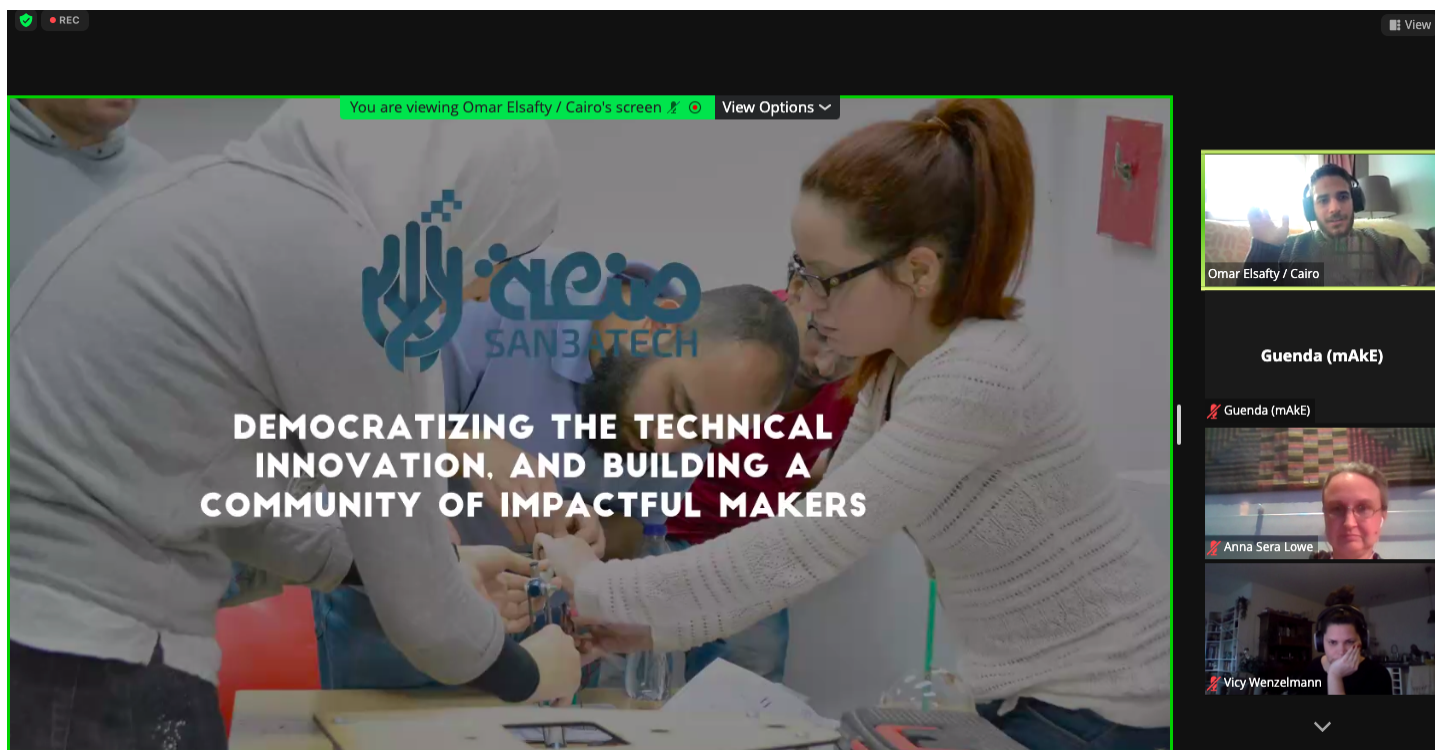


Figure 25: First Business Models webinar with San3a Tech, one of the speakers

- **Embedding and Sharing Activities:** As explained in D6.3, the embedding of shared information and resources will be done across three multipliers; Integration, Inclusion and Attachment (IIA) across the consortium and deliverables. At the centre of our work as part of mAKE, sharing real experiences and accomplishments will be at the core for the mAKE communities to share, amplify, multiply and create a ripple effect inspiring the next generation of makers e.g. visibility through sharing stories. All activities are captured and embedded within each organisation and the ideal of one repository for developed tangibles is in the refinement phase and will be updated according to preferences, activeness of the consortium and communities on the platforms, advancements in technology and accessibility platforms such as use of Discourse as a channel to embed and share.
- **Consortium Meetings:** Consortium meetings, happening twice per year and alternatively in Africa and Europe, are a fundamental and valuable time to engage with partners, organise workshops and advance with the project since they are in-person meetings. During the Consortium Meetings, to make the most out of it, discussions among partners, presentations and workshops are held, as well as collaborative exercise, warm-up and team building activities. The sharing of knowledge allows the project to advance more quickly into the project stages, with clear communication and showing what each WP has achieved and being frank about problems, challenges etc. Latest Consortium meeting took place in Cape Town, where several decisions were made and where the mAKE members came to know local organisations and inspirational work done by the local partners.





Figure 26: Consortium meeting in Cape Town 2022

- In-person events: events are a great formula of getting the most out of in-person meetings, networking and engaging the African and European community of makerspace and enhancing the “mAkErverse” (see D6.1 for more details). Several events take place along the year where mAKE has a role in it, such as re:publica in Berlin, the Africa Makerspace Gathering in Cape Town, the international event of Bali Fab Fest, etc. All past and future events in which mAKE participates can be found on the website in the following link: <https://makeafricaeu.org/events/>.



Figure 27: AMG Gathering event in Cape Town 2022



### 4.3 Capacity building beyond the project

As shared in the deliverable 6.3, the embedding of shared information and resources will be done across three multipliers; Integration, Inclusion and Attachment (IIA), in order to create the REF (ripple effect) and to communicate using a harmonious language ensuring ownership among consortium members and relevant networks aligned to the community of the “mAkErverse”. A “ripple effect” can be defined as activities where information can be disseminated and passed from community to community to ultimately broaden its impact, amplifying and multiplying all efforts.

### 4.4 The mAkE community

In order to support the mAkE community and the work done by WP6 to build the mAkErverse, some assets and templates were developed, such as the Community Connector templates (originally “Champions”), which is described in detail later on in the “Editable assets” paragraph 4.6. The templates are specifically designed to share across social media and relevant platforms to promote not only mAkE but also the individuals who are those engaged in their respective communities and the end-users of the capacity building tools developed through the project work packages. As explained in D6.3, at the centre of our work as part of mAkE, sharing real experiences and accomplishments will be at the core. Stories are particularly effective in making it easier for other people to share, amplify, multiply and create a ripple effect inspiring the next generation of makers.

## 5. Templates

### 5.1 Design guidelines

The design guidelines have been implemented during the first year of the project, considering the needs of partners and different stakeholders, based on the existing social innovation capacity building tools defined previously. The list of design guidelines include:

- **Brand guidelines:** they were developed and implemented in the first months of the project from the Project identity, website and social media (D5.2), since there was the need for mAkE to have a clear identity and that it had to be reflected on the website. The brand personality is a framework that helps a project to shape the way people see it, the way it gets portrayed. The guidelines include and show the design study and co-design sessions with partners in order to have a collaborative effort and a full participation to create the best and more inclusive version possible for every member.

In practical terms, the brand guidelines contain:

1. Presentation of the brand elements
2. Application of the logo with its different shapes and formats



3. Colours palette and tones
4. Stakeholder mapping
5. Co-creation moodboard: a moodboard is a visual tool that communicates mAKE concepts and visual ideas that are intended to evoke or project a particular style or concept. Partners had to vote among several moodboard styles
6. Photos input by partners for inspiration

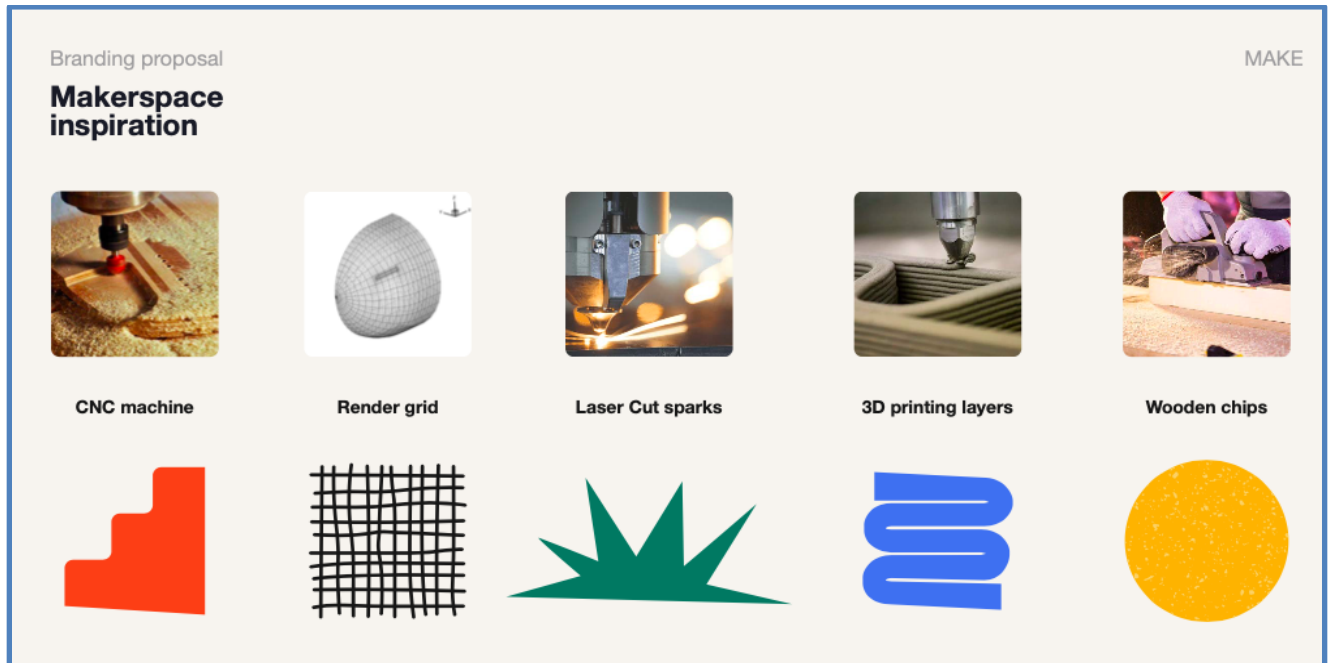


Figure 28: Brand guidelines: shapes inspiration

7. Makerspaces inspiration for shapes: CNC machine, laser cutting sparks, 3D printing layers and more can be found in picture 19, with some of the inspiration material for creating the characteristics and colourful mAKE's shapes, used in every asset such as presentations, on the website and social media, etc.

The brand guidelines can be found publicly on the mAKE website, on the resources page under the entry "education & culture", available here: <https://makeafricaeu.org/resources/>.

- **Photos & videos (Media):** photos are a very important resource for the project, as it allows to create and complement any kind of assets such as fliers, banners, social media posts and stories, used on the website for every page and to illustrate blogposts in the dedicated section. Photos, on top of being shared through the Drive internal folder system of the partners, are also uploaded on Flickr, an image and video hosting platform, as well as an online community, where the user can publicly





access and download them when needed. Flickr images from the mAKE project can be found in a dedicated album from FabLabBcn page via this link: <https://www.flickr.com/photos/fablabbarcelona/albums/72177720305238499>, making images available and giving easy access to them to partners, who can download them with different formats and dimensions. At the beginning of the project some of the images were taken from providers of both free and paid stock photography. As the project progresses, photos from partners, events and makerspaces will continuously be added and updated.

Video and video recording is used and will be exploited more in the future during webinars and community calls and then will be uploaded on the YouTube Channel of mAKE, reachable at the following link: <https://www.youtube.com/@makeafricaeu>.

- **General guidelines:** the general guidelines is a document shared with all the partners where practical steps such as events procedures, blogposts creation, mAKE logo and EU citation process can be found. The guidelines are updated monthly with new tasks or requests to partners, and with new assets that will be created. Guidelines are a way to help partners to guide them through the WP5 folder and easily find the templates, design and visual material or any other tools or resources they might need for the communication of mAKE. The guidelines are complemented with monthly WP5 meetings, a moment for partners to share doubts, requests and help and for WP5 to go through important steps, ask partners for specific tasks, show and update partners on new items within WP5 work.
- **Assets:** a dedicated folder for the assets is found in the brand and communication folder in the Drive, where partners will find the following items in order to properly use the mAKE branding and visual identity:
  1. **Mailchimp template:** the template for the newsletter is in html format, which can be used by partners through the platform for newsletter management which is Mailchimp.



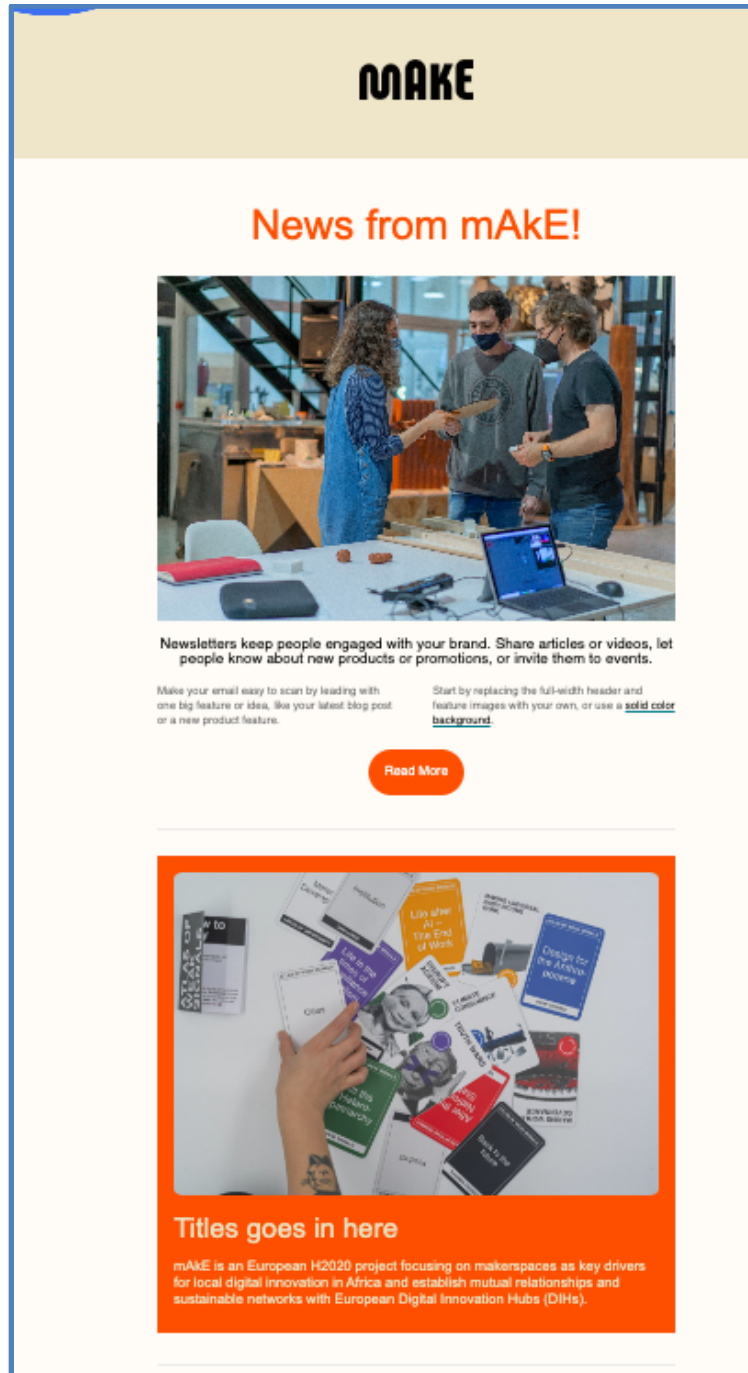


Figure 29: Newsletter Mailchimp template

Newsletters can be easily created through a large range of visual choices, adapting each time the newsletter to the current needs, for instance with the possibility to add videos, text and images, pictures separately, boxed text and so on. Having a standard template to work on is fundamental to ease the process of creating the newsletter, with all the brand identity, colours, logos and standard links as the social media accounts links.



2. Social media banners: social media banners are used on the four main social media – Twitter, Instagram, Facebook and LinkedIn –, each of them using unique and specific formats, therefore the outlook when posting on them is different according to the social media used, as in the examples below, where the Facebook banner (picture 21) is in landscape mode and the Instagram one (picture 22) in portrait mode.

These banners are standardised, but they can then be edited using Canva, a platform that will be introduced in paragraph 5.4.



Figure 30: Facebook banner



Figure 31: Instagram Stories



3. Social media avatars: since every social media has its own format and dimensions standardised, we need specific logos' format and size for each of the social platforms used for mAKE: Twitter, Instagram, Facebook and LinkedIn.



*Figure 32: mAKE logos for social media*

4. Stickers: they are uploaded in the assets folder as png and directly usable, as well as in the editable format in Canva, more information on the stickers and how they are created on Canva can be seen in paragraph 5.4.
5. Newsletter banner: in order to gain subscribers to the newsletter, a banner to be used by partners in their own newsletter has been created, with essential information on the project and a catchy outlook and image. A link will be inserted directly in the newsletter that takes to mAKE homepage, where one can easily subscribe to the newsletter. This banner can be used also for other collaborations and stakeholders, within the makerspaces and the maker community.





Figure 33: Newsletter banner

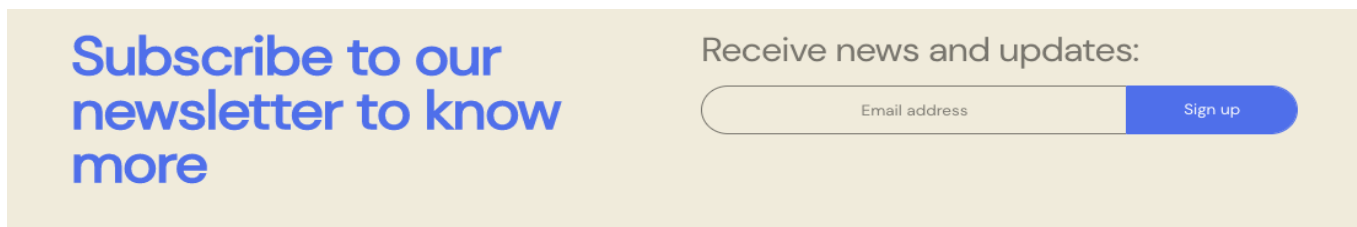


Figure 34: Website subscription format for newsletter

6. Icon set: icon sets are available for partners to use in visual assets, they are general icons which aim to represent a concept, they do not have a mAKE brand identity, as they are thought of as standard icons. They can be used in the presentation templates and any other type of assets to accompany and better represent a concept.



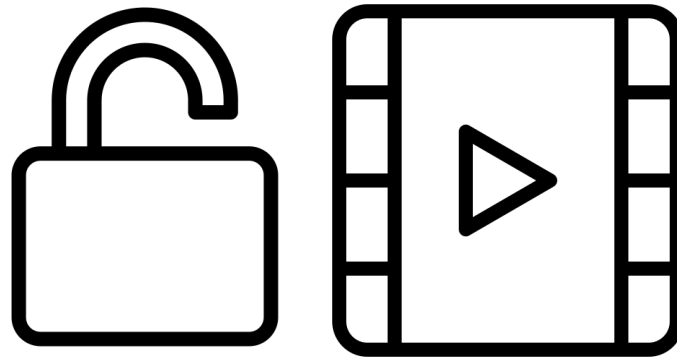


Figure 35: Icons example

- Zoom backgrounds: backgrounds for speakers on Zoom or other video-conferencing platforms are used in order to solidify and increment mAKE visibility and emphasise the visual identity when a webinar, video-call including the mAKE community, Knowledge Pills and others type of online conferences and meetings. The zoom backgrounds are created with different colours to give the speakers different choices. Below is just one example:



Figure 36: Zoom backgrounds

- Partners' information: it is a spreadsheet with partners' contacts, their website and social media and with one representative specifically for the communication side, a person that WP5 can address directly for any communication and dissemination activities.

## 5.2 Templates

In order to provide the consortium of partners with visual resources centred around mAKE branding, and in order to make the process smoother for them, templates have been developed to have easily accessible templates allowing the partners to promote the mAKE project with the correct branding, citation, colours' palette and be consistent in the use of the design:

- Presentation template:

The presentation template is a powerpoint document which is used by partners when representing the mAKE project, allowing for easy recognition of the brand and mAKE visual distinction. It is a user-friendly template, where every element is editable and includes charts, shapes and tables in order to better frame the content.

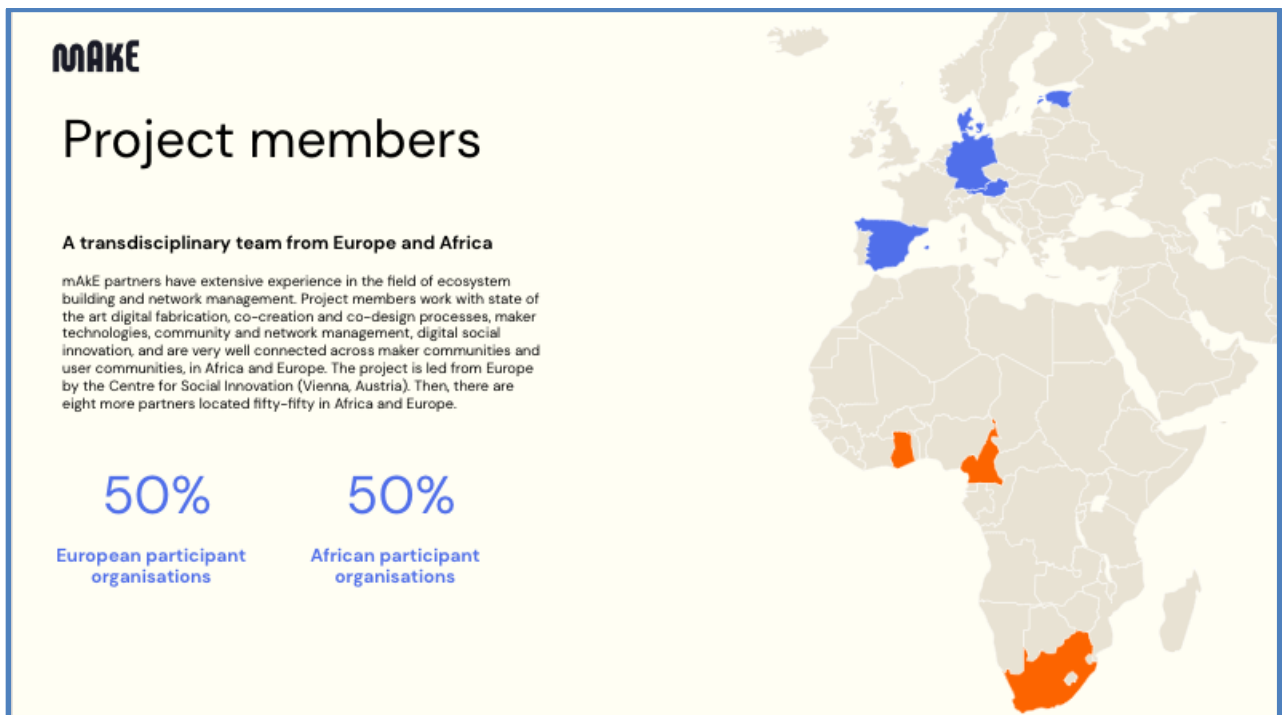


Figure 37: A slide from the presentation representing the partners on the map

A first version of the template was created at the beginning of the project, while a second version has been added recently with few amendments and new visual explanation of several aspects of mAKE. In addition, editable country-by-country maps have been added as well. The European and African countries are displayed in different slides either all together and individually, using different colours of the mAKE palette. This allows for flexibility and total liberty in the preparation of a presentation by the partners, who can then adapt it to their specific perspective, needs and cultural sensibility. The presentation template will be updated along the project in case of any requests or need for improvements of the template itself, according to the different usage that will be needed.



- General presentation templates on the mAKE project (2 templates): while the above presentation template is a general template without specific information on mAKE, these two powerpoint presentations are templates where the mAKE project is explained visually. Partners can use these two templates prepared with mAKE information, such as some tables and charts to define principles and key concepts within the mAKE project. The templates can be changed and adapted to the partners' needs as all the text, the icons and the images are individually editable. The below image shows the four key concepts of mAKE explained with icons and short sentences, a page that is editable in every part and can be changed in case the concepts, the description or the icons become obsolete as the project advances.

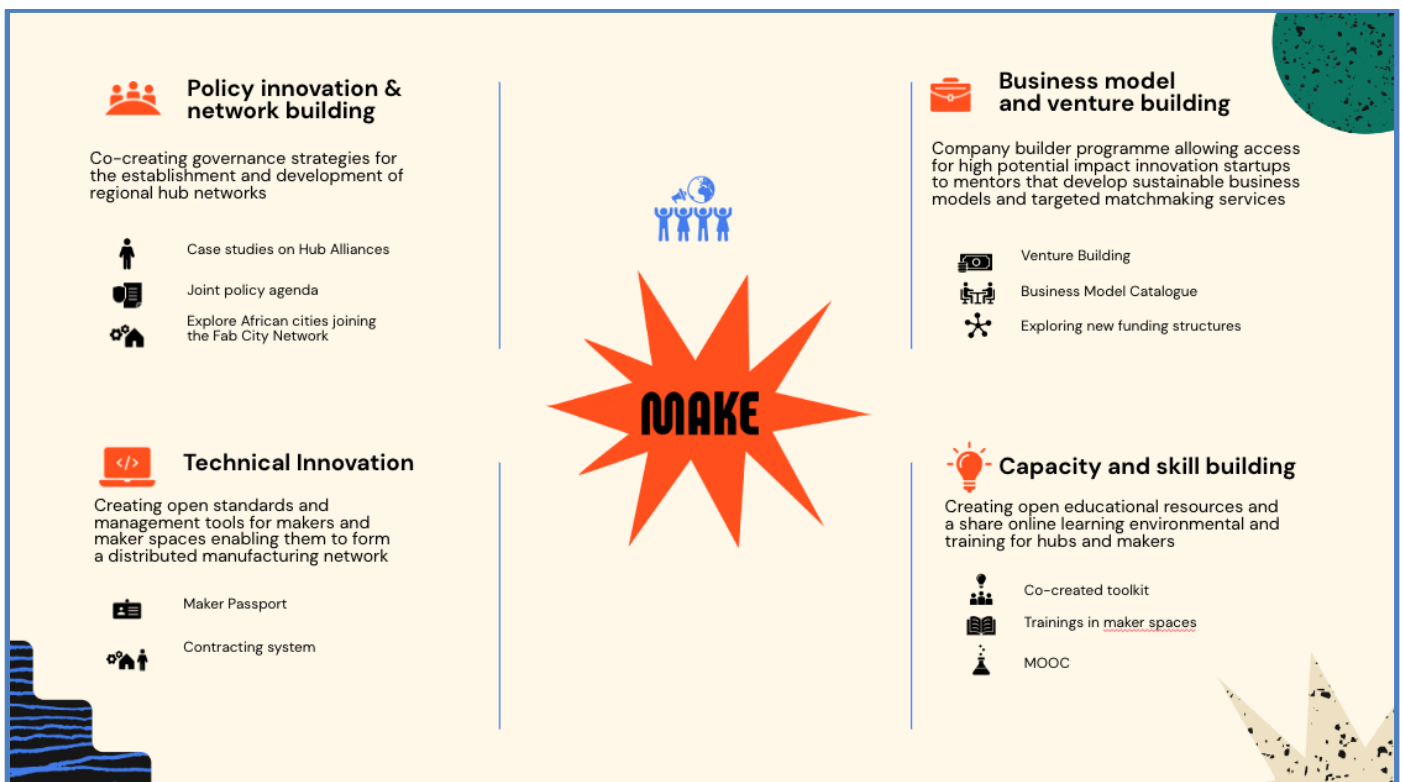


Figure 38: A slide from the presentation with a visual representation of key concepts



- Deliverable template: an updated version of the deliverable template is found in the WP5 folder shared with all the partners. This template contains the structure of the deliverable, divided into paragraphs, as well as indications on how to handle the different sections, the abbreviation, images, etc., with side comments to guide the user.



*Figure 39: Deliverable template*

## 5.3 How to's

How to's are the guidelines on how to deliver certain WP5 and general communication tasks: for instance, how to write an article, a guide of the video making process or how to develop a webinar. These how to's templates include:

- **How to write a blogpost:** this is a guide for partners to make it easier for them when writing what will go on the blog section of the mAKE website, explaining all the characteristics a blogpost should have. Number of words, length of the titles, the division in paragraphs, how many images they should provide, the tone of the writing, etc.

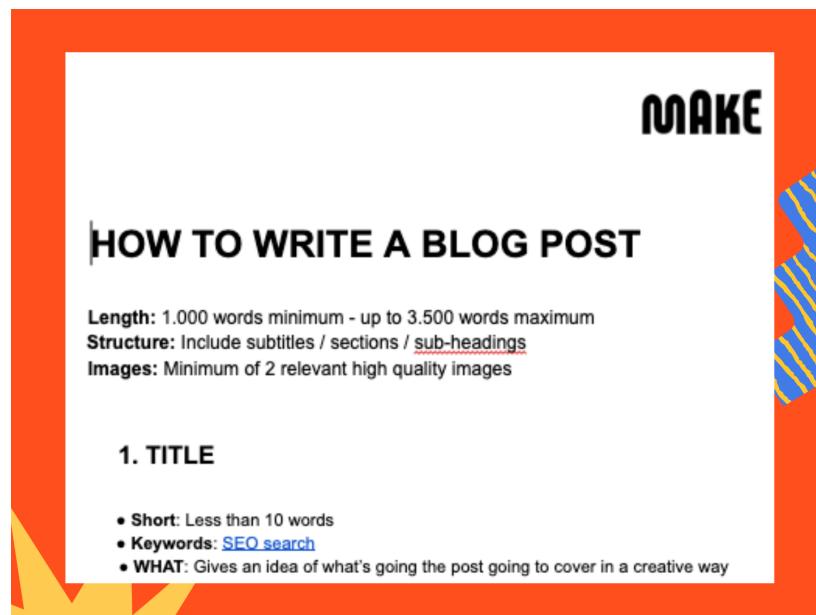
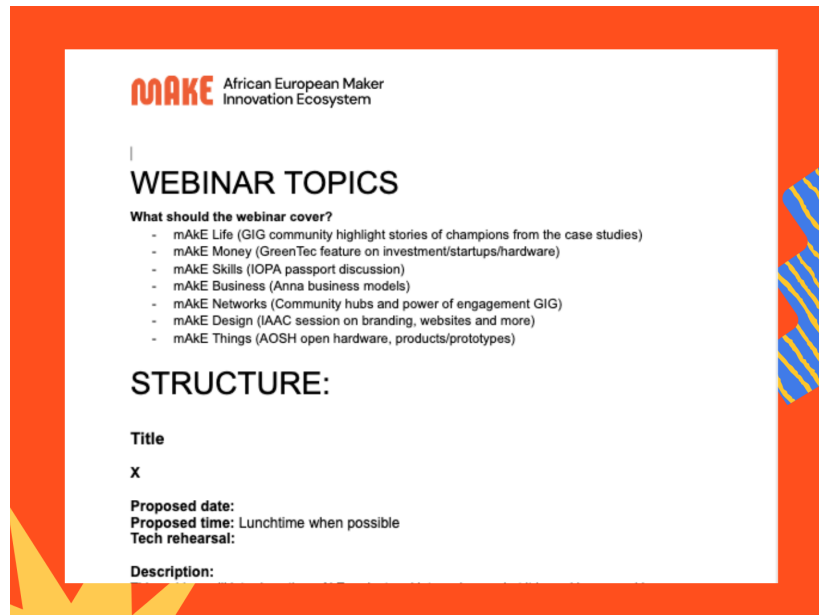


Figure 40: How-to write a blogpost template





*Figure 41: How-to develop a webinar template*

- **How-to develop a webinar:** the webinar template is a document built with questions, key information on the webinar and a detailed agenda of how the webinar will take place, divided into sections with different time for speakers, Q&A moment, lighting and sound tips, structure, etc.
- **How-to add the email signature:** this is a how-to template to add the partners' signature on one's email with the mAKE logo, explained with several steps and screenshot for a clear and user friendly procedure.



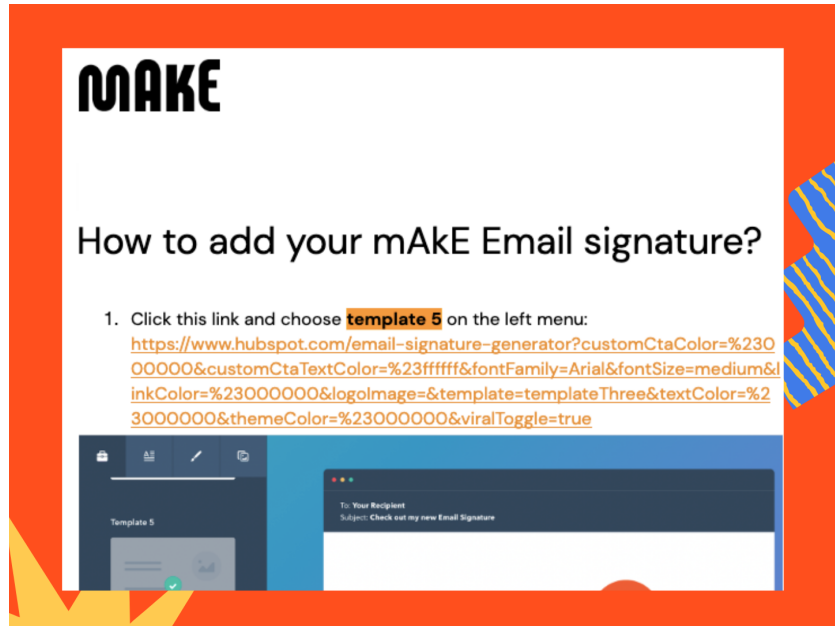


Figure 42: How-to add email signature

- **How to do video making:** two documents were developed in order to explain how to shoot.
  1. Introductory video guidelines: how to film introductory videos for the beginning of the project, either for social media or for the website, distinguishing among formats (landscape or portrait), content of the video, the length which is shorter for social media than for the website, etc. In this way, partners could film themselves knowing exactly what kind of content is expected from them, which format is needed, and to keep in mind the time they have at disposal.



Figure 43: How-to do introductory videos



2. How-to self-filming: the second document on video making is a guide that explains in detail all the elements for self-filming, with an image to explain each description. The items to consider are for instance location, background, light, placement of camera, indications on where to look at, what to wear, etc.

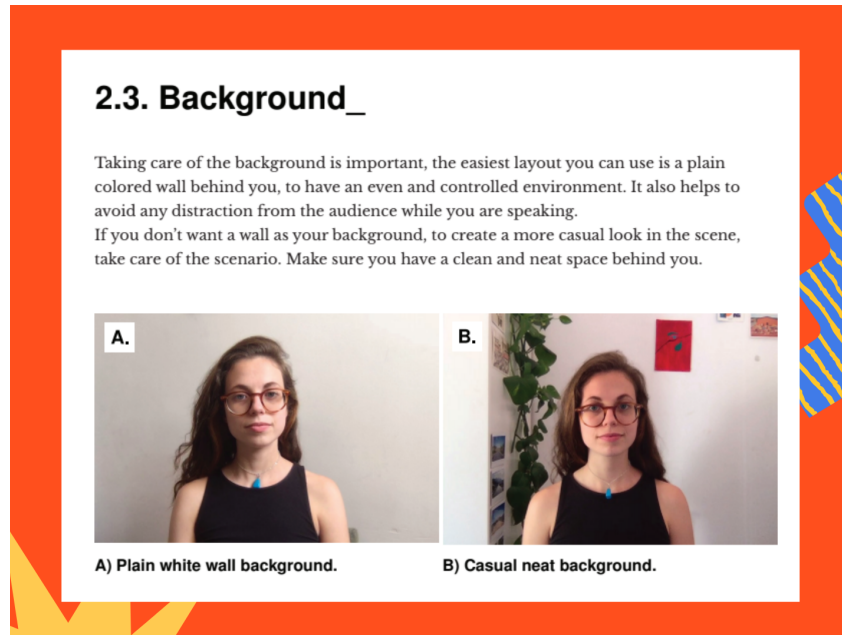


Figure 44: How-to self-filming

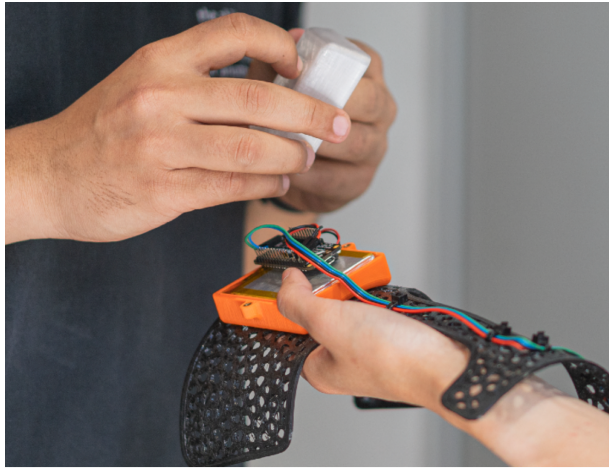
## 5.4 Editable assets: other templates

Utilising open-source tools such as [Canva](#), a graphic design platform that permits to create, modify and download your own design products, other types of assets are created and are available to partners in order to adjust the templates easily and in autonomy, making the process of internal communication and collaboration smoother and simplify the procedures. This allows as well to use different types of formats rather than uniquely powerpoint presentations, png format or general google sheets.

The new templates created are the following:

- **Brochure:** the brochure template is characterised by a clear brand identity, where images, text, charts and diagrams, lists with bullet points and other types of visual layout are available. This brochure allows for a wide range of different purposes and visual creations, with the aim of helping the partners with the creation of their own visual material with the mAKE branding.





## Welcome to mAKE!

mAKE is an innovation action that aims to promote cooperation and strategic partnerships between digital innovation hubs (DIHs) in Africa and Europe. Our overall aim is to strengthen the EU-Africa innovation ecosystem by creating the necessary infrastructure for decentral production and collaboration as well as shared policy frameworks and educational opportunities. mAKE is focused on connecting makerspaces in both Europe and Africa, in particular in regard to digital, local manufacturing and innovation in product design and development.

01

## Join the mAKE community! We want your story to be heard.

As a mAKE ambassador you have inspirational stories to share on how you and your community have reached aspirational goals for the work that you do as mAKErs. You will be a part of a global community of active makers across Europe and Africa where you can connect, share and learn.

We want your stories to be heard to inspire change and sustainable growth of the global mAKEr ecosystem. We, in turn, will provide your hub with our formal accreditation and promote you and your hub on our social media platforms and website via posts, social media takeovers, videos, interviews and more. As a Community Ambassador you are a builder of an amazing culture and embody what it truly means to be a mAKEr. We want to support your community, film, document and share the valuable work you do.

As a mAKE Ambassador we will support you by:

- Promoting your mAKEr activities and expertise across our network of changemakers and provide you with the visibility to put you on the map.
- Providing access to resources and events, including funding opportunities to attend global mAKE and partner events.
- Supporting your endeavours by offering financial assistance to organize community meet-ups and events.



As a mAKE consortium, we believe that by supporting those mAKErs making a difference we will directly contribute to the success of the mAKEr community as a whole. We're committed to finding African and European community makerspace legends who are doing the heavy lifting and working towards the greater goals of a thriving ecosystem of decentralised production.

Checkout our website and social media links here

02

Figure 45: Some pages sample of the brochure

- Community Connector templates: originally champions templates, have been created following a request by WP6, where one of the aims is to create more visibility for the maker community and the value thereof. The templates are specifically designed to share across social media and relevant platforms to promote not only mAKE but also the individuals who are engaged in their respective communities and the end-users of the capacity building tools developed through the project work packages.

The template is adapted and used for the internal Knowledge Pills series promoted and implemented by WP6 with the support of WP5, where consortium partners are participating to actively create discussions around the mAKE project, bringing their unique and cross-cultural perspective to the activity.





Figure 46: Community Connector and webinar template

- **Stickers:** they are editable on Canva and can be changed in shape, colours, format, space and location of words and the slogan itself. Stickers are catchy, handy and easily transportable cards that immediately transmit and communicate the identity of mAKE, using also the logo sometimes as part of the slogan. See “Community tools” paragraph 3.4.2 for more information.



Figure 47: Sticker example

- Flyer:** a flyer helps to promote the project in online and offline environments. Several styles of flyers are available, therefore partners can choose which one is better for their objective and purpose. The flyer consists of a front page, where there is minimum information, since the focus is on the title, images and shapes, in order to be catchy and attractive for the eye. A QR code is also present at the bottom, which allows the user to easily access the [makeafricaeu.org](http://makeafricaeu.org) website, without the need of typing the URL. The back page, also very visually appealing, gives the user more detailed information on the mAKE project, the text can be adaptable and can be substituted with other texts according to the partner's needs, for instance with a text focusing on the partner's specific activity within mAKE.



Figure 48: Front and back pages example of the flyer



- Roll up banner:** roll up or pull up banners can be used in public events such as conferences and summits where all the partners are represented by their logos. A QR code is also present, allowing the user to easily access the [makeafricaeu.org](http://makeafricaeu.org) website, without the need of typing the URL. The banner has a clear visual identity and immediately identifiable with the mAKE project.

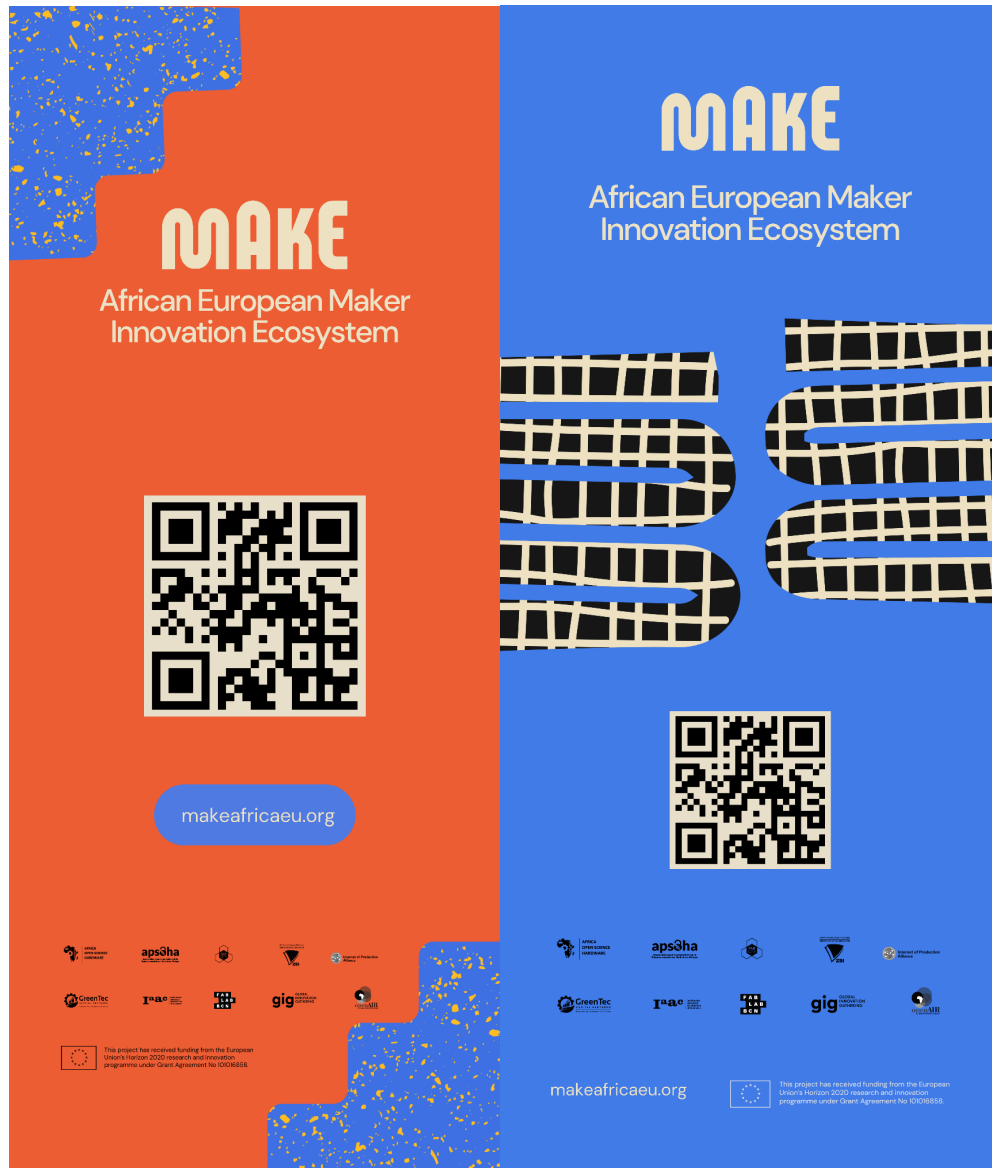


Figure 49: Pull-up banner samples



### 5.5 Other tools

Other internal capacity building tools that were developed and implemented during the first year of the project are the content calendar and the events collector.

- Content calendar:** the content calendar was developed with the aim of being accountable and transparent towards partners regarding the calendarization of posts on social media, blogposts on the website, events, webinars, workshops and any other activity that will take place along the year. The calendar has several tabs, the main division is:
  - One tab dedicated to partners filling with their actions and events during the year, divided per month and per partner and with limited entries in order to maintain it user-friendly.
  - A second tab to be filled only by WP5, essentially useful to calendarize all the activities from the different partners from the previous tab, in this case with more detailed information and the calendar is divided per week to be even more precise and accountable towards partners.

| PARTNERS                               |                          |     | January 23                               | February 23 | March 23 |
|--|--------------------------|-----|--|-------------|----------|
| <b>BLOGPOST</b>                        | 1/month<br>Link          | ZSI | Recap of 2022<br>- First year of<br>mAkE |             |          |
| <b>Events</b>                          |                          |     |  |             |          |
| <b>Point of contact</b>                | Name<br>Email            |     |  |             |          |
| <b>MEETING UPDATES / EMAIL UPDATES</b> | 1/every 3 months<br>Link |     |  |             |          |

Figure 50: Partners' calendar tab example

| CAMPAIGN            | FREQUENCY  | JANUARY '23       |                   |   |             |                     | FEBRUARY '23 |             |             |                                   |
|---------------------|--|-------------------|-------------------|---|-------------|---------------------|--------------|-------------|-------------|-----------------------------------|
|                     |  | 02/01-06/01       | 09/01-13/01       | 16/01-20/01   | 23/01-27/01 | 30/01-03/02         | 06/02-10/02  | 13/02-17/02 | 20/02-24/02 | 27/02-03/03                       |
| <b>Social media</b> | 1/week<br>Link/s   | X Twitter / Linke | X Twitter / Linke | X Twitter / LinkedIn  |             |                     |              |             |             |                                   |
| <b>Blog posts</b>   | 1/month<br>Link  |                   |                   |   |             | Blogpost to publish |              |             |             |                                   |
| <b>Newsletter</b>   | 4/year<br>Link   |                   |                   |   |             |                     |              |             |             | For the first year of the project |
| <b>Webinars</b>     | 3 weeks before + 1 week before send newsletter about webinar |                   |                   | 18th Webinar Consultancy - Business Models<br><a href="#">LINK</a><br>19th Webinar Fab City<br><a href="#">LINK</a> |             |                     |              |             |             |                                   |

Figure 51: WP5's calendar tab example



- Events collector:** this is the reporting spreadsheet where partners need to communicate their events information, such as date, description, type of audience and number of participants. This spreadsheet is particularly important for the reporting to the EU Commission and it's therefore mandatory to fill. Periodic reminders are sent to partners through the email common list and separately as well, in order to maximise the effort and make partners aware of this periodic task. WP5 monthly meetings are also an important moment to share a reminder on the events collector and taking the time as well in some sessions to fill directly live the events' entries. The events collector is found on the WP5 folder and it is pinned at the top, easily accessible for partners.

| Public events / Actions                      |  |   |   |                        |                |
|--|--|---|---|------------------------|----------------|
| WP / Partner or Member / Name of organizer/s | Name of event / action                           | Short description   | Link to website with all info                                   | Type of Event / Action | Date: DD/MM/YY |
|  | eLearning Africa                                 |   |   |                        | 11/05/22       |
|  | enpact event at Motionlab                        |   |   |                        | 07/06/22       |
|  | Re:publica                                       |   |   |                        |                |
|  | GIG weekend                                      |   |   |                        |                |
| WP5  | Makerfaire Barcelona                             |   |   | Makerfaire             | 02/07/2022     |
|  | African startups and German Smes - it's a match! | The event will enable a look at different It answers the key question whether the | <a href="https://www.linkedin.com">https://www.linkedin.com</a> | Local Regional and in  | 14/09/2022     |
| WP1  | African Makerspace Gathering                     |   |   | Local Regional and in  | 21/11/2022     |
| WP4  | African Makerspace Gathering                     |   |   | Local Regional and in  | 21/11/2022     |

Figure 52: Events collector



## 6. Usability and user experience

### 6.1 Language and cross-cultural communication

The primary language of mAKE communication and dissemination is English. The materials will be produced in English but the files will be shared with local partners which are encouraged to translate materials into their local languages. The mAKE project and its partners will make a cross package effort to make the outputs of mAKE more accessible to a wider audience than the English one.

Workshops, panel discussions, online webinars, offline conferences, seminars and any other kind of events where there will be knowledge sharing and discussion on the mAKE project, would be recorded and transcribed. Transcription will be pursued through an additional effort within WP3 efforts, using open source transcription software like [otter.ai](https://otter.ai) or [Replicate](https://replicate.ai). The assets will be shared through Canva, as partners will be able to edit the assets and the text accordingly in autonomy, see paragraph 5.4 for more information on editable assets.

As highlighted in deliverable 5.1 (CDO Plan), the mAKE project will prioritise barrier free and inclusive communication. This extends to:

- The prioritisation of gender-inclusive language (see Appendix O3 for more information on how to build a gender-sensitive language in communication).
- Accessible communication design – including the structure and design of content such as font size, alternative text, subtitles where possible.
- Language and formulation – including the use of clear and jargon-free language.

Further actions could be taken towards an inclusivity and multiplicity of languages, such as for instance the Google Translate automatic translation plug-in, a useful tool that could be applied to the website to enable automatic translation of the website into languages other than English.

### 6.2 User experience

User experience (UX) focuses on having a deep understanding of users, what they need, what they value, their abilities, and also their limitations. It also takes into account the business goals and objectives of the group managing the project.<sup>6</sup>

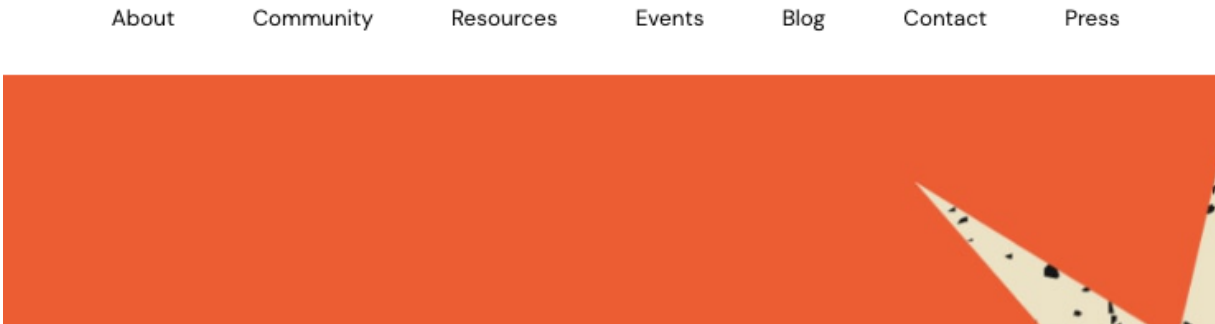
User experience refers in our case to user experience on the website, therefore on an external level and the partners experience within the work of WP5, internal level. WP5 aims at generating content that is useful, usable, valuable, findable and accessible<sup>7</sup>.

<sup>6</sup> <https://www.usability.gov/what-and-why/user-experience.html>

<sup>7</sup> <https://www.usability.gov/what-and-why/user-experience.html>



Concerning the external level, the website has a user-friendly interface, with a menu with a limited number of pages that well describe what will be encountered under each page, accessible at the following link: <https://makeafricaeu.org/>. Users can easily navigate in each page to find the section they are more interested in by scrolling down, find more about partners by clicking on their logos, reading our blogpost section to know more about mAKE activities, learn about upcoming events and reach out the mAKE partners also by the contact form under the Contact page.



*Figure 53: Menu on the homepage*

Regarding the internal level, to respect these principles is fundamental the management of the WP5 internal Drive folder and the creation of guidelines and templates in order to ease the process of communication of the mAKE project for the partners. An example of this is the adaptation of the content calendar to the partners' needs, therefore as specified in paragraph 5.5 Other tools, the calendar has several tabs, one tab is dedicated to partners filling with their actions and events during the year, divided per month and per partner and with limited entries in order to maintain it user-friendly.

As specified in the 5.1 paragraph – Design Guidelines, the partners have access to a user-friendly guide where they will find all the links, the task they have been asked to submit, to get the access to templates, how-to's, editable assets and other tools. In addition, assets are also downloadable directly on the website under the Press page as a ZIP file, by following this link: <https://makeafricaeu.org/press/>.



## 7. References

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## Appendix 01

Table 1: WPs, Cross-cutting tasks, final objectives, and Sharing and Embedding Location

| WP  | Cross-cutting task   | Final objective   | Sharing and Embedding Location  |
|-----|--|---|---|
| WP1 | WP1O1 Provide business expertise to high potential, digital innovation start-ups in order to build business models that are for-profit and for-purpose and improve lives through digital innovation and job creation | <ul style="list-style-type: none"> <li>Catalogue of Business Models (D1.1)</li> </ul>   | <ol style="list-style-type: none"> <li>Catalogue of Business Models: will be on a dedicated URL. It will be linked to from the <a href="#">IOP website</a>;</li> <li>Webinar Series: On Youtube; GIG playlist</li> <li>Open AIR will promote Catalogue via its <a href="#">Open AIR Twitter feed</a> and via blog post on <a href="#">Open AIR website</a></li> </ol> |
| WP1 |  | <ul style="list-style-type: none"> <li>D1.2 Venture Building Handbook</li> <li>D1.3 Matchmaking and Residency Report</li> <li>D1.4 Innovative Funding report</li> </ul> | <ol style="list-style-type: none"> <li>Share pdf on social media platforms, via email and embed on mAKE website</li> <li>Social media, email, and embed on mAKE website</li> </ol>  |
| WP2 | WP2O1 Map and evaluate existing approaches and case studies of regional and national associations in the fields of digital innovation, maker and innovation hubs in Africa and Europe                                | <ul style="list-style-type: none"> <li>Report of 7 Case studies (D2.1)</li> </ul>   | <ol style="list-style-type: none"> <li>FCF social media promotion</li> <li>FCF mailchimp (newsletter)</li> <li>FCF news section of the website</li> <li>FCF website (project section)</li> <li>Slack</li> <li>Open AIR will promote case study findings via <a href="#">Open AIR Twitter feed</a> and via blog post on <a href="#">Open AIR website</a></li> </ol>    |



|            |  |   |  |
|------------|--|---|--|
| <p>WP3</p> | <p>WP3O1 Enable the capacity development of makerspaces themselves</p> <p>WP3O2 Thereby improve and sustainably establish the services they offer to their entrepreneurial members, local SMEs, start-ups and individual makerspace members, in creating sustainable, impact-oriented digital innovations.</p> | <ul style="list-style-type: none"> <li>• Open Makerspace in a Box Toolkit (D3.1);</li> <li>• Training of Trainers Report (D3.2);</li> <li>• Open Educational Resources (D3.3);</li> <li>• MOOC platform (D3.4)</li> </ul> | <ol style="list-style-type: none"> <li>1. Open AIR will promote MOOC via Open AIR Twitter feed and via blog post on Open AIR website</li> <li>2. Mboalab website</li> <li>3. Mboalab Social Media Channels</li> <li>4. African Institute of Open Science and Hardware website</li> <li>5. African Institute of Open Science and Hardware social Media Channels</li> <li>6. MOOC platform will be embedded in the African Institute of Open Science and Hardware website</li> </ol> |
| <p>WP4</p> | <p>WP4O1 Skills: Enable mutual recognition of skills across makerspaces and between makers.</p>  | <p>Skills: Developing mutual recognition of hardware DIH users' skills using maker passports (Task 4.1)</p>   | <p>D4.1</p> <ul style="list-style-type: none"> <li>• 'Creating a digital maker passport' Survey</li> <li>• Mutual recognition standard Published on the <a href="#">IOP Pubpub</a> site under CC by SA 4.0 license.</li> </ul> <p>D4.2 - Maker passport - TBD - Likely a table to be Published on the <a href="#">IOP Pubpub</a> site under CC by SA 4.0</p>   |
| <p>WP4</p> | <p>WP4O2 Machinery: Enable Makers, their customers and potential customers to know where they can find the machines, they need to fill a manufacturing contract. Provide consistency in data to enable data to be shared in maps.</p>  | <p>Machinery: mapping of machinery in and near makerspaces across Africa and Europe (Task 4.2)</p>  | <p>D4.3 - Map published via Datasette at: <a href="https://map.internetofproduction.org/Global/Global">https://map.internetofproduction.org/Global/Global</a> and linked to from the <a href="#">IOP website</a>.</p> <p>Data submission form - Source code on <a href="#">IOP Github</a> under GNU General Public License 3.0</p> <p>User guides and information materials - Published on the <a href="#">IOP website</a> under CC by SA 4.0 license.</p>                         |





|     |  |   |   |
|-----|--|---|---|
| WP4 | WP4O3 Contracts: Enable contracting with a number of small distributed suppliers. Enable contracting across multiple geographies.  | Contracts: smart contracting to distribute production across the networks.  | Scoping document: Research on the state of distributed contracting, recommendations – Published on the <a href="#">IOP Pubpub</a> site under CC by SA 4.0 license.<br><br>D4.4 – Distributed contracting prototype – Open Source license – Shared on <a href="#">IOP Github</a> under GNU General Public License 3.0. |
| WP5 | WP5O4 Existing social innovation capacity building tools from open source hardware innovation, design and maker initiatives will be analysed in order to develop a set of design guidelines, templates and how-to's made available to the project and stakeholders   | <ul style="list-style-type: none"> <li>• Communication, Dissemination and Outreach plan (D5.1)</li> <li>• Project identity, website and social media (D5.2)</li> <li>• Guidelines for capacity building tools for social innovation (D5.4)</li> </ul> | <ol style="list-style-type: none"> <li>1. FCF social media promotion</li> <li>2. FCF mailchimp (newsletter)</li> <li>3. FCF news section of the website</li> <li>4. FCF website (project section)</li> <li>5. Slack</li> <li>6. mAKE social media</li> <li>7. mAKE website</li> <li>8. mAKE newsletter</li> </ol>     |
| WP6 | <p>WP6O1 Facilitate online community engagement in the different formats developed in WP1, WP2, WP3 and WP4</p> <p>WP6O3 Ensure the project's sustainability beyond the H2020 funding period by embedding project outcomes into existing institutional structures, i.e. open education resources and trainings, moderated online platforms, maps, management systems, and catalogues developed in WP2, WP3 and WP4</p> | <ul style="list-style-type: none"> <li>• Community Activation &amp; Engagement Strategy (D6.1)</li> <li>• Sharing &amp; Embedding Strategy (D6.3)</li> </ul>  | <ol style="list-style-type: none"> <li>1. mAKE Website and GiG Website</li> <li>2. GiG Newsletter</li> <li>3. GiG Blogposts</li> <li>4. GiG Social Media</li> <li>5. Wikifactory group</li> </ol>   |
| WP7 | Collect information across all WPs   | <p>2 objectives:</p> <ul style="list-style-type: none"> <li>– ensure that the project's network structures, the capacity building support, the created infrastructures, and</li> </ul>  | Impact publication (scientific publication to be defined which journal/conference)  |



|  |  |  |  |
|--|--|--|--|
|  |  | <p>the created materials are developed according to the project plan and are contributing to the project objectives.</p> <ul style="list-style-type: none"><li>- provide evidence of the envisioned impact, and to identify facts and stories that demonstrate the project's influence beyond the borders of the consortium, especially in terms of capacity building.</li></ul> |  |
|--|--|--|--|



## Appendix 02

Table 2: Moodle features

| Features                                 | Description  |
|--|--|
| <b>General features</b>                  |  |
| Modern, easy to use interface            | Designed to be responsive and accessible, the Moodle interface is easy to navigate on both desktop and mobile devices.                                 |
| Personalised Dashboard                   | Display current, past and future courses, along with tasks due.  |
| Collaborative tools and activities       | Work and learn together in forums, wikis, glossaries, database activities, and much more.  |
| All-in-one calendar                      | Moodle's calendar tool helps you keep track of your academic or company calendar, course deadlines, group meetings, and other personal events.         |
| Convenient file management               | Drag and drop files from cloud storage services including MS OneDrive, Dropbox and Google Drive.   |
| Simple and intuitive text editor         | Format text and conveniently add media and images with an editor that works across all web browsers and devices.                                       |
| Notifications                            | When enabled, users can receive automatic alerts on new assignments and deadlines, forum posts and also send private messages to one another.          |
| Track progress                           | Educators and learners can track progress and completion with an array of options for tracking individual activities or resources and at course level. |
| <b>Administrative features</b>           |  |
| Customisable site design and layout      | Easily customise a Moodle theme with your logo, colour schemes and much more – or simply design your own theme.  |
| Secure authentication and mass enrolment | Over 50 authentication and enrolment options to add and enrol users to your Moodle site and courses.   |
| Multilingual capability                  | Allow users to view course content and learn in their own language, or set it up for multilingual users and organisations.                             |



| Features  | Description  |
|---|--|
| Bulk course creation and easy backup              | Add courses in bulk, backup and restore large courses with ease.   |
| Manage user roles and permissions                 | Address security concerns by defining roles to specify and manage user access.   |
| Supports open standards                           | Readily import and export IMS-LTI, SCORM courses and more into Moodle.   |
| High interoperability                             | Freely integrate external applications and content or create your own plugin for custom integrations.  |
| Simple plugin management                          | Install and disable plugins within a single admin interface.   |
| Regular security updates                          | Moodle is regularly updated with the latest security patches to help ensure your Moodle site is secure.  |
| Detailed reporting and logs                       | View and generate reports on activity and participation at course and site level.  |
| <b>Course development and Management Features</b> |  |
| Direct learning paths                             | Design and manage courses to meet various requirements. Classes can be instructor-led, self-paced, blended or entirely online.                       |
| Encourage collaboration                           | Built-in collaborative publishing features foster engagement and encourage content-driven collaboration.   |
| Embed external resources                          | Teach materials and include assignments from other sites and connect to the gradebook in Moodle.   |
| Multimedia Integration                            | Moodle's built-in media support enables you to easily search for and insert video and audio files in your courses.                                   |
| Group management                                  | Group learners to share courses, differentiate activities and facilitate team work.  |
| Marking workflow                                  | Conveniently assign different markers to assignments, manage grade moderation and control when marks are released to individual learners.            |
| In-line marking                                   | Easily review and provide in-line feedback by annotating files directly within browser.  |
| Peer and self assessment                          | Built-in activities such as workshops and surveys encourages learners to view, grade and assess their own and other course members' work as a group. |



| Features                 | Description   |
|--------------------------|---|
| Integrated Badges        | Fully compatible with Mozilla Open Badges, motivate learners and reward participation and achievement with customised Badges. |
| Outcomes and rubrics     | Select from advanced grading methods to tailor the gradebook to your course and examination criteria.                         |
| Competency based marking | Set up competencies with personal learning plans across courses and activities..  |
| Security and privacy     | Teach and share in a private space only you and your class can access.  |



## Appendix 03

Guidelines for using gender-sensitive language in communication, research and administration developed by Reutlingen University:

[https://eige.europa.eu/sites/default/files/reutlingen\\_university\\_guidelines\\_for\\_using\\_gender-sensitive\\_language.pdf](https://eige.europa.eu/sites/default/files/reutlingen_university_guidelines_for_using_gender-sensitive_language.pdf)

