OpenMaker

D1.6

LES governance system 2.0

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EXECUTIVE SUMMARY

The present document is conceived as a supporting tool for the OpenMaker's partners involved in the set up and management of the so-called Local Enabling Spaces (LESs), i.e. spaces decentralized across Europe operating as enabling environments for radical innovation in the European manufacturing sector, inspired by the emerging practices and approaches of the maker movement and embedded within an overall vision of systemic social innovation.

Specifically, the document defines the LES model after almost two years of experience of all LES partners and points out the learning outcomes and lessons learnt throughout the course of the project, as well as the precise functions and responsibilities that ensured a sound management of the activities performed by the LESs.

The new version of this deliverable points out not only the overall governance framework of the LES ecosystem, but also any significant change in the model operated by the different LES partners.

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INTRODUCTION

The Local Enabling Spaces (LESs) are the humus of the OpenMaker project.

While providing the ground for experimenting innovation processes at the cross road between social innovation, open source ICT and manufacturing, they work to ignite and propagate large scale processes of awareness raising across sectors and borders, with the overall intention to mobilize actors, organisations and communities across Europe towards collective efforts of innovation for common good.

The design, operationalization and follow up of the LESs are the core activities within Work-Package 1, whose overarching goal is to 'boost the construction and scaling of vibrant communities between traditional manufacturers, makers, citizens and stakeholders, in order to contribute to raise collective awareness on open manufacturing and facilitate its transposition to larger transnational scales'.

In particular, WP1 builds upon the following specific objectives:

- To set up Local Enabling Spaces (LES) that will work as activators, connectors and facilitators of meetings and joint initiatives between traditional manufacturing entrepreneurs, makers, citizens and stakeholders. Within this framework, LES also act as hubs of local clusters of 'connected LES', to seed the scaling up of the community;

- To deliver an Enabling Programme in each LES, to encourage meetings and relationships between traditional manufacturers and makers leading to the creation of trust and structured collaborations;

- To manage a Pilot Supporting Scheme to help turning the cooperation between traditional manufacturers and makers into the creation of open manufacturing solutions and technologies.

Within this framework, the present deliverable mainly addresses the first specific objective, to the extent that it provides a set of basic instructions that have been followed to implement the LES model in the four EU countries directly involved as pilot contexts, namely Italy, Slovakia, Spain and UK.

Indeed, the LES model presented in this document is a final version that establishes an overall proposition common to all LES pilots, independently from the specific features that each LES has taken according to contextual factors and dynamics, e.g. the relevance of specific manufacturing sectors, the presence of communities and spaces already active in the field of the project, the existence of specific innovation policies and programmes at national and regional levels.

This updated version of the governance document is released to describe in detail how and to what extent the LES model has been implemented in each pilot country, pointing out any significant change in its characteristics and governance

framework. Moreover, some first indications on value modelling for the long-term sustainability of the LES ecosystem (and in turn, for the OpenMaker project) has started being carried out throughout the course of the project and is presented in this document.

The target audience of this deliverable is mainly internal to the OpenMaker team. Nevertheless, it has been made available to practitioners, entrepreneurs, researchers and policy-makers willing to get insights on potential models of enabling environments for systemic social innovation in manufacturing, potentially scalable to other sectors and domains.

Deliverable 1.6 is organized into the following sections:

- The first section contains a description of the LES model, highlighting its positioning within the overall OpenMaker project;

- The second section provides a description of the LES proposition and its components;

- The third section points out the main functions and working rules in each LES.

- The fourth section gives a description of the LES membership process and features.

- The fifth section presents some first insights on the value modelling for the long-term sustainability of the LES ecosystem.

1. THE LES MODEL: AN ENABLING ENVIRONMENT FOR OPEN MANUFACTURING COMMUNITIES

OpenMaker aims at creating a **transformational and collaborative ecosystem that fosters collective innovations within the European manufacturing sector and drives it towards more sustainable business models, products and organizational models**.

Building on the *paradigm* of **open manufacturing**, the project will achieve this goal by bringing together traditional manufacturers and digital-savvy makers and engaging in the process all relevant stakeholders such as citizens, universities, local authorities, civil society organisations and policy-makers. Leveraging on ICT-powered processes to raise awareness, enhance engagement, trust and sense of community belonging, the project intends to facilitate the creation and growth of **open manufacturing communities across borders and sectoral boundaries**. OpenMaker harnesses the power of digital social interactions to develop an environment where trust in business partners and engagement in common values drive the innovation process towards more sustainable products. All in all, the project addresses the issue of how fostering collective innovation in manufacturing in terms of emergence of a **cooperative and collectively-aware social network conducive to innovation**, where trust is seen as a key enabling factor: awareness of the value systems of other members and trust among them represent a major driver for innovators to take on challenges, and for business and innovation to flourish.

Open manufacturing is the leading concept guiding the OpenMaker project and the setting up of the LESs. Although the field is still in rapid transformation and no univocal definition can be applied[1], it is mainly characterized by the application of open source principles to production processes, and by key concepts such as open data, open software and hardware, distributed networking, collaboration, sharing and transparency. To many extents, this concept has been triggered by recent innovations in ICT, which have enabled individuals and organisations to organize in ubiquitous networks, and collaborate on common projects under a peer to peer logic, harnessing web-based collaboration, open source design and internet distribution. Besides, the increased access to basic tools of production such as 3D printers, computer numeric control machines, CAD software and electronics assembly have turned makers into manufacturers, providing them with unedited power and capacity to make the most of creativity and innovation in the current digital fabrication revolution. In turn, this has opened the way to newcomers in the market, which have brought about radical new methods, practices and organisational forms to develop sustainable and socially innovative products and services. Considered in its potential to infuse production processes with social innovation principles and values, open manufacturing opens room to cultivate radical changes in the economy and society, able to preserve and grow the public

good while steering disruptive paths of innovation.

Within this vision, the **Local Enabling Spaces (LESs)** are the beating heart of the OpenMaker project.

Conceived as **physical spaces across Europe** for co-creation and co-learning, their ultimate goal is to host, support and scale up communities of individuals and organisations committed in achieving meaningful and sustainable innovations in the European manufacturing sector, driving the latter to experiment with and engage in new business models, production processes, products and governance systems based on horizontal collaboration, decentralization, openness and trust, within an overall vision of a zero marginal cost society.

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[1] *Open Manufacturing is an emerging practice which infuses production processes with social innovation principles. It has been described in various ways, and the plurality of definitions hints at the lack of maturity and constant evolution of the sector. While it is a challenge to define clear boundaries, it is possible to identify some defining characters. Michel Bauwens (2010), the founder of the P2P Foundation, defines the sector as 'open manufacturing' and 'p2p production' highlighting the collaborative character of this emerging form of handcraft production. According to the Open Manufacturing Network – 'Open Manufacturing is about bringing free and open source software development methodology and philosophy to the design and construction of the physical world'. Another popular term is 'open source hardware'; according to the Open Source Hardware Association (OSHA), open source hardware (OSHW) 'is hardware whose design is made publicly available so that anyone can study, modify, distribute, make, and sell the design or hardware based on that design. Open source hardware gives people the freedom to control their technology while sharing knowledge and encouraging commerce through the open exchange of designs'. The Institute for the Future talks about 'social manufacturing' (IFTF, 2012), pointing out the socio-economic transformative power of this approach with respect to the way we organize to produce what we need as human societies. All definitions share a reference to the maker movement and to open source principles.*

The **LESs are designed as territorial hubs of a European ecosystem of innovation in manufacturing**: leveraging upon local community-building processes combined with ICT to amplify engagement and audience reach, they operate as propellers of connections and relations across borders and sectoral boundaries, and as a lever of trust and capacity building. By providing spaces for makers, manufacturers and stakeholders to connect, and by hosting continuous processes of interaction and exchange among them, the LESs support and steer the launch of joint initiatives and coalitions between manufacturing entrepreneurs, makers, citizens and stakeholders, making the most of creativity and innovation that can be unleashed thanks to the structured connection between different competences, knowledge and expertise.

The LES model envisaged by OpenMaker takes inspiration from recent developments in the field of social innovation; in particular, it is triggered by the empowered and often unedited patterns of community-building for social change that blend horizontal mechanisms of collaboration, digital technologies, and physical spaces for co-working and co-design to drive a new kind of innovation, based on democratic participation and openness, and oriented to societal goods.

Within this framework, the Impact Hub Network[2], FabLabs[3] and Living Labs[4] – among others – represent some major examples of *spaces for social change* that OpenMaker project considers as sound models for the promotion of systemic social innovation, and in turn for radical, sustainable transformations within the European manufacturing sector. All these models - all in all conceived as shared, networked platforms for convening people and common purposes of social transformation - provide examples of sustainable infrastructures based on **access** rather than on property, on a **shared identity and values**, and on an overall positioning that, while operating locally, is often oriented to **global challenges and performed with an international breath**.

'Another world is not just possible, it's happening. People from every profession, background and culture are being united by one thing – the imagination and drive to pursue enterprising ideas for a radically better world. These are the people who see and do things differently: community leaders, the entrepreneurs, the executives, the policy-makers, the freelance professionals. However, many people around the world are still involved in everyday practices that are no longer sustainable for the planet. And there are some others who are already practising those new ways that are best for tackling the most complex problems in the world. According to Margareth Wheatley, in the backside of the old practices that are falling, the new ones emerge. There is not one moment when individual people or the whole system changes, so we need to give hospice to the old while we give way to and illuminate the new practices.'

Impact HUB Hosting & Programming Handbook

Coherently, the LES model is conceived as an overall **networked organizational form** that sees the presence of **five main territorial hubs** in Florence, Turin,

2 www.impacthub.net

3 www.fablabs.io

4 www.openlivinglabs.eu

Bratislava, Bilbao and Liverpool, respectively run by five partners of the OpenMaker consortium (LAMA, TOP-IX, Centire, Tecnalia and Beautiful Ideas Company, acting on behalf of Accord Group).
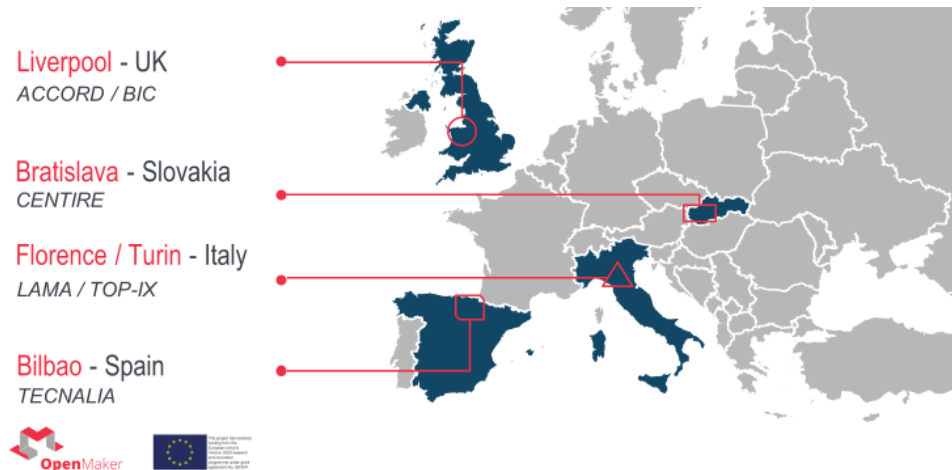
A common Theory of Change guide the action of the five hubs, which in turn develop specific strategies for the creation and growth of open manufacturing communities.

> Crucial in all this is the idea that open making be positioned to unleash more than strictly economic process efficiencies; it can unlock democratic and distributed innovation and thereby the deep transition to economies of democratic purpose and belonging. It is a true craft revival, which can generate fresh sources of meaningful work, learning, identity and innovation. To achieve this, a new type of institutional economics is required.

Indy Johar, OpenMaker Innovation Leader, Democratic Making: manifesting inclusive growth and radical contribution, piece of article on Medium, 2016

The five LESs are not only connected to each other; importantly, they are grounded **on strategic connections and collaborations with existing influential nodes** at the local, regional and national levels, be they spaces for innovation, communities, organisations and actors already positioned in the field, as well as local innovators and change-makers that recognize themselves in OpenMaker's key values and messages. Therefore, the model of the LES is designed to allow them to operate as platforms of connections among these connected 'LESs', seeding the scaling up of the community at larger scales and scopes. These clusters of 'connected LESs' constitute the engine of OpenMaker, and their identification and engagement in the process is delivered by the LES partners on the ground of their own knowledge and expertise, as well as thanks to the insights stemming from a continuous work of network analysis realized by the international research team of the project (Bosphorus University, IMT, Zurich University).

Each LES is defined by three aspects:

- **Community:** each LES works to create a community of individuals that share the values and the vision of the OpenMaker project. Makers, social innovators, startuppers, manufacturing entrepreneurs, practitioners and citizens, the community is not pre-determined nor sectorally connoted; rather, it is 'hosted as a deliberate serendipity engine built upon seeding cultures of purpose, empathy, collaboration and openness' (Johar, 2016).

- **Space**: it is the main medium of aggregation and connection, needed to host and facilitate the meeting among individuals with different backgrounds and mind-sets. A LES may build on one or more physical spaces, but it is important that, from time to time, such spaces are able to convene on messages and values that can be recognized by the community. As we will see further on, the overall OpenMaker community can also rely on a common digital space, the Digital Social Platform (DSP).

- **Programme:** events of networking, informal moments of exchange and knowledge sharing, co-creation and co-design activities and workshops, social dinners, - among others – are all examples of events that each LES promotes as part of its own community-building process. Whatever the format, all events ground on 'methodologies of hosting' that facilitate peer to peer exchanges and knowledge sharing among members, and that from time to time drive the community throughout topics and issues that are meaningful and relevant to them.
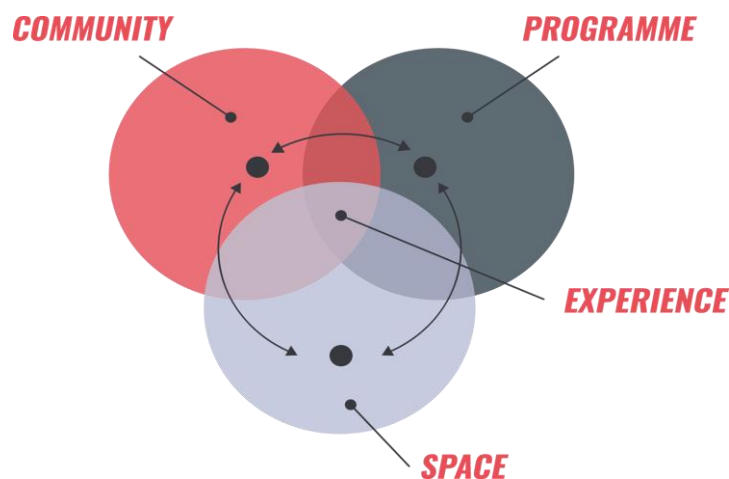

Community, Space and Programme influence each other, to the extent that they produce continuous feedback loops that progress and evolve with the project development. The intersection among these three dimensions determines the LES experience, e.g. the value proposition represented by each LES. Rather than an accelerator of ideas and projects, under this perspective the LES is an 'experience environment' that enables the members 'to actively co-construct their own experiences through personalized interaction, thereby co-creating unique value for themselves' (Prahalad and Ramaswamy, 2004).

2. THE LES PROPOSITION

As briefly anticipated in the previous section, the overall LES model grounds on a value proposition that combines community-building, spaces for co-creation and co-learning, programmes of events dedicated to support the scaling up of the community and its engagement in open manufacturing approaches and values.

The LES is based on four components – Enablers, Local Enabling Programme, Digital Social Platform, Pilot Support Scheme – that constitute its overall proposition.
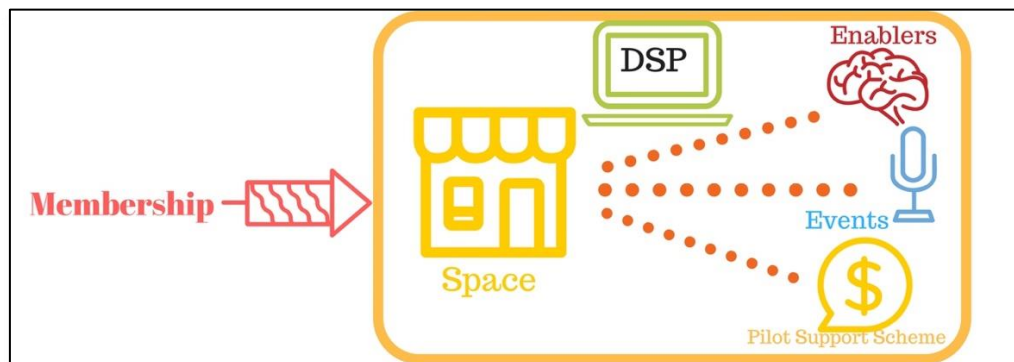
2.1 The Enablers

The so-called Enablers are the key teams in charge of managing the LESs and their activities. They design and implement the strategy of community-building in the five territorial contexts targeted by the project, and represent the compasses that facilitate the communities in achieving meaningful impacts.

Besides, they work in close cooperation with the Managers of the main building blocks of the project, namely Digital Social Platform (work-package 2), Impact Assessment (work-package 3) and Exploitation and Outreach (work-package 4), to ensure that all the value generated through the LESs is captured, amplified and disseminated at larger scales and scopes.

OpenMaker foresees five team of Enablers, one for each of the five LESs envisaged by the project. These are managed respectively by LAMA, Tecnalia, Centire, BICo and TOP-IX. As a basic rule, each Team is composed at least by three persons, covering respectively coordination functions, community-building and management functions, and communication functions.

The Enablers are the facilitators of the community-building process in each context targeted by the project, and represent the 'human platforms' that channel relationships, collaboration and cooperation among the members of the community. More than match-makers, the Enablers perform a culture of hospitality which continuously feeds the three pillars of the LES model (space, content and community). They are available to all members to organize events,

promote ideas and identify synergies, and represent the point of reference within the overall OpenMaker community.

While acting under a shared Theory of Change, each Enabling Team is autonomous in realising its own community building process, in setting up the precise shape of its own space (centralized vs distributed), and in designing and implementing its own

> 'In an environment of collaborative learning, facilitators are persons who help people find the path to reach their own objectives faster. They facilitate encounters between people and match them with their supporting role models ensuring people with complementary skills and experience can collaborate together. They offer services and advice on methods for peer to peer learning including places, people, and books and support the access to these resources. They support people's initiatives and often times are the cause of these initiatives.'
>
> Ivan Illich

Enabling Programme, according to the specific features of each targeted context.

The Enabling Teams adopt common working tools and are coordinated as an overall Enabling Team (see section 3), in order to promote learning and information exchange, identify synergies and make the most of the international collaboration rooted in OpenMaker.

Importantly, all the Enablers are trained with specific methodologies of facilitation and hosting, taking again inspiration from approaches and methods used within the Impact Hub Network. A specific deliverable of methodological guidelines (D1.4) is part of the toolkit to set up and manage a Local Enabling Space. The tool is public and accessible to third parties willing to adopt a similar model to manage their spaces, contents and communities.

2.2 The Local Enabling Programme (LEP)

The **Local Enabling Programme** lies at the core of the Local Enabling Space, being the engine that facilitates the construction of vibrant communities of knowledge and practice around the open manufacturing topic.

Its specific goal is to support and nurture structured connections, relationships and partnerships between the members of the community, and ultimately drive the latter towards meaningful, socially driven impacts.

The programme consists of a **set of events of different type and scale**, which run on a constant basis throughout the overall project implementation. The LEP also plays an important role in promoting awareness-raising processes about open manufacturing.

Importantly, the typology and contents of the LEP are driven by the community itself - representing the mood of the community and its evolution over time -, and are thus dependant from specific members' interests, needs and aspirations.

Nonetheless, as can be seen in the LES methodological guidelines (D1.4), all LEPs ground on common methodologies and approaches of facilitation, matchmaking and hosting that allow the community to remain open, grow and evolve over time.

LEP's events revolve around creating opportunities for the members, inspiring them with success stories, creating new connections and facilitating learning and knowledge exchanges. Some examples could be talks and presentations, matchmaking activities, co-creation workshops, business clinics and social dinners, either produced by the Enablers or co-produced with the members.

All LEP's activities will be documented in the Enabling Programme Report (D1.8, forthcoming).

2.3 Digital Social Platform

An innovative model for open manufacturing requires an innovative approach in the use of social technologies, including a digital social platform for harnessing the shared wealth of information and opportunities for collaborative action based on mutual trust and dynamics of co-evolution.

The goals of the **OpenMaker Digital Social Platform** are:

- to apply a solid **conceptual framework** that encompasses the full scope of interactions including the knowledge sharing and collaborative actions;
- to create a **digital space** to reflect the expressions and representations of these interactions, manage the data flow, apply machine learning and semantic processing;
- to deploy the necessary **metrics** to quantify and measure the key interaction modalities that define the success and failures of this system as a social network.

Under this perspective, the DSP of OpenMaker is developed to assist members in:
- Organising individual and general knowledge and sharing it with their network;
- Coordinating their actions starting from shared social values and aiming at measurable output;
- Evaluating the output of their activity based on feedback and new evidence;
- Rewarding contribution with social (or potentially also material) recognition;
- Mapping the structure of connection between players;
- Simulate future possible scenarios;

The overarching goal is to make the DSP act as an integrated hub for the dynamic aggregation of information from a variety of resources, allowing members to evaluate, monitor and interact with ease.

From the conceptual point of view the structure of the platform is based on three pillars:

1. Knowledge Network Component. This component performs data harvesting, data rendering (preprocessing, aggregation, postprocessing) which captures community-relevant content such as profiles and demographics, social media posts and news articles, information around maker events and organizations. It thus produces actionable information that creates value for the community. Stage of implementation: most of functionalities are readily implemented and integrated.

2. Value Systems Component. This component uses a psychosocial profiling approach that allows to map users into clusters based on their general and makership specific value systems (e.g. importance of social inclusion of disadvantaged people, the importance of open hardware and social, economic and environmental sustainability of new technologies). By prompting this information to the users, the system increases their awareness of the community values. It also increases the potential for finding common grounds between digital and traditional makers by pointing to similarities and complementarities that will help them in working together. Further, this information is used by other components e.g. to assess the level of trust among DSP users. Stage of implementation: the prototype is implemented, its integration to DSP is in progress.

3. Recommender, Reputation and Trust Component. This component combines advanced machine learning modules in the back-end and user interaction in the front-end. The user interaction in the front-end allows to collect users' direct endorsements to one another. The component as a whole allows to generate user specific recommendations in terms of content such as relevant news articles, modes of action based on user values, issues/ challenges and preferences, as well as on influencers (e.g. prominent users) within the geographic proximity. Stage of implementation: recommendation of content is implemented and its integration to DSP is in progress. Front-end direct user endorsements to one another is in internal evaluation stage.

4. Action Network Component: This component monitors and renders actions of the registered members and presents them on the member profiles. The component helps to observe value-consistent engagements and contributions of the members to the community. The information rendered via the modules of this component is further used within recommendation and reputation related modules. Stage: To be implemented in next two months.

OM DSP Conceptual Framework Model: Integrated Components
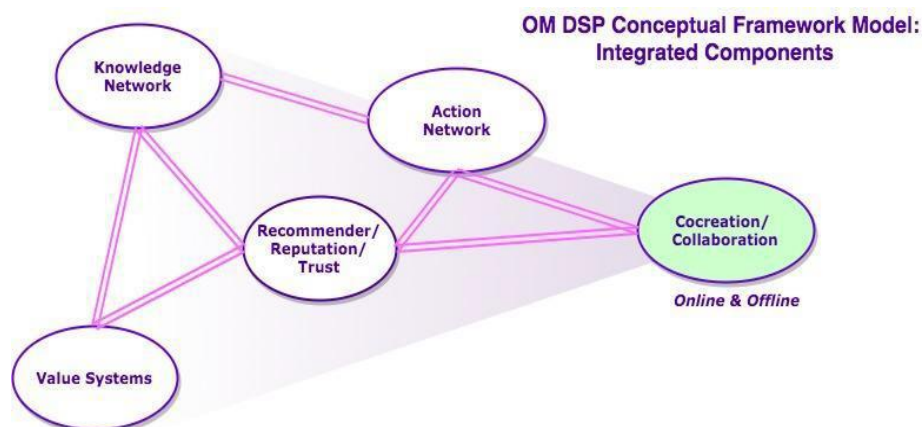
The core modules of the DSP will allow it to serve as:

- Collector: a place to gather data and information on people behaviors or attitudes, extracting them from other social media platform or from the interactions that will happen on DSP.

- Catalogue: an ordered and well-defined showcase of completed and on-going projects of members and challenges launched to members of the community.

- Exchange: a tool for sharing knowledge, expertise and valuable information (technical, financial and managerial) on existing initiatives, to facilitate risk management and the reuse of successful solutions in the community within various fields of interest.

- Showcase: a tool for promoting successful initiatives, and the community at large, to stakeholders and potential investors by highlighting achievements and results of the employed innovative methodologies.

- Map: a compass to navigate among initiatives following different paths and levels of resolution.

As for the researchers'role, it is about understanding the principles of this kind of forms of production and the ways to successfully export/replicate them, tuning local inputs to achieve global outcomes. The research team has designed part of the incentives, motivations, reputations and network metrics with an Agent-Based approach (described in Deliverable 2.3) to monitor interactions and will provide feedback to the members on how to create positive loops.

2.4 Pilot Support Scheme (PSS)

The PSS provided funding to prototype solutions realized in partnership by makers and manufacturers that are members of the OpenMaker community.

It has been an incentive for collaboration and innovation, and a concrete opportunity for manufacturers to explore approaches and methods rooted in open manufacturing.

Through a call of proposals[5] designed in collaboration among the five LESs and managed with the support of an external panel of advisors for the final selection, the LESs provided seed funding to 20 **prototyping projects** of open manufacturing solutions/technologies, proposed by a partnership including at least one manufacturer and one maker.

Projects had to clearly proof both their technical feasibility, their market potential, and how their implementation would contribute to solve a social/environmental challenge previously identified as important by the LES members.

The support scheme received 137 applications from 308 organizations.

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[5] *http://openmaker.eu/pilot-support-scheme/*

At the end of the selection process, following inputs from the project coordinator, an additional prize has been assigned to the idea "Crafting Fashion with robots" from Italy. This has been possible by re-allocating a small amount of budget from each partner to generate a 21st prize.

This has been done to recognise the value of leading women in the open-manufacturing community, which is still male dominated. This additional prize is an added value to the project and will contribute to its visibility. The idea has been accelerated by LAMA as Italian LES.

During the realization phase, the awarded projects are organizing at least 3 public meetings: the first one to present the prototype idea; the second one to present the mid-term state of the art; the last one to present the results. Feedbacks and suggestions have been collected during the meeting in the LES and continuously on the DSP from the local and international community.

3. LESs' WORKING RULES

3.1 LESs' functions

In every LES, three profiles of Enablers act as a unique team to drive the community-building process and its overall action towards meaningful impacts:

- **LES Coordinator**: it coordinates the overall LES' activities and maintains constant relationships and exchange with the other LES' partners. It is the reference point for all members interested in getting in contact with the other LESs, connected LESs and project partners. It coordinates the PSS, being the reference point for local and international opportunities linked to the PSS. It represents the LES locally with institutions, and during local, national and international events, conventions, fairs.

- **LES Community Manager**: it facilitates connections within the overall LES community, and is the reference point for all the members, acting as collector of ideas and proposals. In the development of its role, it shall exploit the DSP as an engine to reinforce and scale-up connections, matchmaking and collaboration processes.

- **LES Communication manager**: it is the LES reference point for all communication related to the programme, the space and the DSP. It coordinates the delivery of newsletters, invites members to the events and ensures that processes of exchange and interactions also occur via social networks and the DSP itself. It manages the overarching activities of project communication, from press office to web and social networks, and interacts with the Communication Manager of the project (WP4 Leader).

Role	Function
LES Coordinators	• Coordination and Reporting • Institutional relations • Quality assurance • Management of the PSS
LES Community Managers	• Coordination of the LEP • Community management • Monitoring and reporting about the LEP
LES Communication Managers	• LES communication plan set up and delivery • Coordination of the communication activities (newsletter, communication of events, social network animation, press and media relations)

	• Coordination on WP4 activities

All these teams are coordinated at the work-package level by the Leader of WP1 (LAMA).

3.2 Key roles connected to the LES

Project Communication Manager: Coordinator of work-package 4, it acts as a reference point for all the Enablers in order to deliver local communication strategies that are coherent with the general communication and dissemination strategy of the project. The WP4 coordinator has the responsibility to provide to LESs Communication Managers with the tools they need to communicate, share news and information with all members and stakeholder at the LESs levels.

Impact Evaluation Manager: Coordinator of work-package 3, it acts as a reference point for all LESs Community Managers, in order to ensure the collection of impact data and allow continuous monitoring of the LESs development.

DSP Manager: Coordinator of work-package 2, it acts as the reference point for the development of the DSP. It does not perform its function through a direct connection with all the local Enabling Teams, but it rather coordinates with work-package 1 leader.

The following figure provides an overview of the LESs' organizational chart within the overall project structure:
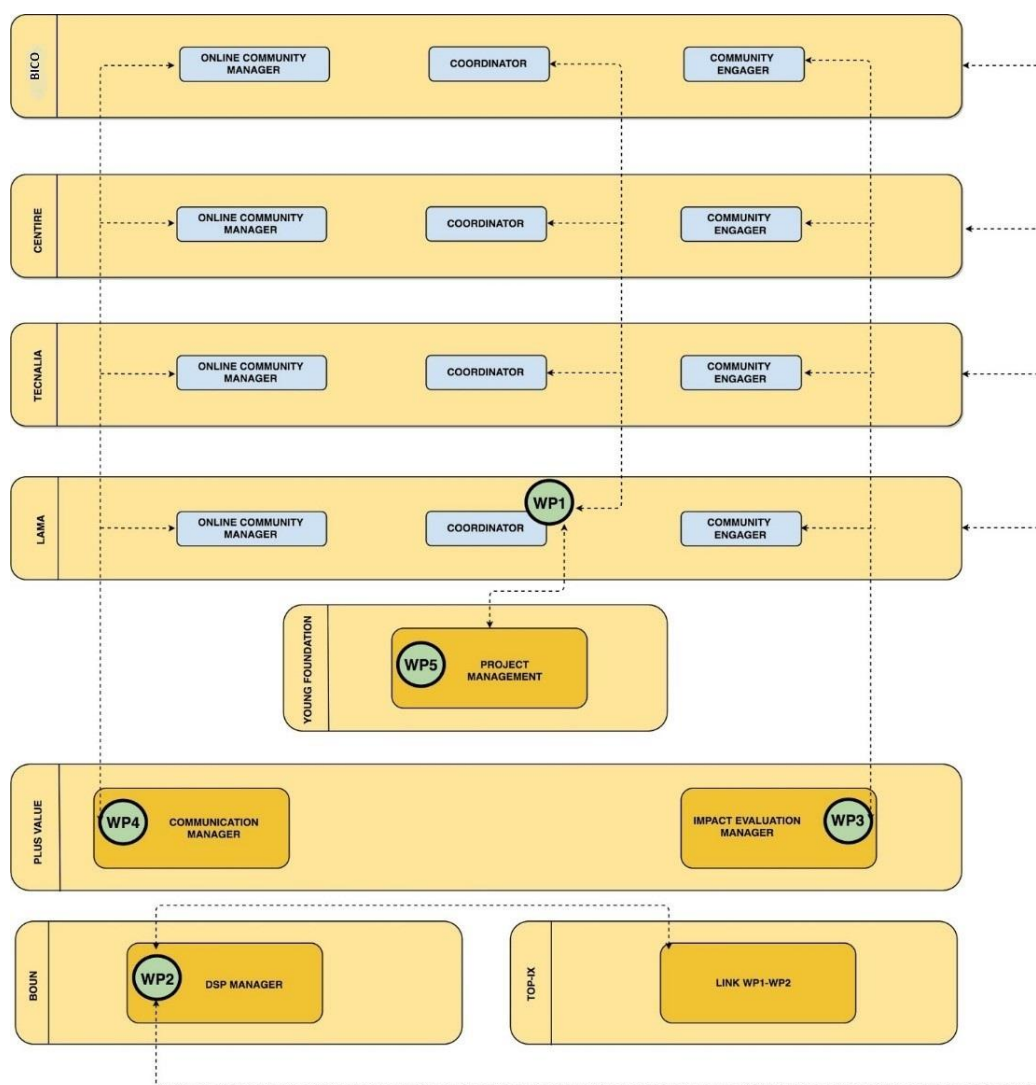
3.3 LES's coordination

LESs' Coordinators are expected to coordinate monthly, mainly via:

- monthly conference calls to check the progress of the activities;
- monthly updating of the internal logbook;
- conference calls held on specific issues;
- adoption of common working documents stored in a shared digital environment.

The LESs also adopt a shared calendar for the LEPs' activities. Besides, all LESs adopt common reporting procedures and tools within the framework of the overall project management structure.

LESs can be visited and their LEPs are open to everybody and can be attended by every member of the OpenMaker Community, independently from the LES where they have originally become members.

3.4 LESs' Monitoring

All LESs adopt a common monitoring system which will allow the impact team of the project to measure and assess the value generated through the LES ecosystem.

Data collection is based on the following tools and procedures:

Feedback forms - Distributed by LES Enablers to all LES Users at each Local Enabling Programme (LEP) activity; - Filled in by LES Users after each LEP activity; - Collected by LES Enablers after each LEP activity; - Data uploaded to CRM System by LES Enablers after each LEP activity
CRM The information provided on the DSP are uploaded as qualitative and quantitative data on the CRM, including: - Number of active LES Members - Number of projects/partnerships started - Keywords and tags - Soft Skills - Technical Skills - Network - Business Information - Other
Interviews with members LES Enablers conduct follow-up semi-structured interviews with LES members, selected from on-boarding data and semi-structured interview data (collected during LES's engagement and on-boarding processes)
Interviews with LES Enablers Semi-structured interviews with LES Enablers to capture their inputs on Impact. Interviews will refer to and expand on data collected by LES Enablers in the CRM System, to get their overview/insights at the LES scale (not just the individual LES member scale)
Social Media Social media contents created and shared by LES Enablers and members will be also used to monitor and evaluate the impact.

The LES Impact Evaluation Manager (Plus Value) is responsible for coordinating data collection with the Enablers in each LES.

4. MEMBERSHIP

To the extent that the LESs build on community building processes, a membership pattern is needed to define how an individual takes part to the community and in which ways he/she can recognize himself/herself as a 'member' of a wider group.

Although the membership model envisaged by OpenMaker is fluid and not based on monetary exchanges (i.e. members do not pay for access to spaces, events and community), it is nonetheless characterized by a key aspect: **a real, offline relationship with the LES Enabling Teams**. This essentially means that all LESs build on connections in the real life, and that an in depth knowledge of members' professional backgrounds, interests and system values is a crucial starting point to enable that *netweaving* process underpinning the LES action.

For this reason, the LES community building – and in turn, the membership process – follows a **chain of nomination methodology** that starts from direct contacts and connections that LESs already have with relevant individuals and organisations (the so-called *inner circle*), and develops towards individuals that are still out of the LESs' reach. In this way, the 'borders' of the community are not pre-determined by narrow and arbitrary definitions of the target-groups; instead, we want to offer a place (physical and digital) where people who wouldn't necessarily identify themselves as 'Open manufacturers' can convey, exchange and collaborate with like-minded people in order to bring innovation and inclusion into manufacturing.

This means that instead of taking a sector-based approach to the community building process (e.g. selecting areas of manufacturing, or prioritising SMEs or large companies) or a semantic approach (identifying organisations interested into determined key-words interpreted as proxies for their interest into open manufacturing), we take a place-based approach (targeting individuals who show the features of a broadly defined 'open manufacturer archetype' instead of organisations, and offering them a conducive environment where they could experiment with creating new products/services/solutions). Within this place-based approach, both sectoral and semantic considerations can be taken into account without the risk of losing potential innovation leaders.

The Mapping Process
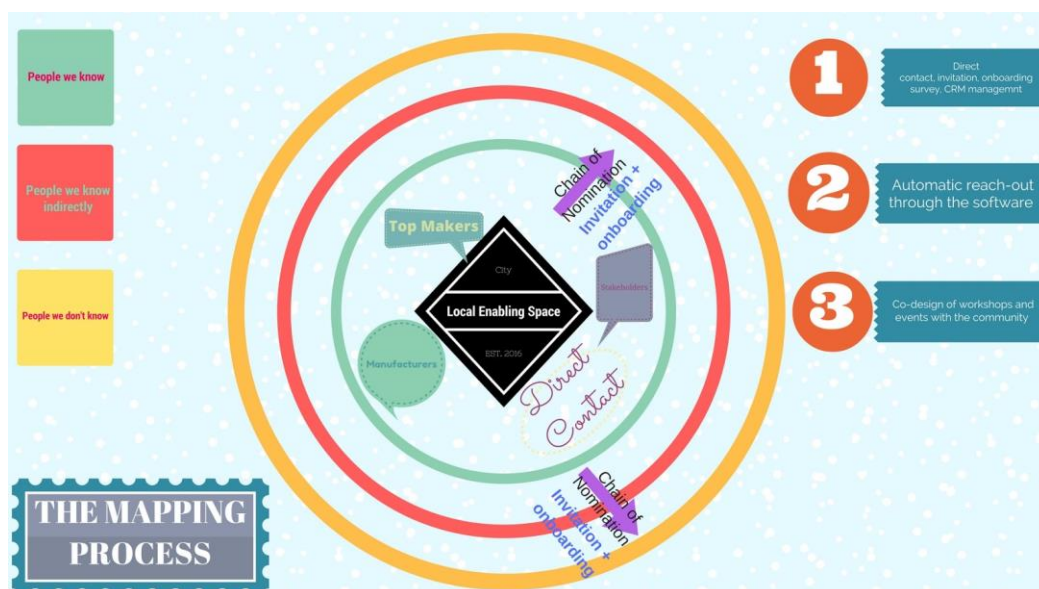
As the chain of nomination evolves, the Enabling Teams establish real life relations and connections, using a set of common tools that support this 'mapping > getting in contact > inviting > joining' journey:

- **Onboarding form**: a basic survey which helps to gather a set of preliminary information about the prospective members. The OF is the entry point to the community and to the DSP;
- **CRM**: integrated and nurtured by the OF, it helps all LESs Enablers to have continuous updating about the development of contacts and the community;
- **Semi-structured interviews**: thought to go beyond the first contact and establish true relations.
- **Membership agreement**: this grants access to the DSP and provides specific information about data treatments and privacy policies.
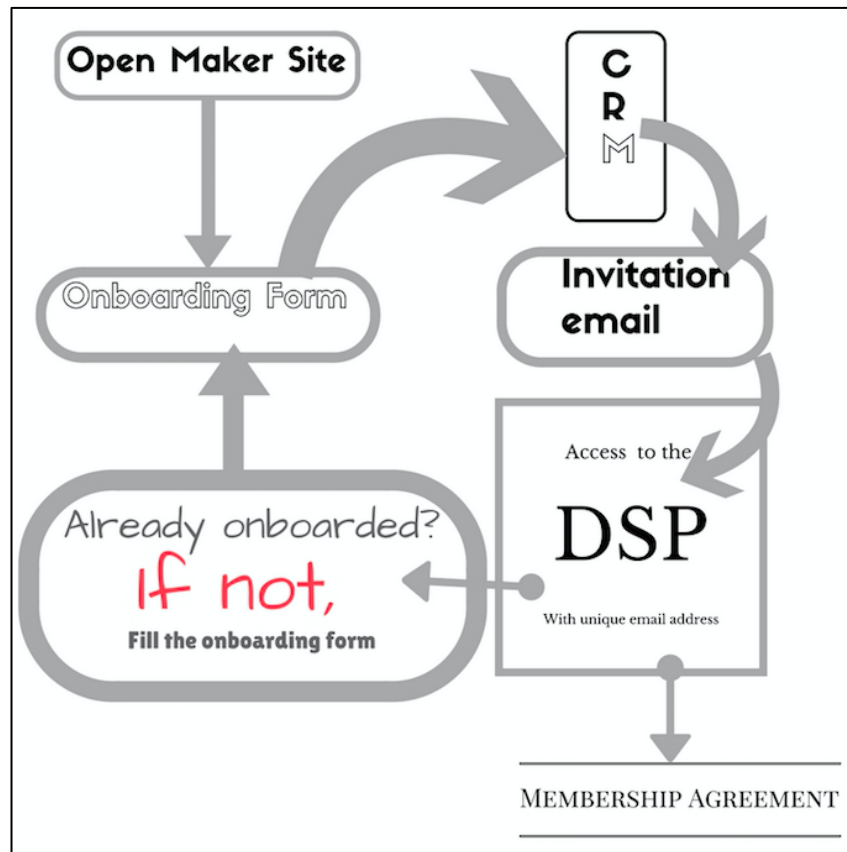
At this point, the person has finalized the subscription and created his own profile to login in the platform, and can access to the following:

- Members are entitled to benefit from the facilitation and match-making processes developed by the Enabling teams, in order to identify potential collaborations and partnerships with other members and stakeholders.
- Members can participate to events organised by the project.
- Members can propose events and co-organize them.
- Members can submit their projects at the PSS call and receive assistance to prepare the application.

Through the DSP, members can:

- View news and events related to makers communities, in particular OpenMaker news and events (this feature is accessible also by non-members);
- Share news and events through social media channels (this feature is accessible also by non-members);
- Personalize their Newsfeed;
- Search for community members and topics, and view member profiles and related social networks links;
- View various interaction maps related to a specific topic;

- View experts and influencers on a topic;
- Nominate other people interested in joining the community;
- Participate to challenges launched by the LES, in partnership with companies and foundations;
- Fill their profile with information they would like to share with other community members;
- Access to all information related to the Piloting Support Scheme (accessible also by non-members);
- Send the application to the Piloting Support Scheme;
- Leave comments and feedbacks.