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Working Through Communities

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Key takeaways:

- Knowledge for policy emerges from connections between different actors, inside and outside policy or scientific institutions. One of the ways to channel their tacit as well as explicit knowledge is to work through communities of practice (CoPs).
- Communities focus on specific knowledge or competences needed, facilitating learning and exchanges which improve performance.
- The chapter focuses on the benefits and different ways organisations, researchers and policymakers can mobilise a vast array of internal and external stakeholders around common issues, topics and practices and with specific goals, in the form of communities.
- Effective collaboration through communities reduces duplication, allows exchange and broader inputs from various parts of an organisation as well as its relevant circles and leads to greater strategic alignment while increasing efficiency and quality of work.
- The chapter offers a self-assessment tool for a community – the CoP Success Wheel – encompassing eight success factors. For a community to succeed, it is important to create the right environment which includes setting strategic goals and objectives, real governance and support from senior management, empowered community leaders, investment in the community management role and sound and user-friendly digital environments to host conversations, exchanges and repositories of knowledge.



Communities – A Form of Collective Intelligence

Mobilising knowledge, i.e., people and resources, is vital nowadays for the co-creation of policies. Therefore this chapter focuses on the benefits and the different ways organisations, researchers and policymakers can mobilise a vast array of internal and external stakeholders around common issues, and with specific goals, in the form of communities. Such pooling of knowledge from many places and people is vital for modern scientific organisations producing relevant input in a policy context.

One new way of working is with **communities**, sometimes referred to as knowledge communities, communities of practice (CoPs) or of interest (see the next section for some terminological clarifications). What binds them all is the social interaction at their core: they naturally take advantage of social learning and exchange between members. Such interaction can take physical or virtual forms, or both. Communities give people opportunities to experiment with what they have learnt, in safe environments and with the support of other people.

In *The Knowledge Illusion*, cognitive scientists [Sloman and Fernbach \(2017\)](#) show that our intelligence resides not in individual brains but in the collective mind. We think in groups and no individual knows everything. Sloman puts forward the importance of communities of knowledge as collaborative processes, built on trust between the community members, that house expertise in the right way and that know how to take advantage of it. Communities help to see blind spots and opportunities in our current knowledge and promote knowledge sharing as a default basis for policies based on the collective intelligence of the organisation's people and external partners ([Wenger-Trayner and Wenger-Trayner, 2015](#)).

A growing number of web-based applications have proven that a group of diverse, independent and informed people might well outperform even the best individual estimate or decision ([Bonabeau, 2009](#)). To unlock the potential of collective intelligence, we need to understand how collective intelligence systems and tools work. 'They need not magic, but the science from which the magic comes' ([Malone et al., 2010](#)).

To tap into a crowd's wisdom and avoid tapping into a crowd's madness ([Bonabeau, 2009](#)), it is important to get the mechanisms for harnessing the power of collective intelligence right. When the MIT Centre for Collective Intelligence looked into hundreds of examples of web-enabled collective intelligence, researchers identified a small set of building blocks as the 'genes' of collective intelligence systems (see [Fig. 1](#)).

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Never think alone
Steven Sloman.

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Communities give people opportunities to experiment with what they have learnt, in safe environments and with the support of other people

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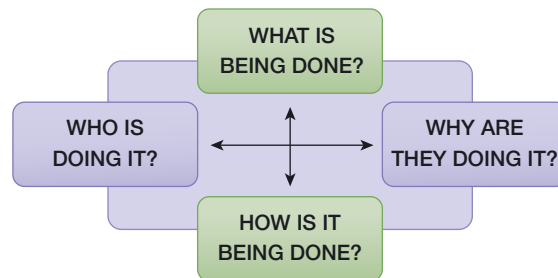


FIGURE 1 The design questions behind collective intelligence. (After [Malone et al. \(2010\)](#).)

In our individual brain, linking observation, analysis, creativity, memory, judgement and wisdom makes the whole much more than the sum of its parts. Mulgan argues that assemblies or communities work the same way: the ones ‘that bring together many elements will be vital if the world is to navigate some of its biggest challenges, from health and climate change to migration. Their role will be to orchestrate knowledge and also apply much more systematic methods to knowledge about that knowledge – including metadata, verification tools and tags, and careful attention to how knowledge is used in practice’ ([Mulgan, 2017](#)).

For public institutions, collective intelligence at work challenges structures, roles and boundaries; therefore it is important for organisations to be aware of how they observe their environments and how they harvest the know-how of their employees, external partners and other audiences. Sometimes it may require developing entirely new ways of thinking and working ([Mulgan, 2017](#)).

“Communities promote knowledge sharing as a default basis for policies based on the collective intelligence of the organisation’s people and external partners”

Communities of Practice – Definitions, Typology, Success Factors and Benefits

Definitions

Based on our experience at the European Commission, the concept of communities of knowledge or knowledge communities, as labelled by Sloman, is narrowed down to communities of practice (CoPs). Our working definition of a CoP is *a group of individuals who share their interests and problems within a specific topic and gain a greater degree of knowledge and expertise through regular interaction*. In a CoP people share and develop their knowledge within a domain, as well as use and develop the community’s body of knowledge which includes practices, methods, guidelines and other resources. Communities of practice go beyond just sharing information as practitioners have a desire to build and improve their practice (Ingham, 2017).

Three main elements define a CoP: the shared **domain** of interest, the **community** where members engage in joint activities and discussions and the **practice** itself, as members are practitioners who share a repertoire of resources such as experience, stories, tools, etc. ([Wenger-Trayner and Wenger-Trayner, 2015](#)).



Unlike independent and loosely governed bodies of years ago, today's communities require real structure. Recent research also shows that communities work best if they have clear accountability and management oversight (McDermott and Archibald, 2013).

To become effective, a community operates best according to the following drivers: **acquiring** (user-centric information provision), **connecting** (networking and exchange) or **co-creating** (results oriented co-work, creation of new knowledge, learning process).

Typology

A JRC assessment study of about 20 internal (JRC and the Commission) CoPs identifies three basic community types:

- Hub – CoPs that connect people with knowledge content; the primary value is to *inform* the organisation around the topic of practice.
- Platform – CoPs where members collaborate to produce new knowledge; the primary value is *discussion* and *collaboration* around the topic of practice.
- Service – CoPs that provide a service; the primary value is to *deliver* value and *cooperate* with the rest of the organisation in the achievement of its goals.

This typology represents a progression of CoP types (Fig. 2). CoPs typically begin life as Hubs, then progress to Platforms and then mature into Services. This can be seen as an evolution of value over time, though it should be noted that Hubs and Platforms offer value in their own right; they are not necessarily destined to evolve into the higher value types, though the potential for this could always be explored. This reinforces Sloman's theory that in a community of knowledge, what matters more than having knowledge is having access to knowledge (Sloman and Fernbach, 2017).

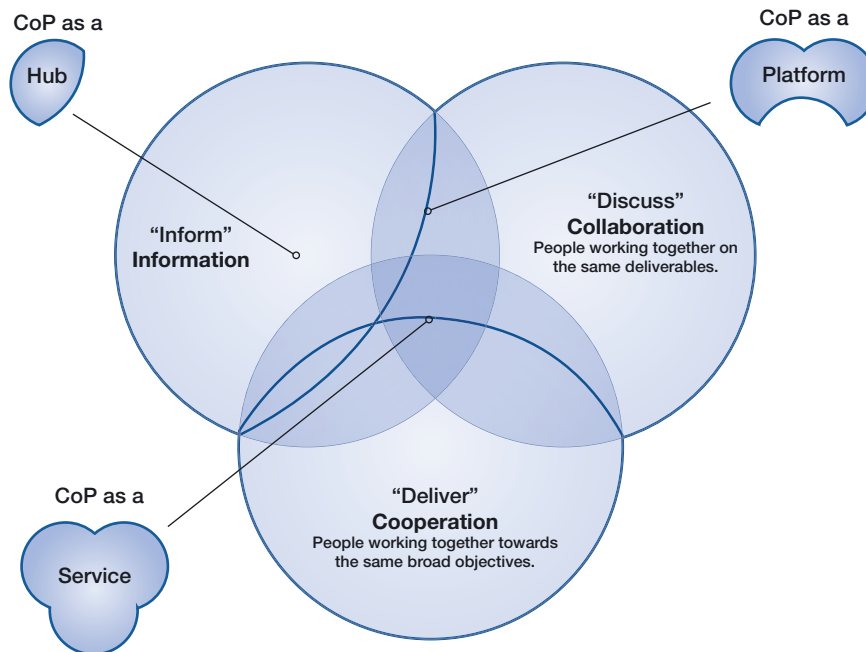


FIGURE 2 Typology of communities of practice.



Benefits and Motivation

Effective collaboration reduces duplication, allows discussion and broader inputs earlier in the policy cycle and leads to greater strategic alignment in the organisation, while increasing the efficiency and quality of our work.

The added value and benefits of a CoP are in sharing of three components of knowledge: *data*, *information* and *tacit knowledge* (= experience). The CoP's specific added value is the access to tacit knowledge by means of networking people. Communities of practice ensure direct link between learning and performance, as the same people participate in project teams.

Capturing and retaining tacit knowledge is difficult; however, this is often shared within and between communities. Bringing together a diverse group of people that share the same challenges, but have different experiences, creates a wider pool of knowledge to draw from to address shared problems.

Success Factors for Communities to Thrive

Most of the success factors described here are linked to the framework for designing collective intelligence endeavours proposed by MIT Centre for Collective Intelligence and mentioned in the first section of this chapter. Within the JRC, we performed thorough research assessing the state of our communities and identified several factors which contribute to the development of thriving communities. We incorporated them in a 'success wheel', which contains eight aspects necessary to create and maintain well-functioning CoPs. The success wheel can also be a framework for designing, assessing and continuously improving a community (Fig. 3).

For a community to succeed, it is important to create the right environment which includes the following:

Setting Strategic Objectives

Formal goals and deliverables energize communities and provide a reason and a focus to meet and participate. They are worked out by the community members and should be steered by a core group of individuals that hold the potential of becoming more connected. The goal has to originate from the community owners and members. They have to convince themselves of the value of the community by uncovering their own goals and objectives. Once the goal is there, it needs to be translated into specific behaviours we want members to perform. Behaviours will change from group to group, but their common denominator is that they all feed towards the goals.

For co-creating community goals and strategic objectives, Collison proposes very good helpers in the form of questions which can guide productive conversations around three CoP drivers: collect–connect–create (Collison, 2014):

- 'What knowledge can we **collect** – what can we each bring to the table?'

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Behaviours will change from group to group, but their common denominator is that they all feed towards the goals

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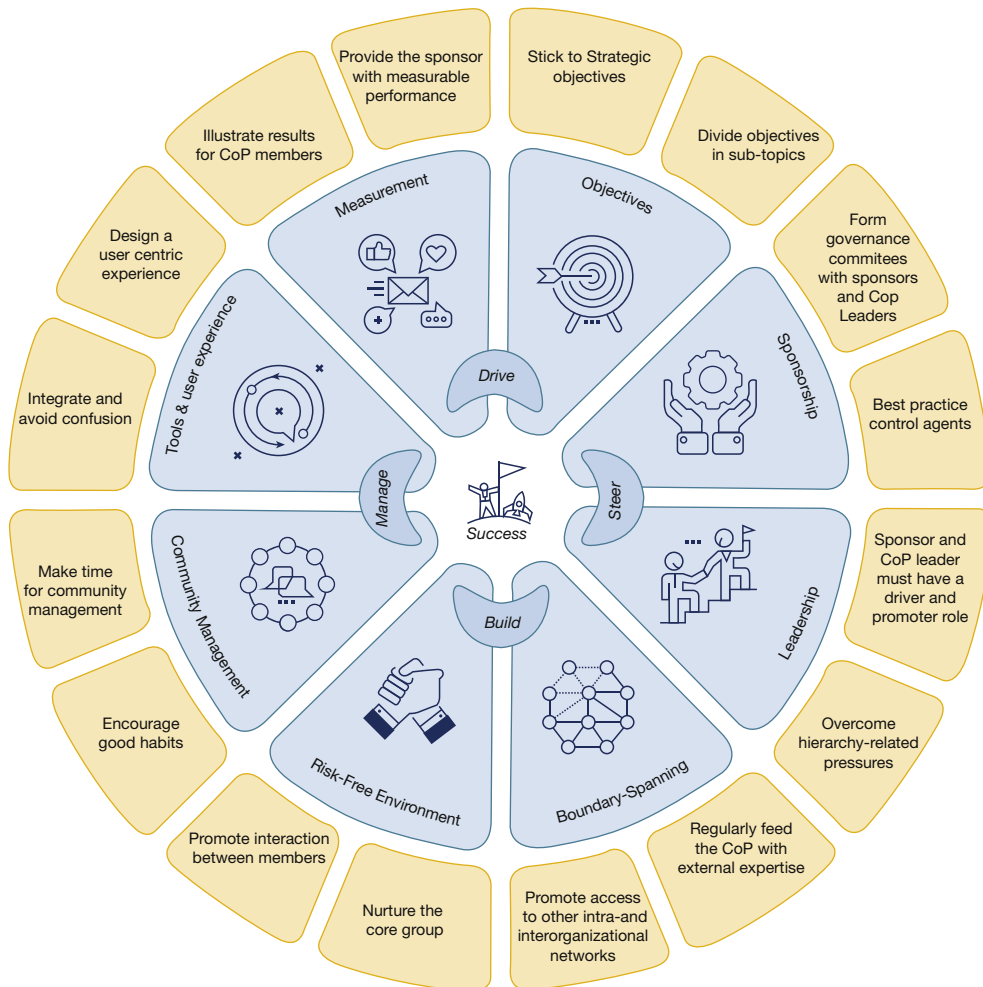


FIGURE 3 Communities of practice success wheel.

- 'Which subtopics and specific questions can we **connect** together to discuss, where a conversation is more appropriate than formal information sharing?'
- 'What are the areas and challenges where we could collaborate and **create** new knowledge (products, guides, recommendations, processes) together?'

When setting up the CoP on mapping (related to geospatial science) in the European Commission (EC), the community owners in the JRC identified the goals and their related behaviours which were validated by the community members. Here is an example of goals and behaviours identified by community owners.



Goal 1	Ensure coherent and coordinated mapping activities across JRC and EC
Behaviour 1	When working on a new map, members consult the CoP reference space to check for geographical correctness, mapping conventions and links to key resources (e.g., GISCO, ESTAT, etc.).
Behaviour 2	Members share/point to their maps in the community.
Behaviour 3	Facilitator creates reference library in the community, which covers geographical correctness, mapping conventions and links to key resources.
Behaviour 4	Geographic information system users from policy departments join the community.
Goal 2	Improved efficiency and effectiveness of mapping
Behaviour 1	Members post their questions and challenges. Facilitator responds to questions on geographical correctness by pointing to key resources and by inviting other members to respond.
Behaviour 2	Members inform peers about their upcoming mapping activities and projects.
Behaviour 3	Members attend regular face-to-face meetings to discuss topics of their interest.
Behaviour 4	Members identify shared training needs.

Sponsorship: Support From Your Organisation

Two decades ago, communities were thought to be self-organising and self-sustaining, operating independently of hierarchy. Recent research shows that communities need strong endorsement from the organisation's top leadership to make a difference in the long term. In the case of internal CoPs in an organisation, research shows that the vitality of communities and their results depend a lot on the extent to which senior managers acknowledge, support and invest in them. For example, in the JRC, the Deputy Director-General sponsors several CoPs on transversal themes such as migration, demography, sustainable development goals, fairness, etc., spanning across units, directorates and different thematic departments of the organisations.

In the case of participation in communities with external stakeholders, endorsement from the organisation's leadership and a clear mandate are necessary to make sure stakeholder engagement activity is an integral part of the research or policy work.

Leadership

Community leadership is both about support, investment and active participation from senior and middle management addressed earlier and about leadership from inside the CoP. A core group of CoP members taking the lead and steering the community is a key element coming up in our research. Such leaders generally and ideally emerge from within the community but they can be appointed too. The community appreciates and values their input. The community manager is part of the core group and convenes its members on a regular basis.

Community leaders need to be knowledgeable, respected and empowered. Communities may have one leader appointed by the organisation, the community or themselves. A community should allow for emerging leadership or sharing of leadership responsibilities by the core group. Community leaders give direction to the community, connect members and facilitate



discussions, but they do not have authority over members or own the community. Successful communities belong to their members.

For more hands-on tips on community leadership in practice, see [Community Management](#) section.

Boundary Spanning

Evidence suggests that knowledge related to the practice of a community is regularly imported from experts outside the CoP. These experts can be from other organisations or be part of the organization to which the CoP belongs. Access to intra- or interorganisational networks not only increases members' active participation but also ensures members' diversity. Diversity of members' backgrounds and locations is desirable, but this can also mean a diversity of expectations and needs. The value proposition of CoPs needs to be defined for different personas. For instance, what is useful for a scientist may not be of same relevance to a policymaker.

Risk-free Environment: A Safe Space to Fail and Learn

Trust is the basis of a successful CoP and needs to be cultivated so that members feel safe to collaborate with each other. Within the CoP boundaries, members are no longer regarded as being under their direct supervisors' management as a CoP is a hierarchy-free, learning zone. The community leaders remind members that they will not be judged or sanctioned by their supervisors if they make mistakes, ask naive questions or admit that they have gaps in their knowledge. In a safe community environment, members can contribute openly without being judged and can always learn from others. Any negative behaviour is addressed by the community manager to keep the environment safe. The core group of members in each CoP needs to be nurtured so that they collectively own the responsibility of increasing vitality through shared community management. Core group may have a private group where any issues are discussed. Any community should have short guidelines on 'safe' participation, which may differ from community to community.

Community Management

Community management skills and sufficiently resourcing community management interms of time, budget and capacity building are crucially important for the good functioning of a community and its impact on the organisation's performance. However, our research shows that community managers have little time to fulfil their community management role, which is often squeezed within other job duties. Many organisations have made community management an integral part of job descriptions, including the European Commission and the UN's communities. McDermott and Archibald research found that community leaders spend half- to one day per week on community management. The same research shows that communities provide greater value when organisations systematically train their community leaders on community management skills.

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The community manager's tasks include (not exhaustively) the following:

- Promote the growth of the community and introduce and manage elements of community structure such as documents, taxonomy, knowledge mapping and events.
- Invite and stimulate different levels of participation because people will have different levels of interest in the community.
- Create and maintain a lively activity for the community (initiate discussions, meetings, video conferences, web activities, informal lunches, workshops, etc.).
- Welcome newcomers, invite them to participate, establish community relationships and promote contributions.
- Curate content by creating content types such as latest events, popular discussions, interviews and inspiring stories.
- Draw up an annual review of the CoP they manage; they can use Wenger and Trayner's assessment framework (see point 8).

Community Management: Good Practices

It is now recognised that engagement requires a systematic approach that aligns tactics with a community-centric strategy. The community manager is the voice of the organisation to the community and voice of the community into the organisation. Community managers are process facilitators, making shared knowledge visible, circulated and used. They also act as catalysts, having a good understanding of dynamic social intelligence processes such as bridging, brokering, connecting, stewarding and more.

Identify Who Belongs in the Community and 'Recruit' Them

Even though you know who the community is for, precisely identifying the right people requires analysis and oftentimes a stakeholders' mapping exercise.

Webber proposes four main questions to ask yourself when trying to determine who should join the community ([Webber, 2016](#), p. 37):

Purpose – Does this person share a role, similar environment and overall work goals with other people in the community?

Challenges – Does this person share the same day-to-day challenges as other people in the community?

Learning – Would this person be able to learn things from other people in the community that would make them better at their job?

Teaching – Would people in the community be able to learn things relevant for their work from working closely with this person?

Working on a stakeholders' mapping is an essential step in working out the governance of a community and means identifying stakeholders with a task, file, portfolio, experience, expertise and/or keen interest in your practice field. When doing so, inquire about their needs, preferences, priorities, stakes, the "what's in it for them" to be part of the community. Extend this exercise to identify and prioritise associated stakeholders' behaviours and metrics. You can work on a stakeholders' mapping within the workshop with the core group or in the first gathering of a CoP in the early stages. Questions which help map potential members, their needs and behaviours can be used in such workshop.



- *Community Members' Associated Behaviours—Possible Questions*

- What behaviours are important drivers for this community to be successful? Can you influence them?
- What behaviours are not currently happening?
- Why are stakeholders not already doing what we want them to do in a community?

Build Strong Connections Within the CoP, A Risk-Free Environment Safe to Fail and Learn

Community management implies ensuring coordination, cooperation and collaboration in the community. The community managers coordinate the community work in order to make sure it goes towards achieving the goals and objectives agreed. It is important to have a regular rhythm and rituals for the community to ensure interaction between members and so that they know when to expect to meet up synchronously in real life or virtually and contribute asynchronously. The community manager nurtures the community by inviting and developing curiosity and nudging individuals to give their views.

Community gatherings could allow for more informal ways of connecting. Even though digital platforms nowadays link remote staff, most effective communities also hold face-to-face meetings which usually focus on specific goals often linked to concrete deliverables. Face-to-face meetings may take place physically or be facilitated by video conferencing technologies such as Zoom. Face-to-face contact fosters trust and creates the rapport that the members need to feel safe when admitting mistakes, asking for help and learning from each other. Therefore it is important to hold regular formal and informal contacts between community members and find good balance between or integration of online and offline interaction.

- *How to Convene a Community*

The more participatory community gatherings are the better they foster a sense of community and belonging. Design thinking and art of hosting methods can be used to engage and harvest knowledge from participants. Designed, run and harvested well, such meetings can create momentum and inject the energy that the community regularly needs.

When groups of people in the community are based on locations remote from each other, one needs to consider local coordinators who convene the community locally and meet regularly other local coordinators to align on community activities. Research on scientific CoPs shows that to increase international participation in a scientific community, the local coordinators should be connected among each other and that the conference location should rotate between different continents ([Kienle and Wessner, 2005](#)).

Create Community Alignment

[Wenger et al. \(2002\)](#) point out that a 'good community architecture invites many different levels of participation' (p. 55). Providing smooth transitions between different levels of participation allows a lively and also continuous community: new people with new ideas should be able to join the community as easily as possible; already existing members should be able to participate over a period of time and on different levels.



When a critical mass of community members feels more comfortable with each other, the community should collectively define its vision. Having a vision gives the group a shared understanding of why the community exists, which helps create common tasks.

One way to define vision is to organise a series of sessions within a longer workshop to build the vision for the community, to agree on community principles and to define the values members share. There are several ways to run such workshops, and the gamestorming.com community provides lots of ideas for games as co-creation tools used by innovators around the world. When agreeing on goals and activities, it could be useful to turn them into a shared backlog of the community to keep track of what needs to be done ([Webber, 2016](#)).

Online Tools and User Experience

Most communities need a digital place to host conversations, exchanges and repositories of knowledge. Digital tools are enablers of asynchronous community interactions for communication, connection, conversation, co-creation and coordination. They also host the community's knowledge resources. They do not replace synchronous in real life and online interactions but rather complement and reinforces them.

Digital tools hosting CoPs do not need to be complex, normally requiring functions such as forum, document libraries, expertise finder, teleconferencing and ideally video conferencing and online places where members can edit documents and discuss them. For example, the European Commission uses SharePoint, Yammer and Jive software for hosting internal CoPs and Confluence, Wikis and Drupal for CoPs involving members from outside the organisation. One can check some communities run with external partners on the JRC's Science Hub.¹

Community managers should define a list of priority elements and functionalities that a digital community space must feature and provide. The online functionalities should correspond to the community type, its goals and objectives; they are also aligned with the members' expectations. Once the online community is set up, the community manager has to populate it with content, invite members to join, invite them to contribute to a piece of work, follow-up online on physical and virtual meetings' decisions, etc. The quality of the digital tools and the care for user experience have a profound impact on the CoP success.

Measurement: Assessing Impact and Business Value

The benefits and added value of CoPs for the organisation and stakeholders need to be assessed regularly in quantitative and qualitative ways. Guidance for measuring value of CoPs is provided in the conceptual framework developed by [Wenger et al. \(2011\)](#). Based on this assessment framework, communities constantly need to adapt to the evolving needs of its members and the changing thematic environment.

To measure and assess value creation, one must first frame what success looks like by identifying the purpose and strategic objectives of a community.

¹<https://ec.europa.eu/jrc/communities/en>, accessed 05.05.2020.



Secondly, one must identify the indicators that will demonstrate fulfilment of purpose and movement towards goals and corresponding objectives.

This is only a starting point, as the day-to-day life of the community may lead you to reconsider what success truly looks like.

To appreciate the richness of the value created by communities, it is useful to think about it in terms of different cycles:

- Immediate value: activities and interactions
- Potential value: knowledge capital
- Applied value: changes in practice
- Realised value: performance improvement
- Reframing value: redefining success.

Stories are the best way to explain the linkages between community activities, knowledge resources and performance outcomes.

Questions for building value creation stories:

- What did the community do?
- What knowledge resources did they produce?
- How were those applied to get results?

Communities only exist if there is an interest from members in maintaining the group. The practice of regularly checking how well the community is meeting the members' and the organisation's needs – and adapting it to ensure it does – is key for a community to survive, remain useful and relevant. The community needs to revisit its vision, goals and governance on a regular basis to see if they are still relevant, review them and adapt.

The European Commission's JRC has been managing for several years the European Technology Transfer Offices (TTO) circle,² a network which brings together the major public research organisations on technology transfer. Thirty-one of the largest organisations in Europe collaborate to boost innovation in Europe through a set of initiatives, including fostering the use of their knowledge portfolios; sharing best practices, knowledge and expertise; performing joint activities; establishing informal channels of communication with policymakers; organising training programmes and developing a common approach towards international standards for the professionalisation of technology transfer.

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²<https://ec.europa.eu/jrc/communities/en/community/tto-circle-community>, accessed 05.05.2020.



Community of Practice on Fairness

The JRC works on an increasing number of multidisciplinary, multidimensional topics, such as fairness. One could not place such a theme in one single department to be dealt by just a handful of people. A CoP has particular potential in such cases, and the one on fairness was set up in 2017. It works through sharing knowledge and fostering an informed dialogue, across disciplines, on the multidimensional aspects of fairness to better inform policy.

Researchers and policymakers from across the European Commission and relevant research agencies exchange multidisciplinary knowledge and debate issues surrounding fairness, inequality and related policy measures. As a result, the community contributed to the robustness of a report 'What makes a fair society. Insights and evidence'. Such a report, touching on various and different dimensions of fairness, from labour markets, health and education to behavioural insights, owes much to the contributions of the CoP members. Effective community management and its purposeful design, according to the principles described in this chapter, enabled this result.

Knowledge Communities and the Research Policy Bridge

Bridging the gap between knowledge production and the knowledge use remains a key challenge for the whole policy cycle, from conception to implementation and evaluation. We know from experience as we operate at the interface between evidence production and policymaking.

The hardest challenges are not about producing knowledge but rather about sharing, using and interconnecting it. Our recent audience research into the ways researchers and policymakers interact with knowledge shows clear difference between the researchers and policymakers' communities simply explained by the fact that they operate according to such different respective rhythms and priorities (Fig. 4, see also Chapter 1).

Researchers are used to engaging in communities and understand that to have more policy impact with their research, they need to reach out in new and varied ways. They are interested in finding alliances with other researchers through various platforms, as equally as they are interested in promoting their research to a policymaking audience. They are particularly concerned about the need for a 'feedback loop' – to know if, how and why their work has influenced policy. Researchers may be bound within a strict cycle in their year, particularly if waiting for new rounds of data or the update to an index.

Policymakers express concern that they cannot find the information they need, but do not tend to go outside of their current networks or traditional channels to source that information. They need to be cautious around explaining publicly how and why they have used particular pieces of evidence, or not. The political process necessitates judgements to be made about which evidence to follow or when to not follow the evidence at all. Senior policymakers see value in being connected with an expert or experts on a particular topic that is of interest to them at that moment.

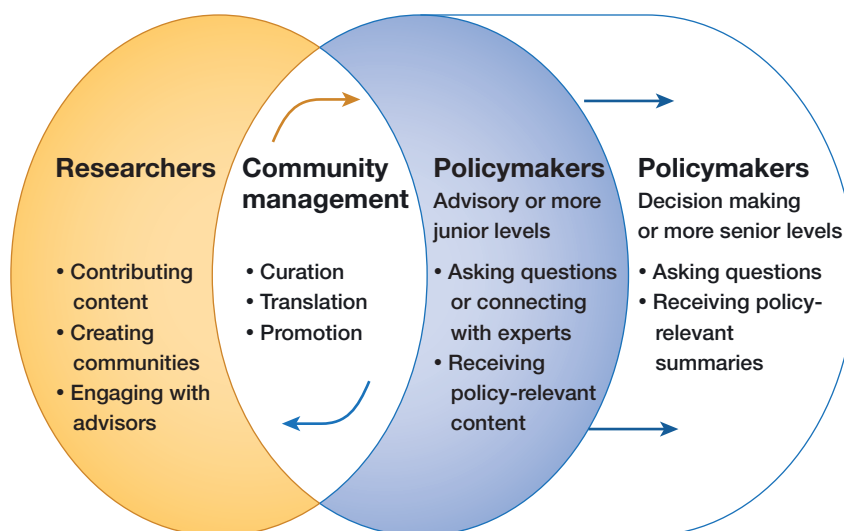


FIGURE 4 Recommended strategy for the Knowledge for Policy following an audience research – community management and interactions to bridge the gap between the two communities.

Communities have a potential to enhance the science-policy collaboration, but given the above differences, there is a strong need for knowledge brokerage and community management, defined as a form of curation and translation that makes knowledge relevant and useable for the world of policy. If you find yourself in such a role, it is useful to consult also our work on Knowledge Centres, Competence Centres and the Knowledge for Policy platform.³

³<https://ec.europa.eu/knowledge4policy>, accessed 05.05.2020.