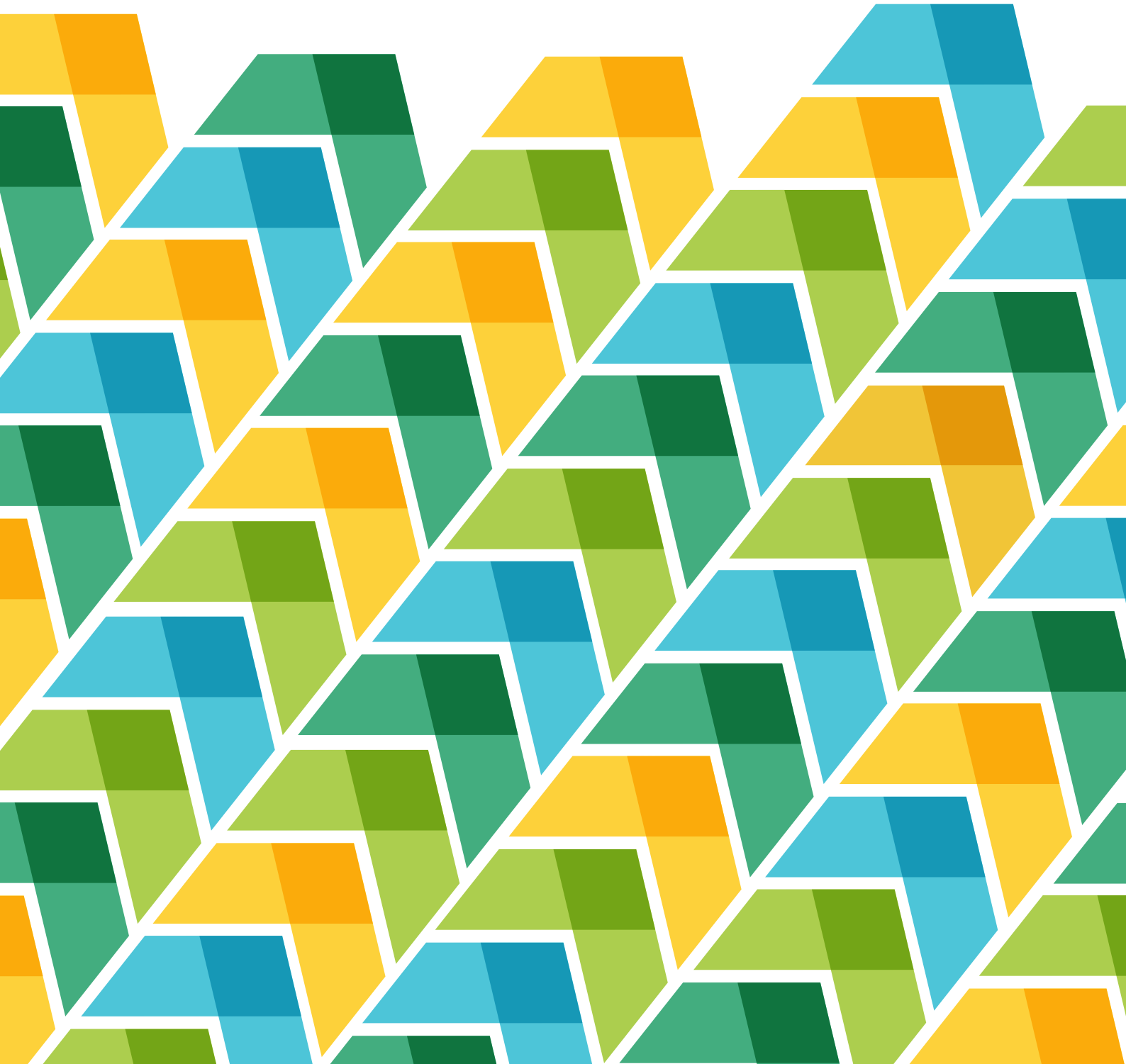
PASSPARTOOL
Interreg Europe

European Union
European Regional
Development Fund

POLICY RECOMMENDATIONS



1 Introduction: **PASSPARTOOL** *rationale and objectives of the report*

The ***competitiveness*** and ***resilience*** of territories and their SMEs depends on their capacity to innovate. At the same time, policy and academic literature have increasingly shown that innovation cannot be reduced to the outcome of R&D investment. Rather, innovation may emerge from less formalized and factors, mainly involving ***organizational***, ***creative*** and ***relational dimensions*** (i.e. Arundel et al., 2008, Barge-Gil et al., 2011, Bender and Laestadius, 2005, Polder et al., 2010, Stoeneman, 2010).

The ***PASSPARTOOL project***, which has run ***since 2019***, has explored these aspects from both a conceptual and policy point of view, looking at public instruments to foster and monitor such soft innovation. On the one hand, it is important to ***conceptualise these soft innovative dynamics***, finding tools to navigate this fuzzy space. On the other, it is necessary to ***measure such processes*** in order to define more tailored policy instruments. Indeed, the inability to understand these dynamics, means that a significant part of innovative (or potentially innovative) activities go undetected and, therefore, unsupported.

This report summarises the findings and lessons of the ***Phase 1 of PASSPARTOOL*** with the aim of diffusing the knowledge developed beyond the project boundaries and advance the policy debate.

This report is organised as follows:

- **Section 2** maps the key policy dimensions related to soft innovation
- **Section 3** highlights two characteristics of soft-innovation: its complementary with R&D/technology-based innovation and its sectoral and territorial specificities
- **Section 4** delves into the challenge of monitoring soft innovation
- **Section 5** provides some examples of support for soft innovation
- **Section 6** concludes, reflecting on the importance of understanding soft innovation for the digital and green transitions.

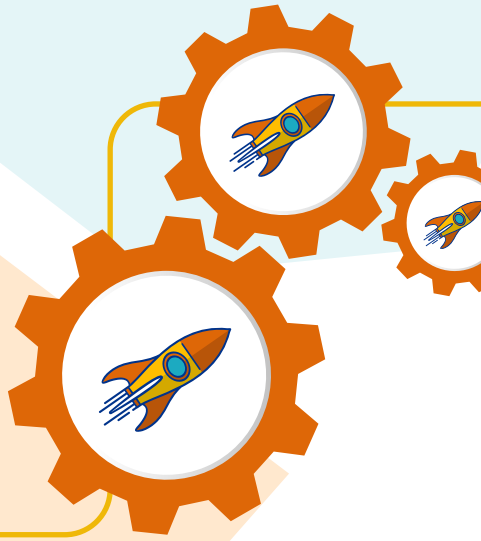
2 Mapping **SOFT INNOVATION**: *key dimensions*

The ***PASSPARTOOL*** project has explored several dimensions related to ***soft innovation***, in an attempt to make sense of a set of heterogenous dynamics detected in the different territories.

These revolve around the following:

NON-R&D INNOVATION

Non-R&D innovation refers to innovation that does not originate from dedicated or contracted R&D teams. It refers to ***non science-based***, and it goes beyond the application of a systematic body of knowledge into a new product.

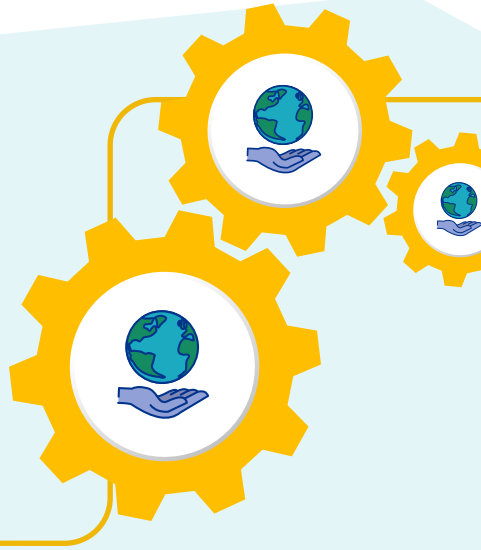


SME INNOVATION

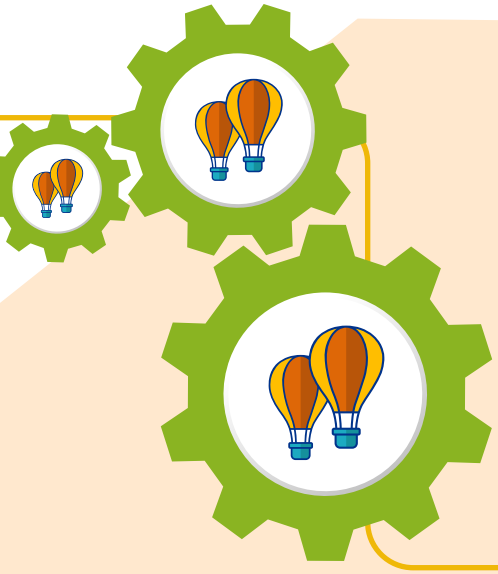
SME innovation is defined as ***a new*** or ***improved product***, ***business process***, or ***business model***, that is "introduced on the market or brought into use by the firm".

CULTURAL INNOVATION

Building ***on the Unesco approach***, cultural innovation can be defined as arising in the ***cultural and creative industries***, when new goods and services encourage culture by ***promoting*** and ***maintaining cultural diversity*** and enhance democracy in accessing culture.



SOCIAL INNOVATION



The OECD defines ***social innovation*** as "the design and implementation of ***new solutions*** that ***imply conceptual***, ***process***, ***product***, or ***organisational change***, which ultimately aim to improve the welfare and wellbeing of individuals and communities."

Broadly speaking, ***innovation policy*** has ***typically focussed on supporting R&D investment*** (through grants, tax breaks or support to infrastructure) or supporting the innovation ecosystem, promoting collaboration among actors, ensuring the application of scientific discovery and supporting entrepreneurship.

So far, ***few policy instruments have tried to harness other forms of innovation***. As the impact of innovation on society becomes better understood, and as societal challenges such as climate change, aging population and inequality require new ways of thinking, it is important to venture into these new domains.

3 The nature of **SOFT INNOVATION**

The ***PASSPARTOOL*** project, which has reviewed the (limited) academic literature and explored policies among partners, has found that ***non-R&D and R&D innovation are complementary***. In this sense, it is not sufficient to support firms in developing and acquiring technology if, at the same time, other complementary aspects are not taken into account. ***Technological and R&D-based innovation require complementary organisational, social and consumer changes to generate effects.***

The difficulties that SMEs face in the process of adjusting to digitalisation (OECD, 2021), bare testimony to the fact that the availability of a technology is not sufficient for a successful adoption. At the same time, the fact that the debate on soft innovation is at its early stages, with blurred concepts and overlapping definitions, makes drawing general policy conclusions extremely difficult. To ***support soft innovation*** means to ***engage deeply*** with the specificities of a ***territory and sector***, to ***develop targeted policies***. At the same time, soft innovation relies on ***a strong eco-system***, that can valorise ***relationships and human capital***.

The cases below exemplify these points:

Box 1 Territorial specificities and soft innovation

Identifying instruments to support non-R&D innovation in the Apulian Home System

The ***Apulian Home System*** sector, which comprises furniture and construction, is sufficiently large, in terms of employment and value added, to require and justify policy attention and policy support. Whilst the sector is composed mostly of ***micro-enterprises***, it also ***includes large players***. In other words, there is enough critical mass to generate a structured supply chain. Nevertheless, the sector is strongly atomized, with actors moving independently, with few resources and without a strategy or a catalyzing agent with the strength and mandate to develop the sector.

The sector, in Apulia, ***is evolving extremely rapidly***, with market needs and production possibilities changing in very short time horizons. Within this context, ***the survival of the sector*** cannot be based on price competition (which cannot be compressed to the levels of Asian competition) but ***must be centered on quality.***



Non-R&D innovation is critical to understand ***the concept of quality***, which needs to be articulated in a broad sense: including ***attention to design***, ***materials***, ***packaging*** and ***logistics services***.

Pursuing quality through policies for non-R&D innovation would, in this context, require:

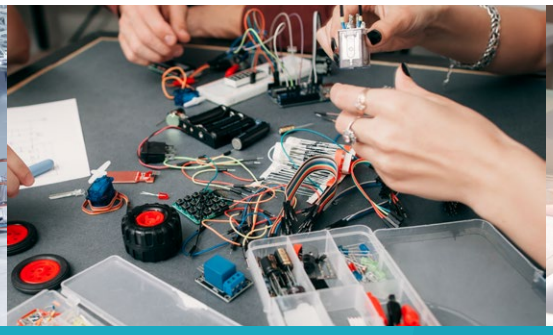
- ***Supporting firm-level organizational change related to digitalization.*** The latter can become an obstacle, rather than an aid, if the diffusion of technologies is not accompanied by the adequate industrial restructuring, which in turn requires specific skills.
- ***Supporting sectorial reorganization by developing a cluster*** as a knowledge and innovation broker for SMEs, providing virtual and physical infrastructures for interaction and co-creation.

Both type of policies, however, require first developing a more in-depth understanding of the sector and of its demands and capacities.

Box 2 Firm and sectorial specificities and soft innovation

Supporting different types of SMEs in different Global Value Chains

SMEs, as crucial economic actors in the EU, receive specific policy attention.
However, the terms SMEs, per se, simply captures the size of the firm, regardless of significant sectorial and organisational differences. The latter correlate with ***the SMEs' abilities to innovate*** and with ***the type of innovation*** that this type of firms can undertake.


For instance:

- An ***SME in the aviation industry*** may be engaged in ***testing and prototyping*** frontier technology, in the high-value part of a ***global value chain (GVC)***. Such firm will be fully engrained in and central to the innovation ecosystem.

- On the other hand, an ***SME*** in a more consolidated industry, such as ***car manufacturing***, may now be involved in ***low value-added activities*** (i.e. manufacturing of components), within its ***GVC.*** This is why an SME is likely to operate on tight margins and have limited space to innovate and experiment.

The type of soft-innovation support required by the two types of firms may be very different. In the first case, it may be ***crucial to focus on supporting organisational arrangements*** that ensure access to cross-cutting knowledge, in the second, we may need to work more closely on ***suppForting skills to make production more efficient*** whilst attempting moving up in the value chain.

Box 3 Soft-innovation and the local ecosystem

Supporting the ecosystem to drive soft-innovation in Lithuania

"Create Lithuania" integrates the Lithuanian diaspora in the public sector to drive its innovation. The programme was created to ***attract young professionals back to Lithuania*** with the aim to ***implement innovative projects in the public sector.***

The programme promotes knowledge circulation (from foreign and private sector), enhances an interest in the public service and in the country's well-being.

For ***12 months*** selected participants advise (on a rotating basis) public-sector bodies on national and regional issues in areas such as the improvement of Lithuania's image, the ***enhancement of competitiveness and business*** environment, the ***promotion of entrepreneurship*** and ***foreign direct investment***, etc.

Participants are directly engaged in solving complex problems in cooperation with the public administration and other stakeholders (businesses, NGOs).

4 Monitoring **NON-R&D INNOVATION**

Policy monitoring is a notoriously ***complex*** and ***multi-dimensional activity***. Monitoring is, first and foremost, ***a tool for policy learning*** for both the public administration and stakeholders. It is through monitoring that we can understand whether we are meeting our policy objectives. Secondly, monitoring ***supports policy communication*** as it is a solid way to articulate how public interventions are evolving. Thirdly, monitoring ***facilitates the accountability and transparency of the public administration***: a clear and empirically sound monitoring report builds trust by sharing knowledge and explaining transparently how the public administration is acting.

The ***primary purpose*** of monitoring is thus to ***measure the effects of public policies*** and reflect on them to improve their efficiency and effectiveness. This is necessary because of the inherently uncertain nature of policy making. At its technical core, monitoring means ***gathering evidence*** from the real world and ***quantifying*** the distance between the ***expectations***, ***objective*** and ***reality*** of a given policy-intervention through a so-called ***"logic of intervention"***.

The logic of intervention expresses the policy maker's expectations about the effects of the policy intervention. Through these lenses, monitoring means ***gathering evidence from the real world*** and ***quantifying the distance*** between the ***logic*** and the ***reality*** of the intervention.

A (highly simplified) logic of intervention, as in *figure 1* below, identifies the objectives of a given policy and quantifies the policy actions and its effects into output indicators (i.e. what the policy has supported) and result indicators (i.e. what the policy has achieved).

Figure 1 A simplified logic of intervention

The literature has repeatedly shown that ***monitoring*** is perceived as a ***challenging activity*** (Marinelli et al. 2018) by ***policy makers***, due to the technical and political complexities of gathering, interpreting and publishing indicators.
On the one hand, it is ***technically and empirically difficult*** to translate policies into a ***set of indicators*** that mirror the intervention logic, all the more as the same policy intervention may need to be monitored from different actors (i.e. local, regional and national) and for different reasons (this is the case if the intervention has multiple objectives and responds to different strategies).
Moreover, the identification and sustained engagement of stakeholders, which is necessary to develop ***qualitative measures***, is in itself a complex and uncertain task. Finally, monitoring efforts may not produce any change in policy without adequate coordination structures and political support, undermining the sustainability of the monitoring system itself. These difficulties are significantly amplified in the case of non-R&D innovation, for a series of reason.

First and foremost, as ***the concept of "soft innovation" is not fully consolidated***, there are ***no official indicators*** to be produced: policy makers need to rely on their capacities for data collection, statistical and analytical capabilities.
Secondly, the fact that ***policies for non-R&D innovation are still not well codified***, implies that there is ***limited collective experience*** on formalising the logics of intervention themselves: it is therefore difficult to articulate inputs, outputs, outcomes and impact.

Thirdly, within this context, ***it is difficult to define a monitoring system that is policy responsive***, i.e. that can clearly point out to the necessary changes in the public intervention. To make sense of the policy and its effects, it is therefore even more important to involve beneficiaries and stakeholders in the monitoring process, pursuing a participatory approach, which is in itself demanding both technically and in terms of the human resources to be involved.
The example of ***Luoghi Comuni*** *(Box 4)*, in Puglia, clarifies this aspect.

Box 4 A mixed-method approach to soft-innovation monitoring

The monitoring process in Luoghi Comuni: a complex participatory design

Luoghi Comuni is an Apulian programme fostering ***social innovation***.
Its aim is to achieve ***local development***, ***urban regeneration*** and ***meaningful impact*** on the ***local communities*** by allowing youth organisation to exploit under-used public spaces for social projects.
So far, ***65 public spaces*** and more than ***40 youth organizations*** have been engaged.

Whilst monitoring ***the "input" and "output" of Luoghi Comuni is quite simple***, and it involves measuring the funds invested and the number of projects, organisations and building involved. Measuring ***the effects*** (let alone the impacts) ***is extremely complex***, as several dimensions, which are difficult to quantify are at play, namely:

- ***The valorisation of public buildings.***
- ***The development of territorial networks.***
- The ***development of a collaborative culture*** between the public administration and local communities.
- ***Youth empowerment.***
- ***Social innovation delivered to the territory.***

A.R.T.I. Puglia has addressed this challenge through a ***complex participatory monitoring process.*** The monitoring framework was designed following the ***analysis of good practices*** at national and international level and by establishing a scientific committee with national experts in the field. Following that, stakeholders were involved in the definition and validation of the monitoring methodology.

The latter relies, as well as on administrative data, on ***a set of beneficiaries and end-users questionnaires***, which are run at different times during the project life and which capture the ***cultural, social and economic dimension of each project***, as well as its ability to build a constructive dialogue with the public administration.

As the questionnaires are long and complex, A.R.T.I. Puglia, has designated ***a tutor following each project's engagement*** in the monitoring process.
The close engagement with stakeholders allows A.R.T.I. to understand in depth how each project is developing. Processing this information is lengthy and demanding, however, it ***seeds the basis*** for leaner monitoring processes in the future, moving from ***project monitoring*** to ***programme monitoring***.

More information on the initiative is available at:
https://luoghicomuni.regione.puglia.it/

Another important part of the monitoring process is the ***understanding of the baseline in a given situation***. When official indicators exist (as is the case for export, employment, firms' demography, etc.), it is possible to have a sense of such starting point with relatively limited efforts and resources. However, in the ***absence of formal indicators***, as is the case for soft innovation, it is important to be able to collect ***primary data*** directly, developing ***in-house surveys***, as done, for instance, in the case of the ***Northern Netherland Alliance (NNL) Innovation Monitoring*** described in *Box 5*.

Box 5 Primary data collection for monitoring soft innovation

NNL Innovation Monitoring

The ***NNL Innovation Monitoring*** is a ***yearly survey*** born out of the need to understand, in greater depth, innovative dynamics of ***local SMEs***. The survey is a flexible tool, which gets updated on a yearly basis, in light of the needs emerging from the territory.
SMEs taking part to the survey are incentivised, through a customised benchmark report, which is useful for their activities. At the same time, SMEs are offered the opportunity to join an expert panel and take part to a stakeholders committee.

The survey is administered digitally, and a PhD is employed to run it and analyse it. As such the costs are kept low.

The ***soft innovation measures*** include:

- ***Organizational innovation*** (New practices, new partners, and new ways of organizing)
- ***Societal orientation*** (Health & well-being, Clean water, Clean energy, Sustainable agriculture)
- ***Human capital*** (Creativity to come up with incremental and radical ideas)
- ***Eco-system thinking*** (firm-centered vs. ecosystem oriented & dependence on eco-system)

Interestingly, it is through the ***Innovation Monitor*** that the Passpartool-partner NNL found that there was ***a need among SMEs*** to have a subsidy scheme for organisational innovations.

More information on the initiative is available at:
https://www.snn.nl/over-snn/dienstverlener-subsidies/noord-nederlandse-innovatie monitor

5 Examples of **POLICY MEASURES**

This section provides a non-exhaustive ***compilation of policy measures*** supporting ***non-R&D innovation***, as emerged from the ***PASSPARTOOL*** activities. They showcase, together with the boxes above, ***different types of soft-innovation*** support.

5.1 Organisational and SMEs innovation: the ***VIA*** and ***KEI*** subsidies in the ***Northern Netherlands*** and the ***Profinet Scheme*** in Donegal County Council

SMEs are often too small to house the knowledge to ***translate ideas into innovations***, but this knowledge may be available in the broader eco-system.
The ***KEI (Knowledge and Innovation)***[1] scheme ***addresses this gap*** by subsidising SMEs to hire external expertise.

KEI offers subsidy for SMEs to hire a PhD for a newly developed position, or hire an employee from another SME, a bigger enterprise, or knowledge institution, and place them in a new position.

1 - For more information on KEI see: **https://www.interregeurope.eu/good-practices/subsidy-scheme-to-support-innovation-expenditures-kei**

It also ***offers subsidies*** for the ***secondment of their own employees*** within the EU. The budget for KEI was of 4,5 million Euros. When hiring a PhD, the contract has to entail a minimum of three months and a maximum of 48 months. The subsidy covers between 40% and 50% of the eligible costs.

One of the ***key results*** of the ***Innovation Monitor*** described above, was that the most successful SMEs are those that also partake in organisational innovation. Building on this finding, the ***VIA ('Versneller Innovatieve Ambities', or 'Accelerator Innovative Ambitions')***[2] is a ***subsidy scheme*** in the ***Northern Netherlands*** that ***aids SMEs in hiring*** an independent ***expert*** for the development and implementation of a new organisational element, a new business model, or a collaboration with other parties.

The main aim of VIA is to get SMEs within the region to become more future-oriented and increase their ability to innovate. The budget for this fund was 1,5 million euros, with a maximum subsidy per application of 12.500 Euros. The current success rate of this subsidy scheme is 80%.

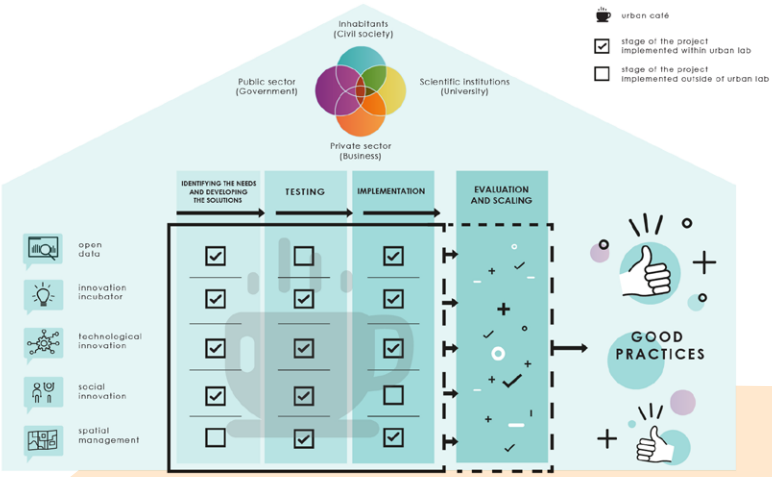
The type of organisational innovation or business model innovation supported is very diverse. An interesting example is the case of a ***medical enterprise*** whom this subsidy scheme helped to hire external expertise to develop a new revenue model. This allowed ***the enterprise to enter new (future) markets.***

Clearly, no soft-innovation is possible without the right skills. It therefore important to find ways to develop appropriate management capabilities. The ***Profinet scheme***,[3] implemented by ***Donegal County Council***, offers such opportunity, through peer learning, mentoring and support. In this scheme, groups of approx. 16 to 18 firms meet monthly for a ***structured 3 hour meeting*** over a minimum of ***18 months.*** Firms can ***graduate to ProfitNetPlus***, where potential innovation projects are identified and prioritised.

2 - For more information on VIA, see: **https://www.interregeurope.eu/good-practices/subsidy-scheme-to-support-innovation-expenditures-and-innovation-outputs-via**

3 - For more information on the Profinet scheme, see: **https://www.interregeurope.eu/good-practices/profitnet**

5.2 Social Innovation in ***Rzeszow's Urban Lab***



The ***Urban Lab*** is an instrument of cooperation between ***municipal authorities***, ***residents***, ***enterprises*** and ***scientific entities***, implemented by the ***Rzeszow Regional Development Agency***. It is aimed at improving the quality of life of residents through innovative solutions to their problems, generating additional value with the use of municipal resources.

The Urban Lab conducts a broadly defined activity as a ***"city laboratory"***, which is a space for discussion of residents, social organizations, representatives of universities and business on the directions of city development. It provides the opportunity to initiate, test, implement and evaluate projects.

The Urban Lab's mission has four pillars:

- ***Cooperation with partners*** to develop solutions for diagnosed urban problems.
- ***Providing an online portal with city data (www.otwartedane.erzeszow.pl)***, useful for all groups of city stakeholders, which can support projects implemented by Urban Lab and its partners.
- ***Running the Urban Cafe***, which is a space for meetings and debates for the city's residents with its authorities, local governments, scientists and business representatives, where coffee is only a pretext for discussion.
- ***The activity of the Innovation Incubator***, supporting the process of developing innovative projects submitted by residents.

As the such the Urban Lab is ***supporting social and organisational innovation*** and its monitoring: indeed, the lab provides open data on ***urban developments*** as well as publications on its outcomes.

5.3 ***Aldea Lab***: Cultural innovation in Extremadura

The ***City Council of Caceres***, with the support of the ***Junta de Extremadura***, the ***Ministry of Industry***, ***Energy and Tourism***, and the ***European Regional Development Fund***, has rehabilitated and equipped two old industrial buildings in the mining town of Aldea Moret and converted them into the ***"Aldealab Knowledge Center"*** which aims to be an international cultural centre for human development focussed on ***information and communication technologies.***

The Knowledge Center has a series of unique spaces conceived and designed specifically for the ***development of actions*** related to ***entrepreneurship***, ***innovation*** and ***cultural development***. It included a ***business incubator***.

A key feature of the Aldea Centre is the ***"Audivisual Production Centre"***, which aims at becoming a ***national and EU reference for cultural innovation***.

Its facilities aim at:

- ***Providing access to state-of-the-art facilities*** to independent creators (preferably from the region)
- ***Providing audiovisual services*** to third parties or to the City Council itself.
- ***Providing training*** for the audiovisual production industry
- ***Collaborating with centres, institutions, schools*** and ***other entities,*** preferably in the region, that develop training programs related to the audiovisual or multimedia sector in the region.
- ***Collaborating in the implementation of web-tv channels*** in other institutions and entities in the region.
- ***Generateing and dynamize audiovisual content***[4] of the City Council itself.

4 - It is important to stress that PASSPARTOOL highlighted many other policy instruments to support cultural and social innovation. Whilst it is beyond the scope of this report to mention all of them, it is interesting to also mention the Mimmit koodaa -program (Women code -program), in North Karelia (Finland). Its purpose is to increase gender equality in the Finnish software industry by providing accessible coding workshops, free of charge, for women without previous experience. For more information on this programme see here: **https://projects2014-2020.interregeurope.eu/policylearning/good-practices/item/6001/mimmit-koodaa-pohjois-karjala-mimmit-koodaa-women-code-north-karelia-women-code/**

6 Conclusions: the urgency of understanding **SOFT INNOVATION**

The ***PASSPARTOOL project*** started a few months before the Covid Pandemic revolutionised our way of living and showed how quickly and how rapidly life can be disrupted and re-organised. Inadvertently, this very situation has also highlighted the ***importance of soft innovation***: the COVID pandemic has impacted tremendously on our behaviour as workers, citizens and consumers, it has affected many societal aspects, requiring soft-innovation through the radical re-organisation of our transport, home, employment and health systems. At the very same time, it has put formal R&D and technological innovation at centre stage, by stressing the importance of digitalization and drug-development as a way to live through and exit the global public-health crisis.

In other words, the pandemic has showed how ***technology and R&D-based innovation are complementary to soft innovation*** and need to be coordinated in order to address the challenges that our society faces. Public policy needs to take these aspects into account and catalyse these complementary phenomena. ***PASSAPARTOOL*** has shown that doing so is as complex as it is necessary.

The case of ***digitalisation*** appears particularly fitting to explain such complexity: as much policy attention at the EU, national and regional level is place on the digital transition. Public policy instruments are supporting the ***digitalisation of businesses***, ***production processes*** and ***organisational arrangements***. Such support to technological innovation needs to be accompanied by policy instruments that focus on the ***non-R&D counterpart***.

Indeed, ***digitalisation changes skills demands*** before the supply is adjusted, generating new dynamics in the labour market which may have ***particularly perverse effects on SMEs*** in traditional sectors. Policies for ***soft innovation*** can focus on supporting the ***development of the right skills,*** as well as of the ***appropriate organisational change,*** to ensure that the benefits of digitalisation are fully shared. The policy maker needs to become aware of these aspects and devise measures complementary to digitalization support.

Soft innovation is also critical in the ***transition towards sustainability***. The literature on transformative innovation (i.e. Schott and Steinmueller, 2018) has stressed that we will not reach our objectives in relation to sustainability just through R&D-based innovation.
For instance, for consumers to switch to new modes of energy consumption, such as autonomous ***energy communities***[5], it is not sufficient for the technology to be available. It is necessary that they ***develop new habits***, ***knowledge*** and ***structures***. Likewise, fostering circular economy and industrial symbiosis cannot be reduced to developing adequate technologies, as it implies ***significant changes*** in the value chain and logistics of each industry, as well as a shift i***n consumer behaviour*** and ***preferences***.

It needs to be stressed that ***a healthy eco-system*** is at the centre of any type of innovation. ***Soft and R&D-based innovation*** need to rely on a ***strong relationship*** among actors, that facilitate knowledge exchange and sustain trust in the community. Within such ecosystem, particular attention should be paid to ***SMEs***. They represent the ***cornerstone of EU economies*** and have notorious challenges in developing traditional R&D-based innovation. As such they are particularly ***resilient and ingenious*** when it comes to ***soft innovation***. Integrating SMEs in the ecosystem, by listening to their needs and developing adequate instruments, is therefore critical.

5 - Energy communities are groups of self-organized consumers that founded sustainable and independent ways to power their communities

To conclude, understanding soft innovation is, for the reasons above, both important and urgent. Policy makers need to devise ***instruments that support experimentation*** with new ***organizational*** and ***business models***, engaging society at large and ensuring that the creativity and ingenuity of social and economic actors (and in particular SMEs) get adequate support.

In so doing, however, they also need to ***develop responsive monitoring systems***. As ***PASSPARTOOL*** has shown, ***monitoring soft innovation*** is even harder than monitoring R&D-based innovation, hence much attention from the public administration needs to be placed into ***developing the right internal skills*** and ***procedures***, involving stakeholders and beneficiaries into constructive and periodic reflections on how the policies and the instruments are moving forward.

Box 6 The key learnings in PASSPARTOOL

- Policies need to understand and address the ***complementarity between R&D-based and soft innovation*** as. Such complementarity is crucial to address ***societal challenges*** such as the digital and sustainability transitions.
- Within this context, it is important to understand both ***SMEs behaviour*** and the ***innovation ecosystem*** they operate in.
- ***Monitoring these aspects*** is as important as it is difficult and requires significant efforts from the policy maker.

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