

# The S3 Community of Practice Working group on Innovation Diffusion



The Working Groups (WGs) developed within the S3 Community of Practice (S3 CoP) aim to create a learning loop of knowledge generation, knowledge capitalisation and through stakeholder engagement, action and peer learning.

Throughout their activities, the WGs envision to follow a bottom-up, iterative and collaborative approach to facilitate exchanges of experience among regional stakeholders.



#### The main purpose of each Working Group is to...

- Collect and document existing knowledge and good practices
- Identify common needs, problems and challenges
- Co-develop with the regions potential solutions
- Create a process of successful implementation of those solutions tailored to the particularities of each region

Innovation diffusion is a broad concept, which includes the analysis of how new ideas, practices and innovation spread through a society. Effectively engaging SMEs, the backbone of the EU economy, is essential, as their involvement, though quite challenging, is crucial for understanding innovation needs and dynamics across territories.

Innovation diffusion can be defined as the process through which different organisations gather ideas from outside and use them to introduce an innovation (e.g. a new process of production, a new product itself or a new way of providing a service). Innovation diffusion comprises also the process of adoption of existing technologies (e.g. purchasing machinery developed elsewhere or signing a license agreement for an existing patent).

## The Working Group will focus on the analysis of 4 key issues...



- The adoption of new technologies, innovations, business practices and digital tools across business (and especially among SMEs) from leading firms to those lagging behind.
- The role of universities and RTOs to meet the needs of companies in their ecosystem
- Knowledge spillovers and innovation diffusion channels between large firms, especially multinationals, and local enterprises
- The role of innovation agencies and other public bodies in facilitating knowledge flows, and how they are coordinated (focus on multi-level governance issues)

### Innovation diffusion is central to the success of S3...

In the context of designing and implementing S3 in European regions, innovation diffusion is conceived as a highly complex and non-linear process that relates to: (1) regional and national framework conditions; (2) operational channels such as training and mobility, supply chains, collaborations; and (3) the presence and effectiveness of intermediary agencies. Therefore, it is a proactive and deliberate process.

The focus of S3 is broadening and moving from a strong emphasis on R&D and innovation capacities towards implementation and diffusion issues in a wider societal context.

The analysis of innovation diffusion will be integrated within the Quadruple Helix of Innovation which recognises four major actors in the innovation ecosystem: government, academia, industry, and civil society. The interactions between the four components are not unidirectional, but rather multi-layered, dynamic and bi-directional. In most cases, innovations and the production of new knowledge and technologies result from the interaction between innovation actors and with regional stakeholders (e.g. intermediaries, public authorities), with feedback mechanisms allowing a learning process.

## Key implementation challenges identified

Adoption of new technologies, innovations, business practices & digital tools across SMEs

The role of universities & RTOs (to meet the needs of companies in their ecosystem)

The role of innovation agencies & other public bodies in facilitating knowledge

Knowledge spillovers & innovation diffusion channels between large firms & local smaller enterprises

- Weak articulation of the demand for innovation and for innovation support services
- Digital skills shortages in SME & deficiencies in the digital infrastructure in SMEs
- Lack of business development services for SMEs (training, mentoring, advisory & consultancy services, etc.) & difficulties to access finance for investments in digitalisation
- Mismatch between demand and supply of innovation support services (low understandings of the demand side from universities, different incentives, needs and capacities of companies and universities/research centres)
- Poor tehcnology and innovations transfer from universities and RTOs to companies
- Multi-level governance (coordination problems, etc.)
- Lack of a systemic approach (work in silos)
- Low absorptive capacity of local companies
- Low connection
  between S3 in the
  regions with policies
  to attract and retain
  FDI

## Preliminary conclusions and way forward...

Given the breadth of the topic, during the kick-off meeting of this WG run in June 2023, two implementation challenges have been selected: **the lack of a systemic approach and the weak articulation of demand for innovation by SMEs.** Next WG meetings aim to discuss these challenges on innovation diffusion across European regions, co-develop with the regions potential solutions (new approaches, policies, instruments, and coordination mechanisms) and propose actionable recommendations including examples, good practices, successful initiatives from various regions across the EU, covering a wide range of sectors and topics and adapted to regional specificities.

