

## d Ruici

## dRural Position Paper

Authors: Davide Guariento (Association of Balkan Eco-Innovation)

Other contributors: Carlos Corrales Yerpes (Secmotic), Michel Ehrenhard (University of Twente), Henrik Floren (Research Institute of Sweden), Carlos Gonzales (Ticbiomed), Miryam Martin (Ticbiomed), Luca Ruggeri (Boundaryless), Yasin Sahhar (University of Twente), Manuel Tarraga (Ticbiomed), Andrea Valeri (Boundaryless), Ola Wallberg (Research Institute of Sweden).



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 101017304.

## dRural Position Paper

Digitalization empowers rural areas by providing the infrastructure and tools needed to thrive. It helps address regional disparities, fosters economic growth, and improves the overall quality of life for rural residents, in turn, helping to attract and retain residents. Digitalization in rural areas is a significant priority for the European Commission as part of its strategy to foster regional development and cohesion across the EU. Addressing the digital divide between urban and rural areas aims to provide equal opportunities for connectivity and integration into the digital economy. Consequently, the European Commission emphasizes the importance of digital skills and training. Ensuring that residents in rural areas have the necessary digital literacy is crucial for them to effectively use digital tools in their daily lives and professional activities. Furthermore, supporting local businesses and public services to undertake the digital transition is critical to reduce the digital divide.

In the EU, digitalization of rural areas is challenged by gaps in infrastructure, with some regions lacking high-speed broadband and reliable mobile networks. Despite significant investments, disparities persist, particularly in remote or mountainous areas. High costs of advanced digital services and devices can still be prohibitive for some rural residents, especially where economic opportunities are fewer. While the EU has made progress in digital literacy, many rural communities still lag behind, needing more tailored training and support. EU policy initiatives aim to bridge the digital divide, but complex regulations, contrasted stakeholder interests and differing national priorities can slow implementation. Additionally, concerns about data privacy and cybersecurity can cause hesitation. Overcoming these challenges requires continued EU-wide coordination, investment in digital infrastructure, digital knowledge trainings, and practice sharing, as well as efforts to make digital tools more accessible and relevant to rural European life.

The dRural project, which main objective is to develop and implement a digital solution that delivers multiple services to rural citizens while creating opportunities for economic growth and quality of life improvements, played a key role in stepping forward the digitalization of 11 European rural regions. As such, 11 dRural digital platforms are currently operating and are independently managed by regional stakeholders (dRural promoters). Furthermore, 46 technologically advanced services -involving data and platforms integration, Al technologies, IoT, and complex data infrastructures - were developed and launched, while over 600 other technologically simpler services are offered on the various dRural marketplaces, providing the opportunity for numerous regional SMEs to digitalize their services with a few clicks and at a low cost, and thousands of rural citizens to access their digital services.

The dRural technological offer innovatively address the identified challenges of rural areas by providing a flexible platform that consists of four key components: the Marketplace directly facilitating customer service and product sales; the Core MetaPlatform, a platform that offers a range of capabilities to enhance service offerings based on FIWOO background technology and features; the Open API, a vital intermediary that securely handles API requests, ensuring seamless communication and data exchange, streamlining integration and enhancing the platform's accessibility, interoperability and scalability; and the Integration Tool Kit, a set of open source capabilities that provides developers with essential tools, libraries, and documentation to integrate their applications into the dRural platform and its services. The modularity of the dRural technological solution was key to address the needs of different rural regions and sectors. The dRural platform represents a unique solution to provide a flexible technological solution that is managed and coordinated at a local level. Regional organizations, companies, public authorities that recognize the value of the dRural solution will be able to implement the dRural platform at a below market price, leveraging the experience of the already existing platforms and their key learning takeaways.

The digitalization of rural areas is a complex and long-term process that requires the interlocking of multiple puzzle pieces to succeed. The dRural technological solution was integrated with comprehensive knowledge co-creation activities in key domains such as governance, business and ecosystem development, coordinated under the Business Transformation Team. Substantial effort was



## dRural Position Paper

invested in continuously finding and creating synergies between various interests, visions, and purposes to create a collective sense of agreement for collaboration. Furthermore, substantial improvement in knowledge sharing and platform development was reached by facilitating learning across different sectors and regions. Ecosystem-building exercises were used to expand the ecosystem of players involved, by validating, replicating, and refining previous insights. In addition, each of the 11 platforms' promoters has received support to develop specific business models that will enable post-project economic sustainability. This knowledge was captured in detailed learning materials in written and video form to guide future platform adopters and service developers in the local uptake of the dRural platform.

Throughout the dRural journey, we faced challenges that required re-thinking and pivoting to maximize the impact of the project. Here are our four learning takeaways for the success future initiatives at EU and national level. (i) Lack of technical and business knowledge in rural areas is challenging. This requires constant investments in easily accessible trainings for the rural work force to enable technological literacy and boost conscious entrepreneurship. (ii) Good governance - proper structures, processes, and methods for collective decision-making - is essential to create sustainable impact at various ecosystem levels. In dRural, we experienced the utmost importance of continuous alignment between individual and collective perspectives, not to mention a high level of flexibility. Governance is an ongoing endeavour between collaborating parties. (iii) Platforms should be managed locally and fit rural stakeholders' needs. The dRural project is the first example of a technologically flexible platform that enables rural entrepreneurs to pick and choose what is needed in their context. It is key that businesses are operated at local level by organizations or companies that are deeply rooted in the territory, showing a detailed understanding of the local challenges and needs. (iv) Rural areas strongly benefit from long term visions. Policies and political actions will not lead to sustainable impact if a clear and commonly agreed vision for the specific regions is missing. Continuity is required for long term investment and building of resoures and capabilities. Involving citizens in defining and executing this vision increases resident retention and fosters a sense of belonging.