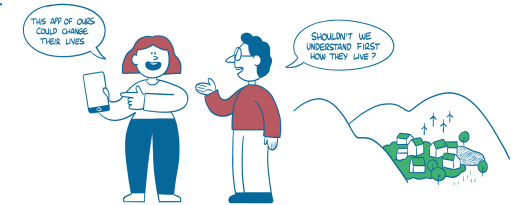


## Is digital for us?

*This paper is developed as a discussion and background paper for the Final Conference, based on Smart Rural 27 outcomes. It is developed by the Contractor and does not reflect the official position of the European Commission.*



When digital solutions are introduced, a key concern is how to make sure that these **benefit communities and bring a change and real impact in community life in the long-term**. Over the course of the Smart Rural 21 & 27 projects, we have worked with a number of communities that were hoping that by introducing certain digital services, key problems such as lack of health-care services, mobility issues, lack of community-engagement and depopulation will be effectively addressed. However, in most of the cases no satisfactory results emerged from the process. Why?

Let's start by reiterating that the (non-binding) definition of Smart Villages developed at the EU level highlights that smart communities aim *“to improve their economic, social and environmental conditions, in particular by promoting innovation and mobilising solutions offered by digital technologies”*. This formulation already implies **that digitalisation is an important but not exclusive means of (to-be) smart communities**. There is wide agreement that in order for a rural community to become ‘smart’, **digital and technological innovation has to be coupled with social innovation** and consequently need to have a community impact. In other words, technological innovations have to be rooted in non-technological local contexts, carefully considering – among others - the specific needs, potential user groups and their skills<sup>1</sup>. **While these principles have been re-stated again and again, they are often not applied in practice.**

Match digital innovation to the needs of communities; not communities to digital innovations.

The first key question is **where the incentive to apply digital technologies is coming from**. On the one hand, there is a strong push from the side of the technological industry that is also eager to find new markets for its digital products. Since *“everybody agrees that digitalisation is something that can no longer be ignored, and to survive in the 21st century, it is important to at least try to keep up with the pace of digital innovation, and use the wide array of opportunities it offers”*<sup>2</sup>, there has been considerable funding invested in helping the digital transition, including rural areas. **Projects that aim to bring digital technological solutions closer to rural communities flourish at both EU and national levels**. However, digital ‘players’ often have more knowledge on the technological side of innovations than on how **to embed these innovations into various community settings**. Furthermore, such initiatives are often funding-driven (rather than needs-driven). Both these dynamics put at risk the long-term sustainability of the solutions introduced.

*“A bottom-up decision-making process was adopted giving power to the citizens when it comes to deciding what services should be implemented and what not.”*  
(Ovenhausen Lighthouse Factsheet)

On the other hand, **the aspiration to use digital technologies, might be rooted in the needs (or opportunities) identified in and by rural communities**. The Smart Rural 21 & 27 projects have argued, that digital innovations that are driven by the needs of the community, have much better chance to survive and to have long-term impact. However, this process is also not without its challenges.

*“If I had asked my customers what they wanted they would have said a faster horse.”?*  
(Henry Ford?)

**Firtly, rural communities are very often not aware of digital solutions that might be at their disposal**. As the famous quote attributed to – but apparently never said by – Henry Ford: *“If I had asked my customers what they wanted they would have said a faster horse.”*

<sup>1</sup> In this paper we are not discussing the availability of sufficient broadband connectivity and infrastructure that is of course a pre-requisite of developing digital solutions. It is crucial that connectivity is supported by public funding (in case of market failure of private investors to provide the ‘last mile’), and/or through community efforts as it has been happened in many rural communities (e.g. Smart Rural village, Raudanmaa, Finland).

<sup>2</sup> Smart Rural 21 Guidebook (2022)

Therefore, communities need to be open-minded towards new solutions and towards organisations or individuals with knowledge and expertise on the most suitable digital solutions (“should not only to aspire to have faster horses”). This still does not preclude however, that digital solutions in rural communities take the needs of the communities first and match that with innovative solutions (rather than the other way around of taking the innovation, and search for communities where these could be applied).

Secondly, it is important to understand that **digital solutions might not always bring the expected impact**. In order to minimise the chance of larger investments in digital developments having no real long-term impact, it is crucial to consider if, why and when digital solutions are best suited for communities. This requires careful planning of digital tools together with local community members, an approach advocated and applied by the Smart Rural projects with communities.<sup>3</sup> Lessons from the process of developing a community app in Torup (Denmark) within Smart Rural 21 project can provide valuable insights on how digital projects can fail or succeed: The White Paper on ‘Developing a digital solution’ has been elaborated by the local expert team based on the learnings of the process, providing detailed guidance on how to develop a community app. The Smart Rural projects have also worked with further communities that applied (or plan to apply) digital technologies in response to a pressing local need: For instance, for Stanz (Austria), setting up a local renewable energy community and becoming energy self-independent has been a priority over the past years. A hardware (gateway) was introduced - and installed in some households as part of a pilot project - to digitally manage the decentralised energy devices (DERs) in the renewable energy community in real time. The digital process of Ovenhausen was building on long-term community engagement and community projects, including several community-engagement events around developing new digital tools, and digital skills (including training of 12 local volunteers as village digital experts). **A common characteristic of these initiatives that they start from a community need and build on strong community-engagement.**

Further aspects of digital solutions are **scope and scalability**. Digital solutions are often harder to introduce in rural areas, due to the lack of economies of scale (e.g. when comparing the Smart Villages approach to Smart Cities). While certain digital solutions might be successfully applied at the local scale (e.g. a community app), others likely to require collaborative efforts of communities, either due to the interconnectedness (externalities) of specific challenges (e.g. mobility) or due to the fact that it might be more costly to introduce a solution only for a single community. For instance, Ovenhausen has cooperated with 26 other communities in Höxter district in digital project of the district.

Overall, **it is recommended that digital solutions are developed based on specific community needs** and the development is embedded in community engagement processes; digital companies and experts to offer digital solutions according to identified needs of communities. At the same time, communities need to realise that introducing new digital solutions might not necessarily be the innovation the community needs and should not be done only because funding is available (as it might risk long-term sustainability). Introducing new digital solutions need careful planning, testing, engagement and specialist expertise.

“You need to find out if your product solves a real problem for the user or if it is just something you imagine.” (White Paper, Torup)

“When exploring possibilities to use digital technology for health care purposes, many residents turned out to be rather reluctant. [...] As the renovated building also serves as a social meeting point discussions about opportunities and risks associated with digital health care are facilitated in a relaxed atmosphere.” (Ovenhausen Lighthouse Factsheet)

The ‘Fail fast’ method means releasing a minimum viable product (MVP) and testing it with real users fast (before committing a large budget), and then rebuild. “Don’t be afraid to fail – be afraid not to fail!” (White Paper, Torup)

<sup>3</sup> See especially the E-service co-design methodology developed by partner *empirica*: <https://www.smartrural21.eu/roadmap-toolbox/e-service-co-design-methodology/>

## Resources

Title of resource	Short description	Link
Smart Rural 27 lighthouse examples	Lighthouse examples include detailed information on why a community is considered to be smart, what holistic journey it has taken, what key smart thematic areas it is focusing on and community engagement. Digital technology in services has been a focus in Lormes and Ovenhausen, but also present in other communities (such as Stanz on use of blockchain in renewable energy and Raudanmaa for local services).	<a href="https://www.smartrural27.eu/lighthouse-communities/">https://www.smartrural27.eu/lighthouse-communities/</a>
Knowledge cluster on digital services	The digital services cluster is about <b>utilising digital technologies to address challenges frequently faced by rural communities</b> : Enabling access to services of public interest, meeting the demands of an aging population, facilitating access to employment, strengthening social cohesion and volunteering.	<a href="https://www.smartrural27.eu/knowledge-cluster-on-improving-services-through-digitalisation/">https://www.smartrural27.eu/knowledge-cluster-on-improving-services-through-digitalisation/</a>
Guidebook on How to become a Smart Village? (SR21, 2022)	The Guidebook summarises the main lessons of Smart Rural 21 on working with local rural communities, including key questions on what is smart and how to support smart solutions in local communities. Available in all EU languages.	<a href="https://www.smartrural21.eu/guidebook/">https://www.smartrural21.eu/guidebook/</a>
Smart Rural 21 Roadmap Toolbox: Engaging stakeholders	Stakeholder engagement is crucial at all stages of smart village strategy development and implementation. This – among others – will ensure that the needs of the local community are met, that people have ownership of the strategy, and – as a consequence – can be more effectively mobilised for implementation. The ‘Engaging stakeholders’ page offers tools on methods of engaging members of the local community, both individuals and organisations, in developing and implementing a smart village strategy.	<a href="https://www.smartrural21.eu/roadmap-step/engaging-stakeholders/">https://www.smartrural21.eu/roadmap-step/engaging-stakeholders/</a>
Smart Rural 21 tool: Wisdom on community engagement	The testimonials from leaders and community members of the Smart Rural 21 villages aim to inspire other people and provide ideas on how to engage other community members. In this tool, we collected for you some of the key messages, suggestions and ‘tips & tricks’ on community engagement in small – and often remote – rural villages.	<a href="https://www.smartrural21.eu/roadmap-toolbox/wisdom-on-community-engagement/">https://www.smartrural21.eu/roadmap-toolbox/wisdom-on-community-engagement/</a>

## USING DIGITAL SERVICES AS SMART SOLUTIONS

