

Smart Villages
– participatory processes for sustainable rural development

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Session: Stakeholders' participation in sustainable tourism development

Introduction

There is a need for digital innovation initiatives in rural areas, where rural development has been marginalised in favor of urban development (see for example Cowie et al., 2020; Pant et al., 2017). By combining tourism research on digital innovation in rural areas (Braunerhielm et al. 2019; 2018; Ryan Bengtsson et al, 2022) with service design (Vink et al., 2020), and value-creating processes (Nöjd et al. 2020), the aim of our research is to contribute with methods for rural sustainable tourism and community development and identify solutions encompassed for businesses in rural settings. Therefore, we contribute with ways of conducting participatory research- and innovation processes, focusing on places as both destinations and local communities. Our current research project is using a participatory approach developed during several years of previous research, albeit in a wider sense where tourism development is put in the context of a general notion of sustainable rural development. The purpose of our recent project ‘Smart Villages’, is to gain increased knowledge and understanding of how smart solutions can address some of the challenges in rural Sweden. Our general research question is: How can ‘Smart Villages’ be used as a concept to overcome challenges and support sustainable communities? In addition to the overall research question, there are specific research questions corresponding to each of the three work packages in this project. The specific research questions are:

WP 1 - What does it mean to be ‘smart’ in a rural context? What are the challenges for businesses and needs of visitors *and* residents in rural villages in Sweden?

WP 2 - How can entrepreneurs in the retail and tourism industry contribute in creating attractive places in rural villages by co-creating ‘smart’ solutions?

WP 3 - How can ‘smartness’ in service solutions develop future customer experiences and create value for both individual customers and businesses?

This year, focus is on WP 1 and this involves to a large extent various stakeholders in different ways. Using this approach entails both challenges and opportunities and our presentation will discuss the insights drawn from this and previous projects.

Theoretical framework

Inspired by the digital development and innovation in tourism (Braunerhielm et al. forthcoming) we argue that to promote sustainable digital innovation for Smart Villages we need to problematise how spatial and social practises are shaped by technology and the other way around, how technology is shaped by social and spatial practises (Jansson, 2020). Media technology is increasingly and extensively integrated in our way of living (Thielman, 2010; McQuire, 2016; Adams & Jansson, 2012) and has a role in how we understand the world and the activities that we conduct (Fast et al., 2018). In this study, we shift focus on what drives the innovation process, from focusing on finding solutions based on technology to using technology to support smart solutions. We therefor aim to contribute with new approaches to inspire new methods.

By adding the concept of ‘Smart Villages’ to tourism research, we see the possibilities of increasing knowledge about tourism development and innovation in rural areas. Within the field of tourism, the term ‘smart’ has, at least partly, come to overarch rural and urban boundaries. Smart tourism, or rather smart destinations, are closely interlinked with Smart Cities, but have addressed different types of tourism destinations in both rural and urban areas. Tourism is highly dependent on information and communication technologies (see for example Werthner and Klein, 1999; Boes et al 2016; Gelter, 2017) and has been at the forefront of digitalisation (for example at an early stage implementing global digital booking systems, adopting to social media and developing visitor-oriented services such as Airbnb and TripAdvisor) (Gretzel et al,

2015; Krotz, 2017; Mermet, 2017). It is therefore not surprising that the tourism industry has found it useful to apply ‘smart’ to destination development. Smart tourism applies smart city principles to both urban and rural areas addressing the perspective of visitors/tourists into the development process. Lately, however, we have seen an increased awareness of the plurality in how digital technologies affect and alter travel and tourism practices. The most prominent example might be studies of Airbnb addressing how the platform triggers gentrification processes, over-tourism, and conflicts between visitors and locals (c.f. Ioannides et al. 2018; Gurrán et al. 2018) and at the same time elevated as a successful tool enabling authentic experiences, increased tourism and an inclusive form of tourism (Guttentag, 2015; Kadi et al. 2019). But more profoundly this is an example of how media technology and spatial and social practices are highly intertwined. Digital solutions for tourism have socio-cultural and spatial impact, not only within but also beyond the tourism sector (c.f. Jansson, 2020; Braunerhielm & Ryan Bengtsson, forthcoming). Gössling (2017), applies a sustainability perspective on tourism technologies, concludes that they have diverse effects, but also suggests that there is an unused potential in technology to support sustainable tourism. We agree. And we argue that technology can only support sustainable tourism if the technology itself is sustainably developed.

Methodology

In our research, we take a participatory approach (Trischler et al, 2018), where we use a place-based method, focusing on bottom-up perspective and a collaborative, creative way of working together with the aim of producing both practical outcomes as well as scientific results and knowledge (Ryan Bengtsson et al, 2022). This method has been formed over five years of research in close collaboration with businesses and organisations and is influenced by research actively engaging actors (see for example Haraway, 2016 and Ren & Jóhannesson, 2017). The method used is divided into three steps where the collaborative process can be viewed as a ladder, each step forming the base for the next. Knowledge and new perspectives create an input into the next step. Crucial in understanding local communities and tourism destinations is working with them, their places and the actors with knowledge of the place. This is the motive for collaborative research as well as theoretical development, tools and methods to address challenges and opportunities, applicable to the service and tourism sector and research within this field. Therefore, there is an increased demand for participatory processes that foster co-creation in sustainable tourism development (Ryan Bengtsson et al, 2022).

In our ongoing project, the method consists of the following three steps: an inventory, a mapping process and evaluation phase. The first step involves gathering vital information that will serve as input into the following steps of the collaborative process. The following studies are undertaken: a qualitative national and international inventory of examples of ‘smartness’ in rural contexts, qualitative interviews with key actors at our local cases, qualitative inventory of the use of digital technology at the local communities and quantitative visitor surveys. The second step builds on the knowledge created in the first step. The second part of the method involves working with stakeholders at local places. This is a process of a series of workshops led by the research team and with the contribution of our partner businesses who are experts in ICT and community development and planning. The participants will co-create ideas and solutions on how to address challenges and turn these into opportunities for businesses and other actors in their communities. The third step will involve collaborative testing and evaluating the most viable of the creative ideas and solutions. This will provide not only new solutions adding value to the businesses, residents and visitors, but also ideas and insights for both researchers and the partners involved in the project.

Results

As mentioned, the research project Smart Villages grows out of, and further develops our research on rural innovation processes. Previous research projects resulted in a guide for a three-step innovation process that was used by local tourism businesses/entrepreneurs to develop digital innovations. Examples of innovations created through these processes are place-based digital solutions to enhance experiences at tourism places in the county of Värmland. This was for example using a genus perspective and adding guided stories of womens' role in the mines at a cultural heritage site. A rafting company started producing instruction films to visitors and added a historical perspective to their visitors by using multi-media solutions. The digital solutions were developed and innovated in a collaborative process involving a range of actors at place and building on unique conditions at place such as the history, the culture and the natural conditions of each local area. When developing technological solutions, we therefore argue for the importance of anchoring solutions in people's practices and needs (Braunerhielm & Ryan Bengtsson forthcoming). We want to develop this further by shifting focus to rural businesses and their specific conditions. At this conference, we will present our recent findings regarding the knowledge about local conditions – both challenges and opportunities for rural villages.

As mentioned, our current research project is further developing an innovation process, resulting in ideas, concepts and prototypes for digital solutions encompassed to a rural setting, using the concept of 'Smart Villages' as a focal point. Our presentation will therefore also include insights from using this method in our previous and ongoing research project, conducted at in total seven local destinations in Sweden. We will describe this learning-centered 'ecosystem' focused on the co-creation between researchers, companies, residents and visitors to create attractive and creative rural environments that contributes to sustainable tourism development. We will discuss challenges and opportunities of engaging stakeholders in a participatory approach. For example, our previous research has shown the benefits of working with two or more cases simultaneously and letting actors from different places meet, to create synergy effects. On the other hand, involving multiple stakeholders create uncertainties regarding ownership of solutions and concepts, implementation of ideas and future financial support.

Conclusions

We strive to contribute to a broader use of the concept of 'smart'. With 'smart solutions' in our project, we mean new working methods, new collaborations and new digital place-based solutions that contribute to vibrant, resilient rural communities, using resources in an efficient and responsible way. By combining the concept of Smart Village with our place-based approach on digital innovations we also want to add that technology can only support sustainable development if the technology itself is sustainably developed. We are therefore adding a geomedial perspective to Smart Villages to further develop and strengthen the growing research field (Jansson, 2020; Adams, 2017; Fast et al. 2018). In this project we are working in a place-based innovation process involving the special challenges, conditions and actors of place to improve conditions for both businesses, locals and visitors. The businesses and the villages will lead the development and innovation instead of 'being led' by the technology. We argue that developing such a process is vital for a sustainable and long-term durable outcome, as it ensures that the ideas, concepts and prototypes produced are based on the local communities' situation. Exactly what the practical solutions will be as outcomes of this project, neither we as researchers, nor our participating partners will know at this stage.

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