

Smart and Sustainable Villages

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Norrbotten – a region of contrasts

- Europe's last wilderness
- Among the 36 most innovative regions in Europe
- 250 000 people – with the same density as other European countries, 12 million people would live here
- $\frac{1}{4}$ of the total land area of Sweden
- 2,5 pers/km², comparing with Brussels with 7025/km²
- 14 municipalities - Luleå 72 000 citizens
- The highest mountain – Kebnekaise 2117 m
- The deepest sea – Hornavan 232 m
- Midnight sun in summer
- Polar night in winter



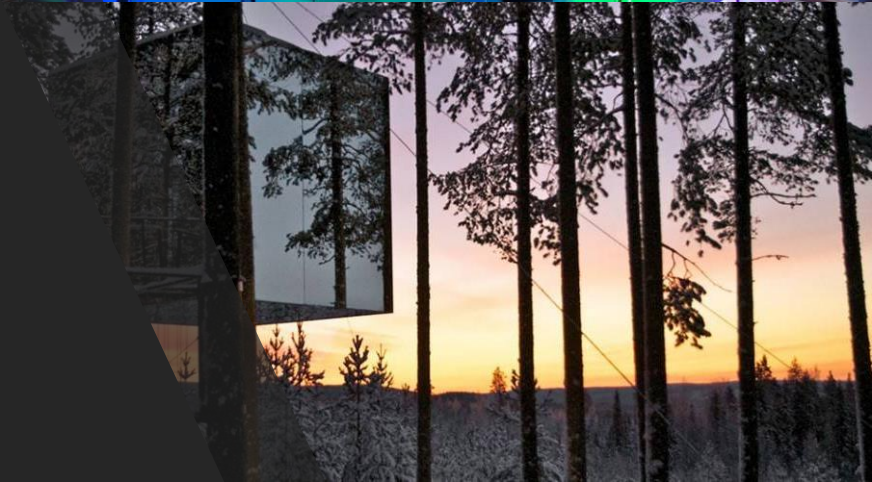
Challenges in our region

- **Connectivity – access to broadband for all? Not all have phone access**
- **Traffic/infrastructure – Snowy roads, slippery, lack of public transportation, local buses perhaps 2times/day**
- **Jobs - lack of people with the right competence, lack of jobs**
- **Health care – 200 km (or more) to specialist doctor and dentist, expensive doctors**
- **Population numbers –decrease in population, uneven age distribution – young people are moving**
- **Shopping – few stores, local grocery sometimes 40 km away**
- **Cultural events – most often 50-60 km away**
- **Schools – often 30 km or more to school for children, school bus**
- **Universities – up to 400 km away – distance education**



So it is important to be smart!

- Connected
 - Online, globally, access to transport
 - Closely, access to public services, access to other people
 - Culturally: multi-cultural environment with multiple ethnicities, services that facilitate practice and living
- Safe
 - Feeling safe in your home and in the society (e.g. monitoring)
 - Access to health care (e.g. eHealth)
- Sustainable
 - Distributions channels for locally produced goods, services and competencies
 - Take advantage of local natural resources and strengths; wilderness, darkness, snow
 - Life-cycle perspective of goods and services
 - Inclusion: Access to society, both physically and mentally
 - Equality and influence

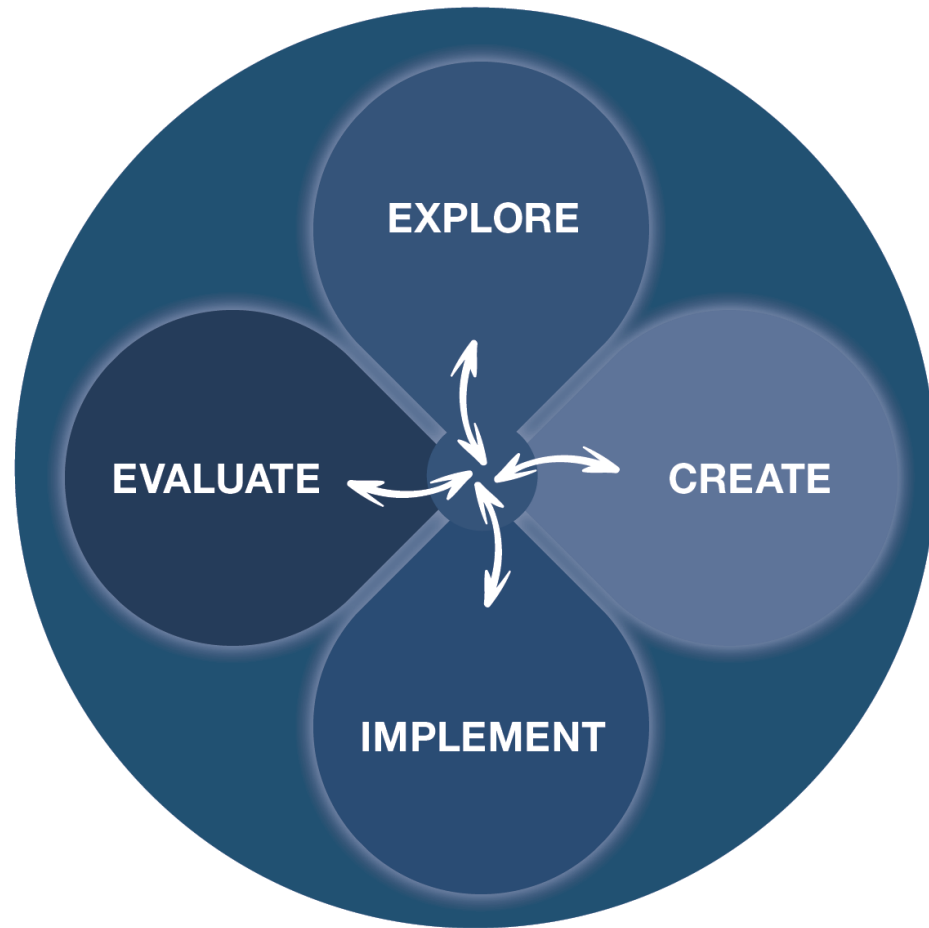


Smart and Sustainable Villages Project

- Background:
 - Getting **access to services** and transports are vital for people to be able to live, work and visit the region
 - **Digital services** offered by the municipalities to their citizens living, working, running businesses in sparsely populated and remote areas are **sparse**
 - Our changed behaviour, e.g. online shopping put new requirements on **transportation of goods** in the region – which are not coordinated
 - E.g. Up to 30 trucks per day delivers good in one village



The FormIT Process



Explore actors needs *of* and needs *in* digital services and transports in the region

Co-Create value-adding e.g. ideas, concepts, solutions for actors active in the region

Implement the co-created solutions in the actors everyday context

Evaluate experienced value of the solutions with the actors

Stakeholders engaged in co-creation of solutions

- **Citizens** – provide insights, co-create service solutions, experiment with solutions, use and adopt
- **Companies** in the region– provide insights, co-create solutions, experiment, develop solutions
- **Municipalities/cities** – perform data collections, co-create solutions, implement solutions
- **Local Government** – perform data collections, co-create solutions, evaluate results, enable implementation of solution
- **Living Lab** – plan, design studies, teach municipalities about LL studies and data collection techniques, facilitate co-creation workshops, evaluate, summarize and spread results
- **Researchers**: gain insights into the drivers and motivators for citizens to use digital services, methods for co-creation
- **Students** – perform data collections, co-create solutions



**Everyone does not live
in smart cities but we all
want to be included in a
smarter society 😊**



Thank You!



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