

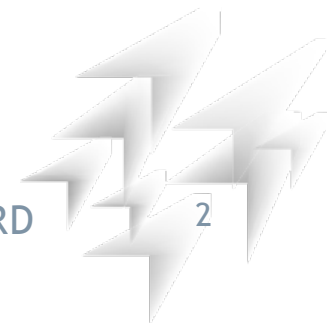
TAKING
COOPERATION
FORWARD

 Launch Event - RI: Tools for Enterprises and Stakeholders, 13th September 2017, Rimini (Italy)

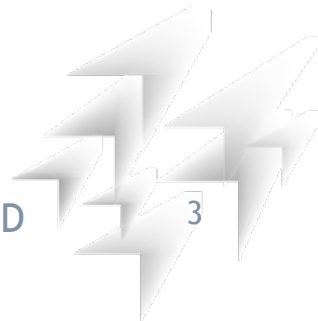
 **LIVING LABS**

 Otakar Čerba, Czech Centre for Science and Society

- What does Living Lab concept mean... → Short theory
- How could be Living Lab implemented in
 - global level... → ENoLL
 - European level... → CentraLab project
 - cross-border level... → Pilot activities of CentraLab project
 - national level... → Wirelessinfo Living Lab
- Any concrete example... → Smart Points of Interest



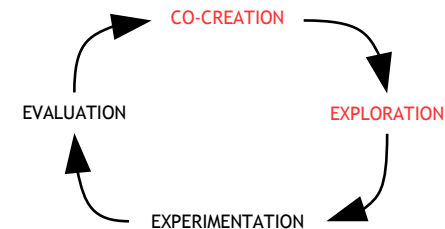
- LL concept was developed in the Massachusetts Institute of Technology (MIT Media Lab) in 2003
- Authors: William J. Mitchell, **Kent Larson**, and Alex Pentland
- Research: to study people and their interaction with new technologies in a living environment
- Original function of methodology: an user-centered methodology for prototyping, validating and refining complex solutions in multiple and evolving real life contexts



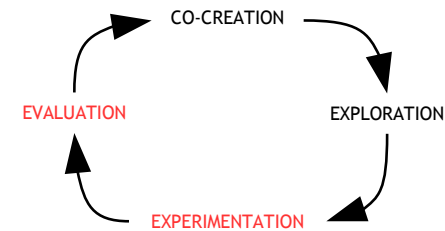
- Ecosystem for experimentation and co-creation with real users in real life environments → User-driven approach
- Essential principle = **Strong cooperation of researchers, developers, policy makers and end users on solving common problems (from idea via research, development and testing to real market) in the real world**
- End users are directly involved into research and development



- **Co-creation:** co-design by users and producers - diversity of views, constraints and knowledge sharing
- **Exploration:** engage stakeholders (especially end users) for discovering emerging scenarios, usages and behaviors through live scenarios in real or virtual environments (e.g. virtual reality, augmented reality, mixed reality)



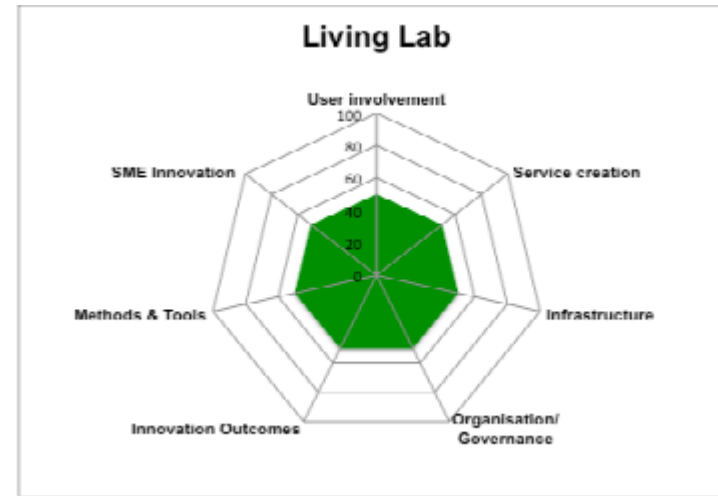
- **Experimentation:** implementing live scenarios within communities of users, including collecting and analyzing data for evaluation activity
- **Evaluation:** assessment of concepts, products and services according to socio-ergonomic, socio-cognitive and socio-economic criteria



LL INDICATORS

(FROM ALCOTRA INNOVATION PROJECT: LIVING LABS DEFINITION, HARMONIZATION CUBE INDICATORS & GOOD PRACTICES)

- User involvement
- Service creation
- Infrastructure
- Organization / Governance
- Innovation outcomes
- Methods and Tools
- SMEs Innovation



Organization and Governance



no organisational
structurs and
management
structures are
defined

contractual
agreements with
partners,
3rd party funded

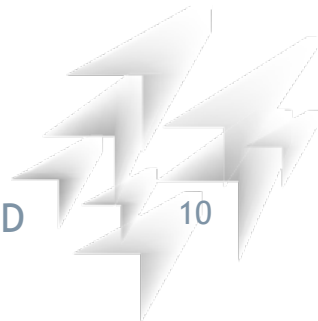
Business models
are defined,
management
structures are
established
LL is self-
sustaining



- Idea (visions) discussing
- Research methods (research methods such as action research, crowd sourcing, emphatic design, participatory design)
- Requirements definition
- Live scenarios (experiments)
- Testing and validation
- Methodology and tutorials co-creation
- Feedback and user experience providing (for updating, improvements and commercialization)
- Promotion and sharing experience



- Integration of the users into the development process for ensuring highly reliable market evaluation
- Reduction of technology and business risks
- Living Labs are beneficial to SMEs, micro-organizations, and start-ups, since they can share resources without so much venture capital
- Large subjects have access to a broader base of ideas



LL SUMMARY

(BASED ON ALCOTRA INNOVATION PROJECT: LIVING LABS DEFINITION, HARMONIZATION CUBE INDICATORS & GOOD PRACTICES)

- Who? - Stakeholders (accent on end users)
- What? - Innovations (products, services, business models, technologies, data...)
- How? - Cooperation on innovation process (multi-method co-creation)
- Where? - Real life environment (with use virtual reality)



- European Network of Living Labs
- Launched in December 2006
- Non-profit association
- Brussels (Belgium)
- Web: openlivinglabs.eu
- **OpenLivingLab** days event
- Publications: **Introducing ENoLL and its Living Lab community, Citizen-Driven Innovation Handbook**

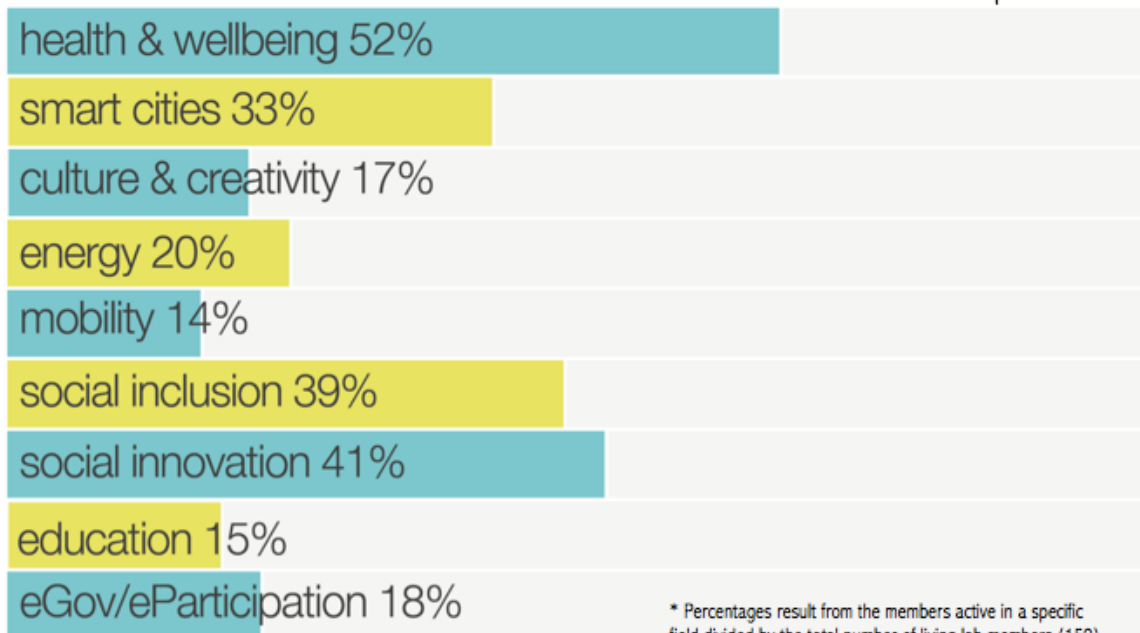
**European
Network of
Living Labs**



ENoLL AREAS OF WORK

ENoLL Members are active in the following thematic areas:*

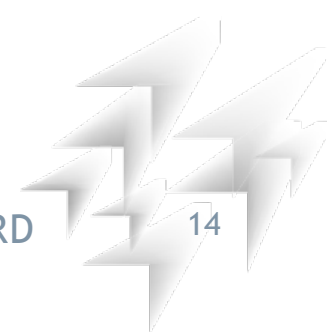
ENoLL combines vertical specialization domains (health, smart cities, creativity, education) with horizontal and territorial specializations



* Percentages result from the members active in a specific field divided by the total number of living lab members (150)



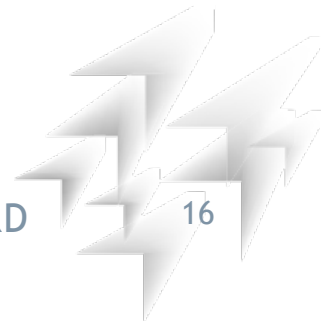
- ~400 LLs
- ~170 active members
- 20 EU countries
- 5 continents



- Central European Living Lab for Territorial Innovation
- 2011-2014
- 10 Project partners from 8 EU countries
- Lead Partner: E-zavod (Slovenia)
- Follow MedLab project
- Transfer the LL approach and methodology to meet the needs and objectives of Central European regions
- Exchange of best practices between two of the more peripheral zones of European Territorial Cooperation

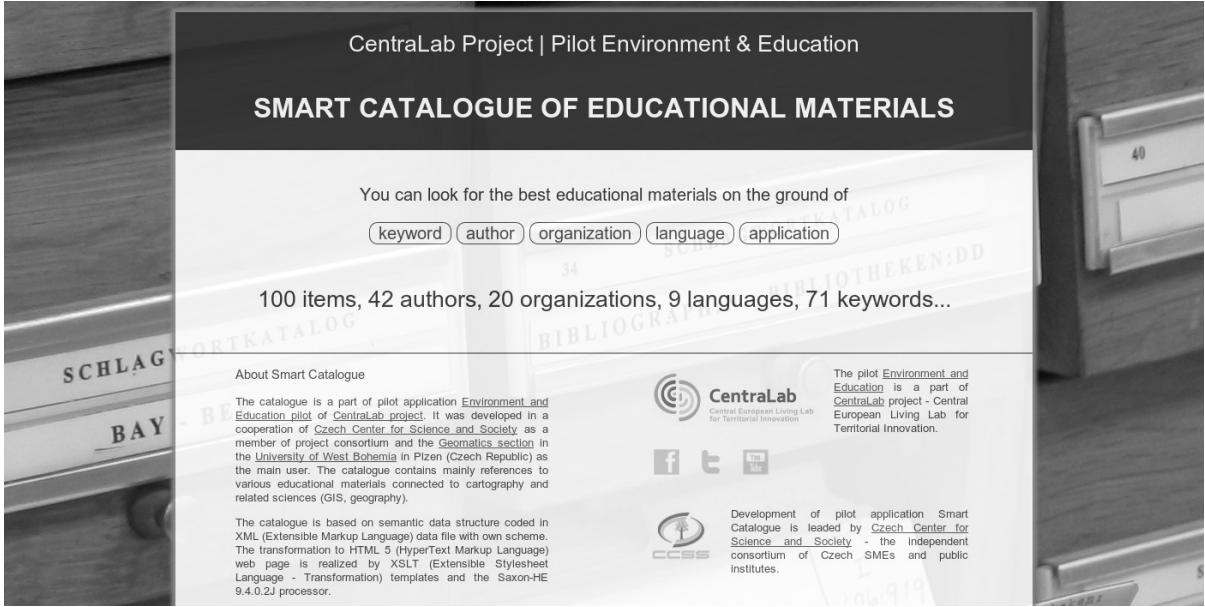


- Climate change (intelligent public lighting in Trento)
- Eco-tourism (social web app for Gorenjska)
- eHealth (supporting mobility of disabled people, Piemonte)
- Energy efficiency
- Environment and education
- Media and creativity
- Micro-SME networks
- Mobility (e-car mobility, Vorarberg)
- Rural development (Smart procurement environment)
- Waste management



ENVIRONMENT AND EDUCATION PILOT

- CCSS; Corvinno Technology Transfer Centre, Technical University of Kosice
- Linked Data and open web standards
- Public participation



CentraLab Project | Pilot Environment & Education

SMART CATALOGUE OF EDUCATIONAL MATERIALS

You can look for the best educational materials on the ground of

keyword author organization language application

100 items, 42 authors, 20 organizations, 9 languages, 71 keywords...

About Smart Catalogue

The catalogue is a part of pilot application Environment and Education pilot of CentraLab project. It was developed in a cooperation of Czech Center for Science and Society as a member of project consortium and the Geomatics section in the University of West Bohemia in Pízen (Czech Republic) as the main user. The catalogue contains mainly references to various educational materials connected to cartography and related sciences (GIS, geography).

The catalogue is based on semantic data structure coded in XML (Extensible Markup Language) data file with own scheme. The transformation to HTML 5 (HyperText Markup Language) web page is realized by XSLT (Extensible Stylesheet Language - Transformation) templates and the Saxon-HE 9.4.0.2J processor.

CentraLab
Central European Living Lab
for Territorial Innovation

The pilot Environment and Education is a part of CentraLab project - Central European Living Lab for Territorial Innovation.

Development of pilot application Smart Catalogue is led by Czech Center for Science and Society - the independent consortium of Czech SMEs and public institutes.

CCSS



Beyond GoogleMaps

Author: Turner, Andrew (8)

Turner, Andrew: [Beyond GoogleMaps](#), [Crisis Mapping Lightning Talk Geo Commons](#), [How Neogeography Killed GIS](#), [Humanitarian Mapping - Interaction ICCG](#), [Mapping Social Infrastructure with Social Media](#), [OpenStreetMap as a Successful Model for User-Generated Geospatial Content](#), [The Future of the Map](#), [Where 2.0 Mapping Hacks Tutorial 1](#)

Language: English (53)

Keywords: cartography (54) , map (12) , digital map (1)

Type of material: Presentation (powerpoint style) (57)

[Go to the educational material...](#)

[Back to the home page](#)

Average similarity to other materials

30%

0% 50% 100%

The most similar materials

1. [Maps and Judgment](#) (similarity score: 11)
2. [Magnificent Maps: Cartography as Power, Propaganda, and Art](#) (similarity score: 10)
3. [Přístupnost map](#) (similarity score: 9)
4. [Mapping Social Infrastructure with Social Media](#) (similarity score: 9)
5. [The Future of the Map](#) (similarity score: 9)



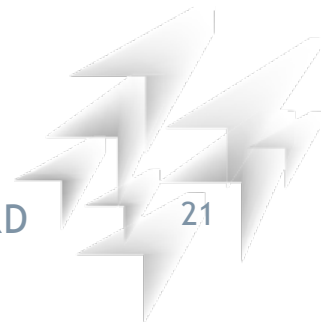
- Members of WIRELESSINFO association (founded in 2003)
 - SMEs (4)
 - University
- Close cooperation with local and regional authorities and research institutes (so-called external members)
 - UWB
 - CCSS
 - Liberec Region; cities Olomouc, Telč, Znojmo
 - Forest Management Institute (public body)



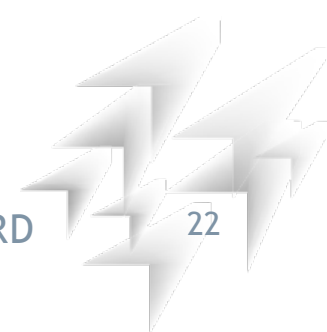
- Focus on geoinformation technologies, spatial data and their implementations in various domains (agriculture, agrotourism, land management, water management, forestry, risk management...)
- Goals of WIRELESSINFO
 - to coordinate activities in research
 - new development
 - testing and exploitations of new information systems and technologies for data collection and data transport on the market



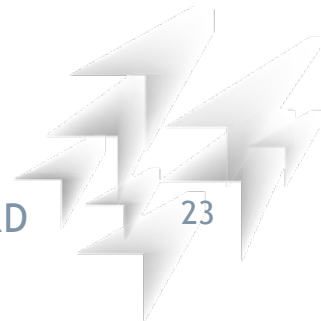
- **AgriSensor** - design and development an integrated framework of dynamic cartographic visualization and modeling tools for agricultural applications based on wireless sensor networks information
- **COIN** - interoperability of agriculture data and their re-usage for decisions on the level of tactical planning on the farm (participation on ontology development for machinery sharing)



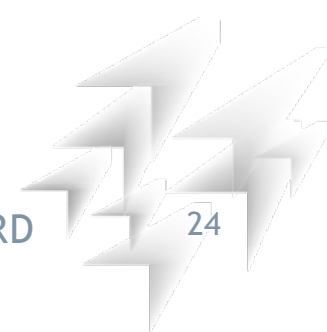
- **AgriXchange** - efficient exchange of information leading to efficient business processes and adoption of new knowledge and technology (development of new data models and exchange formats)
- **SKIN** (Short supply chain Knowledge and Innovation Network) - systematization and bringing knowledge to practitioners, promote collaboration within a demand-driven innovation logic and provide inputs to policy makers



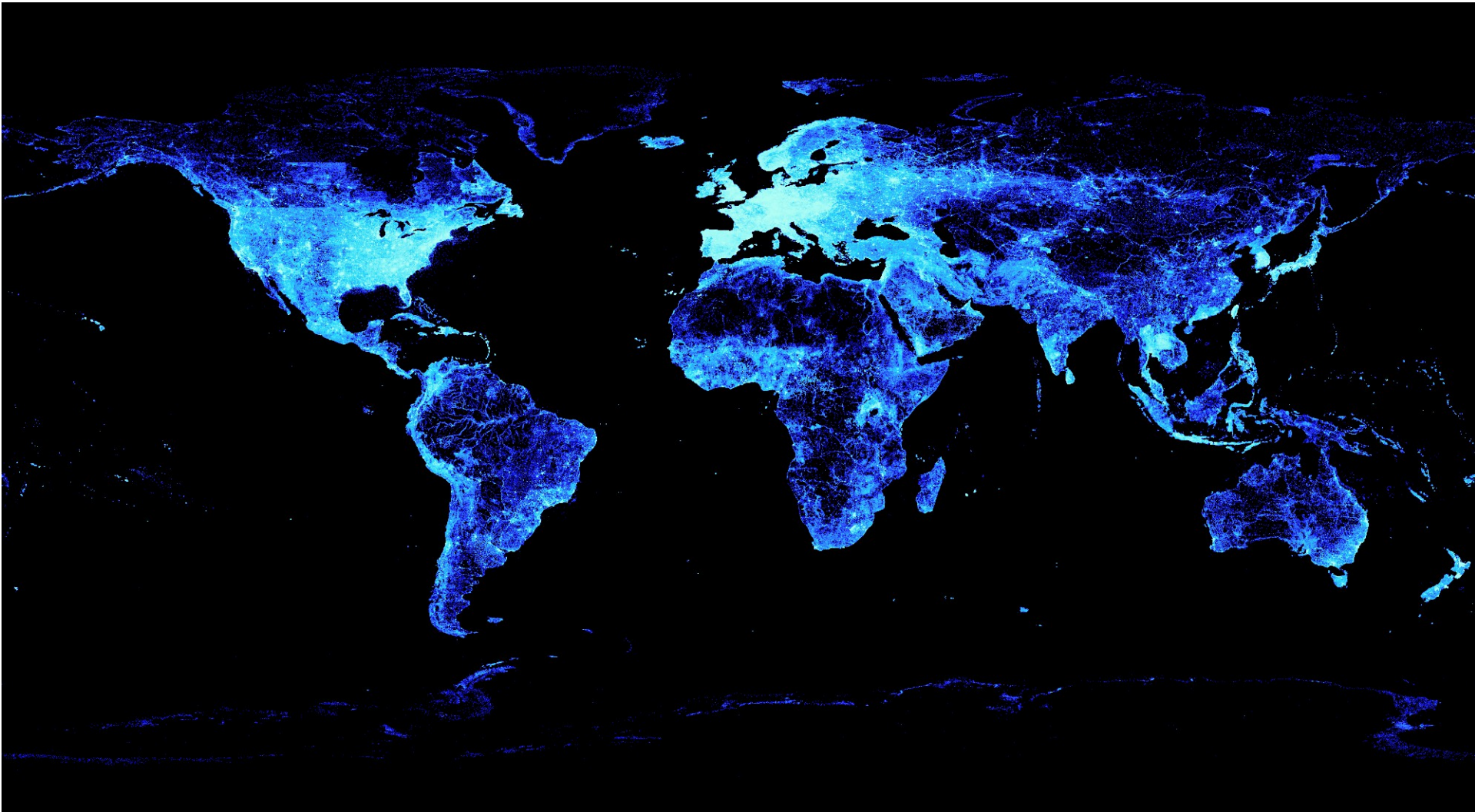
- Following Living Labs principles
- Strong cooperation with stakeholders from an initial idea to market
- Support of other initiatives (related to public participation) such open data and open content, Linked Data, standardization activities (OGC), data crowdsourcing, science shops, hackathons, Software as a Service activities, open innovations...



- The example of innovation developed and managed on the basis of LL approach
- Open global database of points of interest published as Linked Data
- 27 000 000 points
- Large group of data providers (from OSM, GeoNames.org to small local providers and students)
- Web page: gis.zcu.cz/spoi



SMART POINTS OF INTEREST



APPS BASED ON SPOI

Mapa lokality Odkazy Okolí Metoddata

Zřícenina kaple sv. Jana



Popis: Monumentální torzo čtyřboke patrové barokní kaple sv. Jana Nepomuckého se nachází v lese, nedaleko obce Loreta jižně od Klatov. Ve zchátralém objektu objevíte zvláštní dílo - netypickou podlahu, která je ztvárněná jako vodní hladina, do níž spadla obří kapka vody. (podle webu kudyznudy.cz)^[1]
Původně pouťová kaple z roku 1730 leží 1,5 km severně od Týnce.^[2]
Čtyřboká barokní patrová kaple, orientovaná přesně na osu zámku v Týnci. Stavba kaple byla zahájena před rokem 1720 Maximiliánem Norbertem Krakovským z Kotovrat podle plánů Marca Antonia Gilmetho, dokončena byla až kolem roku 1730 za jeho syna Jana Josefa Hyacinta. Kaple byla zrušena v roce 1783 v rámci josefínských reforem a prodána za 30 zlatých klatovskému měšťanovi Schambergerovi. Ten nechal kapli částečně rozebrat a materiál použil na stavbu svého domu v Klatovech. Kaple se tak změnila ve zříceninu. Vnitřní zařízení kaple bylo po jejím zrušení přeneseno do nové zřícené zámecké kaple v Týnci a do kaple sv. Barbory na tynecském hřbitově, později bylo zčásti přestěhováno do kostela v Týnci a z větší části do kostela v Bešínách (zvon, hlavní oltář, sochy atd.). - Dnes z kaple zbyla monumentální torzo. Jesté před 2. světovou válkou byla zřícenina krátce vyzdobena jako rozhledna, dnes již zřítavý zschovává jen neupravené obvodové zdi. - Kaple není započta v katastru nemovitostí, pozemek pod ní je soukromě vlastníci (Dana a Bc. Milan Vacovští z Klatov). (podle webových stránek <http://www.zrnicenekostely.cz>)^[3]

Odkazy

tabulka: [Kaple Svatého Jana \(MonumNet\)](#)^[1] - Záznam o nemovité památce na webu MonumNet (Národní památkový ústav)^[2]

článek na webu: [Kaple Svatého Jana \(Památkový katalog\)](#)^[3] - Záznam o památce v Památkovém katalogu (Národní památkový ústav), včetně fotografie a podrobného popisu^[2]

fotografie: [Zřícenina kaple nad Týncem](#)^[4] - Fotografie kaple Svatého Jana Nepomuckého (krizemkrazemceskem.cz)^[1]

článek na webu: [Zřícenina kaple sv. Jana Nepomuckého v obci Loreta na Klatovsku](#)^[5] - Článek na webu kudyznudy.cz^[2]

Okolí

[Odtb. ke sv. Janu](#)

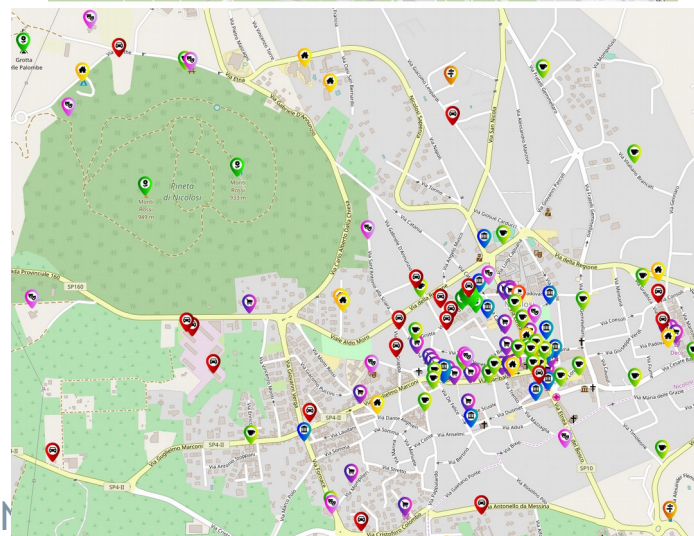
[Kapka aneb Hladina hloubky](#)

Další informace

Ostatní názvy: Zřícenina kaple sv. Jana^[1], Zřícenina kaple Svatého Jana Nepomuckého^[2]

Kategorie: chapel, culture and entertainment, ruin, culture and entertainment

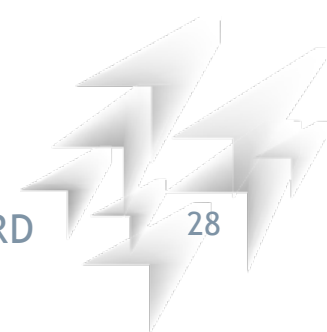
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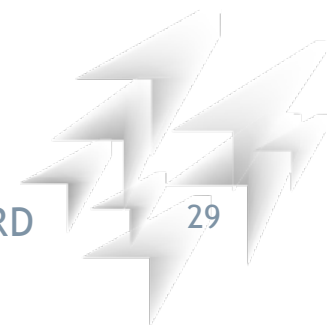
- User involvement (70)
 - Users add new points (SKIN project, Belluno...)
 - Users required new attributes to data model
- Service creation (100)
 - There is a lot of various services and apps (also developed by users)
- Infrastructure (25)
 - No specific LL infrastructure, but possibilities of co-creation (user editing functions) and high level of standardization and interoperability



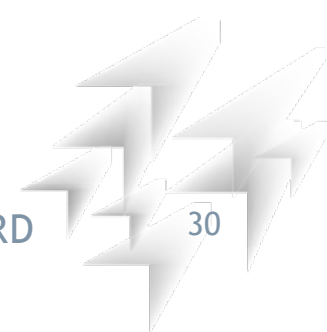
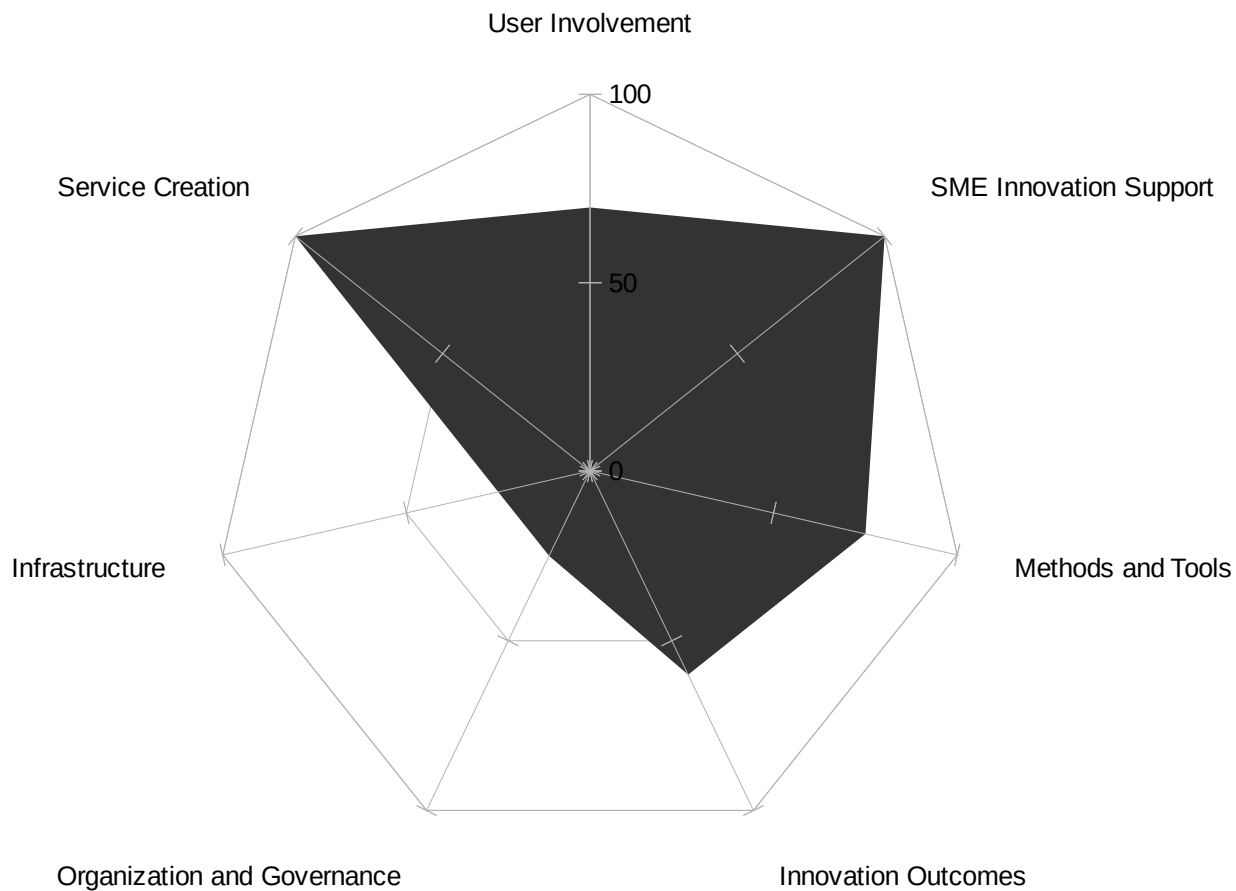
- Organization and Governance (25)
 - Business models are being developed (new stakeholders)
 - Cooperation with regions (Zemgale) or Local Action Groups (Pošumaví)
 - Project is funded to 2019
- Innovation Outcomes (60)
 - Target markets are specified (not for data, but for services and apps) - tourism, agriculture, risk management, transportation...



- Methods and Tools (75)
 - Methods and tools for participation (adding and editing data) are developed
 - Methodology in development
- SME Innovation Support (100)
 - SPOI is developed in close cooperation with SMEs (HSRS, BOSC)



SPOI & LL INDICATORS



THANK YOU FOR YOUR ATTENTION

Otakar Čerba (CCSS)

www.linkedin.com/in/otakarcerba

