GRASSROOTS INSTITUTE

UNIVERSITÀ DI TORINO

Dipartimento Management "Valter Cantino"

NatRisk

Mountain Ecosystems & Resources Management

Smart Mountain Tourism Development

Prof. Dr. Riccardo Beltramo - University of Turin

SMART =

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S.M.A.R.T. =

- **Specific** – target a specific area for improvement.
- **Measurable** – quantify or at least suggest an indicator of progress.
- **Achievable** – specify who will do it.
- **Relevant** – state what results can be significant, depending on the organization.
- **Time-related** – specify when the result(s) can be achieved.

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S.M.A.R.T. ⇄ GOALS

↓

MANAGEMENT

⇣

International Organization for Standardization

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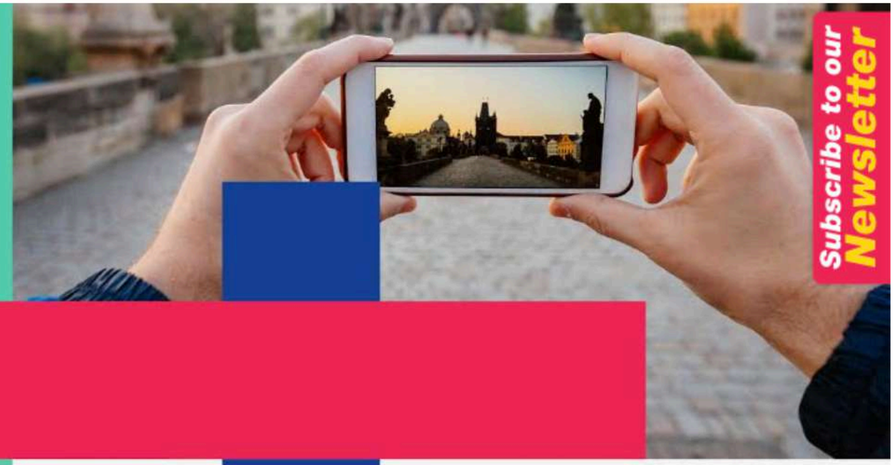
SMART TOURISM

EUROPEAN CAPITAL OF SMART TOURISM

HOME ABOUT APPLY CITIES NEWS

An EU initiative to reward innovative and smart tourism in European Cities!



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SMART TOURISM

SUSTAINABILITY

ACCESSABILITY

DIGITALISATION

CULTURAL HERITAGE & CREATIVITY

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SV² = Smart Visions * Smart Villages

Lo Scatol8 per la Sostenibilità srl
Riccardo Beltramo
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Scatol8 per la Sostenibilità srl (briefly, Scatol8 srl) is an **academic spin-off** of the University of Turin and an **innovative start up** of Regione Piemonte. It works in the fields of **clean technologies and environmental monitoring.** Its activity concerns the development, production and marketing of innovative products and services with a high technological value, and more specifically the development, production and marketing of integrated electronic systems and networks for the collection of variables - in particular environmental - and data analysis through intelligent dashboard, primarily intended for agricultural, commercial and industrial activities.

Product innovativeness is due to the **development of specific algorithms that allow the application of methodologies (Business Intelligence & Organizational Intelligence)** traditionally reserved for corporate information to environmental and energy data.

These products have a high technological value because of the **specifically developed software, which makes them modular and highly customizable;** in particular, it allows both a simple connection to pre-existing environmental management systems, and complete technological integration with sensor and actuator networks **(Internet of Things).**

From Scatol8's background:

The proposal
Life takes advantage from a safe and healthy environment and from availability of services, able to provide satisfactory answers to citizens' needs.

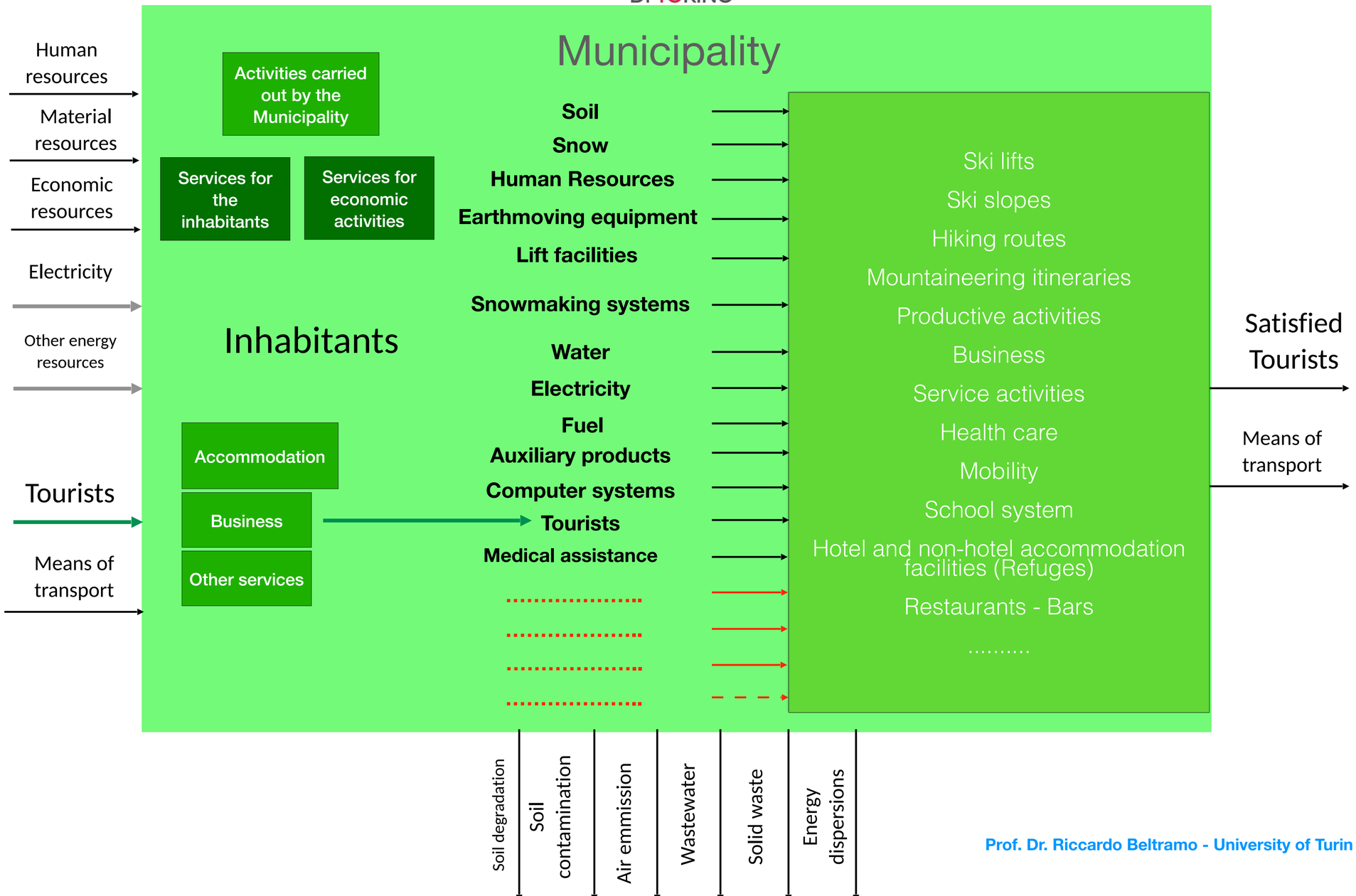
Smartization springs from the analysis of lives in the environment, and becomes real from the **combination of natives' culture,** shaped by centuries of interactions with mountain realities, and **possibilities provided by new technologies and improved and fast connections.**

Though technologies play a crucial role in finding appropriate answers, their introduction comes after the **identification of needs, an accurate, iterative and resource-demanding planning phase that involves humans beings, institutions and stakeholders.** A **bottom up** itinerary builds up the design process: from one side, a solicitation of needs, a verification of data sharing availability and, from the other, the design of a distributed network, able to find answers which could influence habits of individuals and collectivity.

Elder, active and young people engaged in their activities, performed in **normal, abnormal and emergency conditions** will feed the knowledge base of an **Artificial Neural Network (ANN)** technologies designed, trained and used to obtain algorithms able to tune the improvement of quality of life IN monitored and improved environmental and landscape conditions.

In order to consider the **wide diversity of situations** under the umbrella of "smart village", our proposal is currently in the phase of defining the specifications in equally diversified territories, through dialogue with local players: the Municipality of **Valprato Soana** and the **MonterosaSki area.**

VALPRATO SOANA ..... MONTEROSASKI



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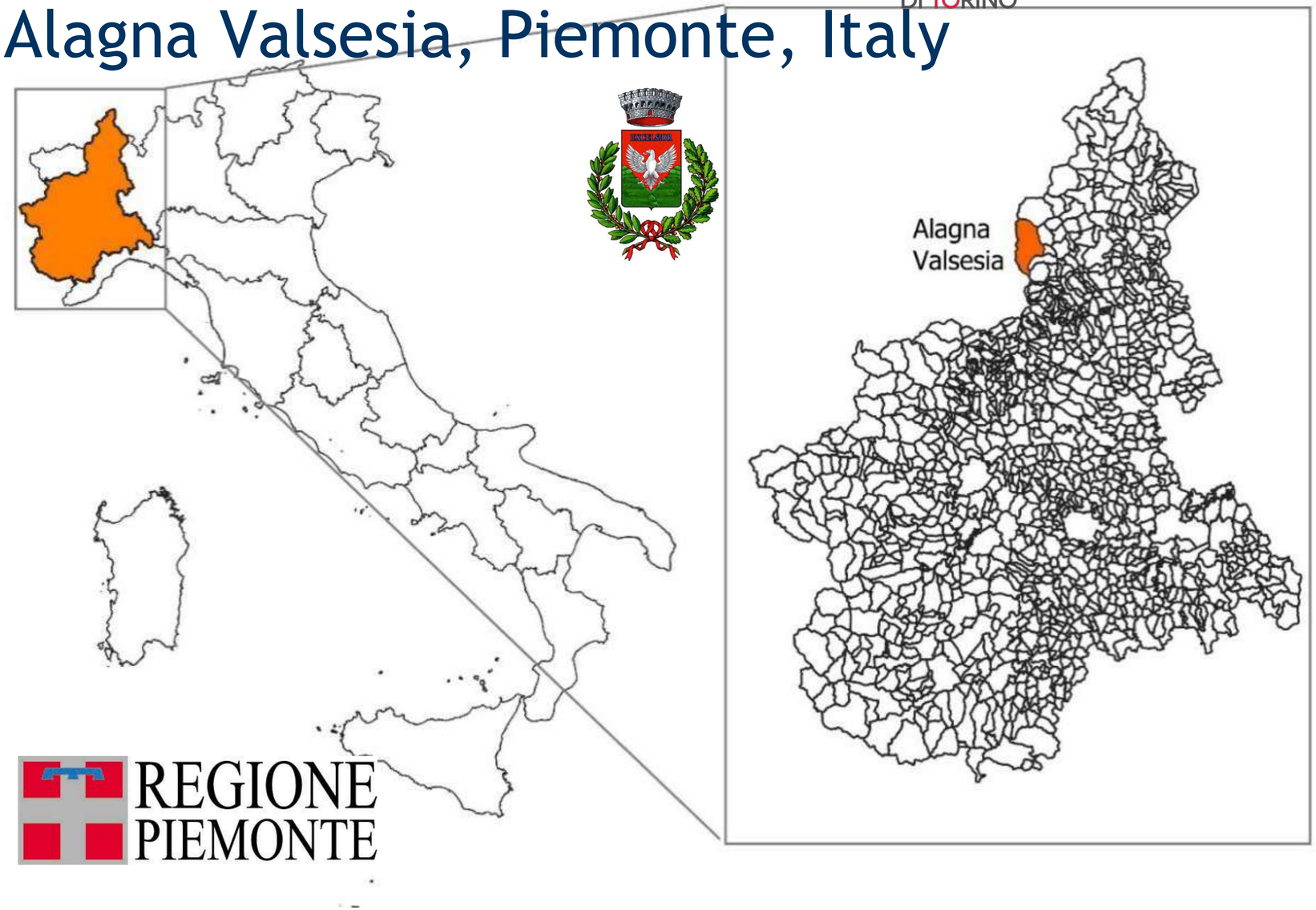
Winter sports		Summer sports	Others….
Snow	Ice		
Biathlon	Bandy	Sport climbing	Hang gliding
Carving	Bob	Cycling	Wildlife photography
Nordic combined	Toboggan run	Downhill	Funbob
Sled dog racing	Curling	Horse riding	Swimming
Freestyle	Hockey su ghiaccio	Horseback riding	Skydiving
Ski jumping	Sled hockey	Golf	Tibetan bridge
Downhill ski	Ice cross downhill	Husky Trekking	Spa
Ski mountaineering	Ice sailing	Jogging	Swan dive
Cross-country skiing	Figure skating	Kayak	
Speed skiing	Speed skating	Mountainbike	
Ski touring	Short track	Nordic Walking	
Ski-orienteering	Skeleton	Orienteering	
Skibike	Sledding	Adventure playground	
Skiboard	Ice flying	Rafting	
Ski archery	Ice-climbing	Skyrunning	
Sled dog	Winter mountaineering	Trekking & hiking	
Luge natural track		Fixed rope route	
Snowboard			
Snow bike			
Snowboard cross			
Snowscoot			
Telemark			
Snowshoes			

Source: Cambiamenti climatici, innevamento programmato e impatto ambientale: - La gestione sostenibile delle piste da sci piemontesi, R. Beltramo et al.

Alagna Valsesia, Piemonte, Italy



The context: Alagna Valsesia

1. A **mountain municipality** of 729 inhabitants located
   - in the North of Piemonte, in the province of Vercelli
   - along the Alps, in the context of the Natural Park of Alta Valsesia – the highest in Europe
   - on the slopes of Monte Rosa, the second highest peak of the Alps

2. A **tourist destination** since the end of the XIX century thanks to
   - its landscape, nature, outdoor activities – such as skiing in winter and hacking in summer
   - tradition related to the Walser population, who has begun to live around the Monte Rosa since the XIII century
   - scientific tourism (Istituto Mosso)

- Economy of the area is strongly based on tourism industry

The research project «Alagna Walser Green Paradise – AWGP» Objectives and relationships

- «Alagna Walser Green Paradise –AWGP» is **intended to**
  - define programs for **smart** tourism
  - involve local stakeholders (participatory tools)
  - develop a tools for the evaluation of the Quality of Life

- The project AWGP was born by the **relationship among**
  - Comune di Alagna Valsesia (the municipality) and
  - Regione Piemonte and
  - the Department of Management of the University of Torino

- Regione Piemonte listed AWGP as one of its **strategic projects**

Alagna Walser Green Paradise – AWGP: planni

	Months	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
WP	Description																								
1	Planning of activities																								
2	Study to identify stakeholders involved in the tourism industry																								
3	Integrated analysis about the relationship between stakeholders and tourism offer																								
4	Smart Governance construction																								
5	Organization of the Governance and Do																								
6	Check																								
7	Sharing of results and Act																								
8	Communication																								

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The 4 pillars of the research

Cultural Heritage & Creativity	Environmental Sustainability
Digitalization	Accessibility

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Proposals? Methodologies?

Cultural Heritage & Creativity	Environmental Sustainability
Digitalization	Accessibility

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Descriptions of Researchers team, Activities, Reports, Abstracts, People involvement, Questionnaires, Interviews, Pictures, Data, etc…

Guidelines for ….

Links to other projects

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NatRisk

Instagram

Cerca

alagnawalsergreenparadi...

Messaggio

Post: **55** **344** follower **329** profili seguiti

Alagna Walser Green Paradise

Servizi locali

Quando la ricerca incontra il territorio nasce il profilo per risvegliare l'anima GREEN e WALSER di Alagna Valsesia

A breve esperienze TOP per voi!

linktr.ee/AlagnaWalserGreenParadise

Follower: **uaua84**, **pagano.domenica**, **alpineyogamonterosa** e altri 6

REGIONE PIEMONTE

FuoriFesti... **Dicono di ...** **Qualità di ...** **Accessibil...** **Digitale** **Ambiente** **Patrimonio**

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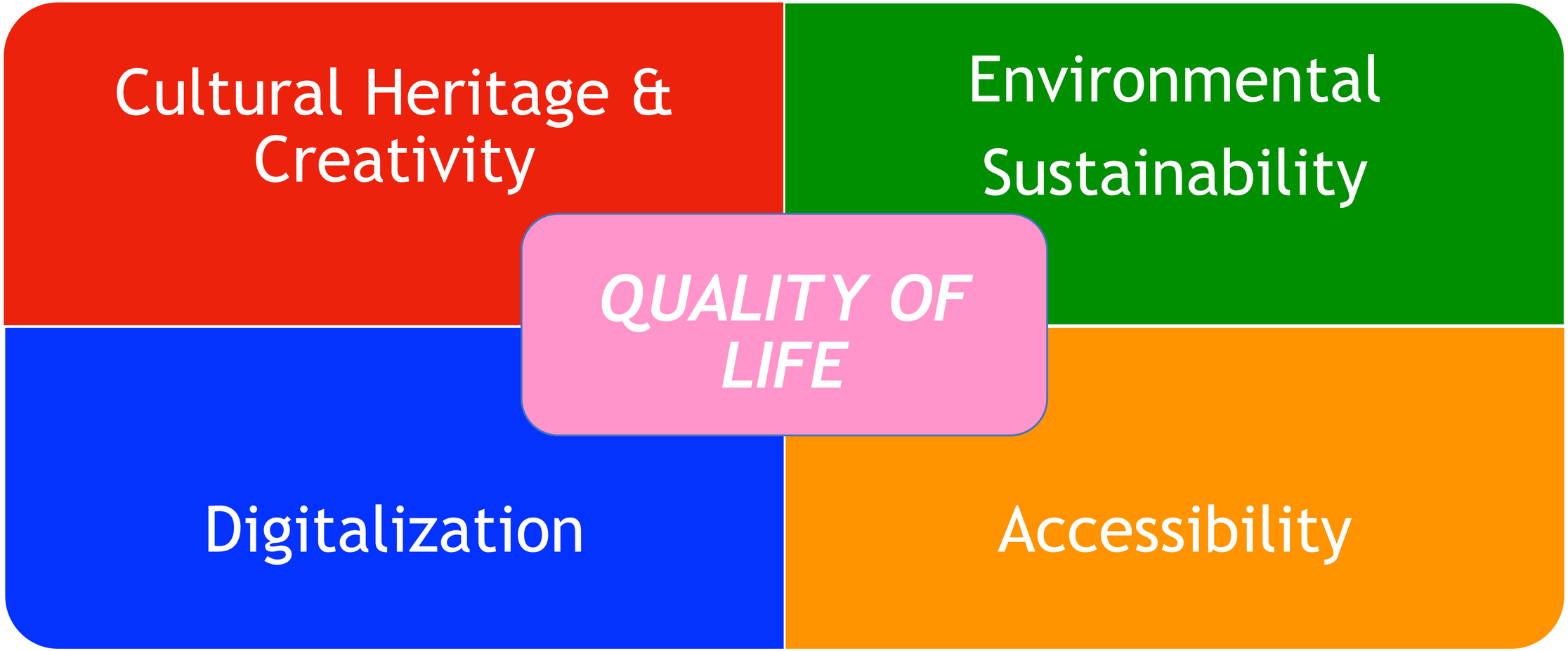
The 4+1 pillars of the research



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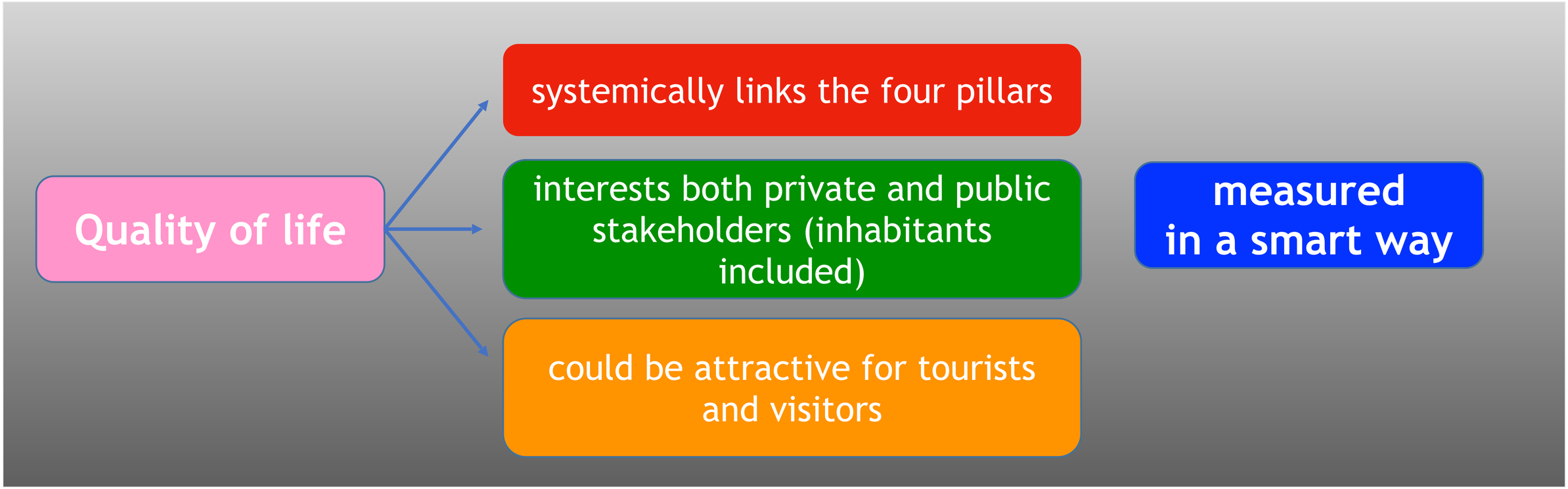
Quality of life

- The main indicator about quality of life had been **GDP or GDP per person for a long time**; wide bibliography showed that these measures **are not necessary** in line with the quality of life perceived by people

- Quality of life includes both **quantitative** (GDP is one but the only indicator) and (maybe above all) **qualitative aspects**

Quality of life: the fifth pilla.

- Quality of life = people's satisfaction with their life and personal well-being
- What does Quality of life mean in a small mountain tourism destination?



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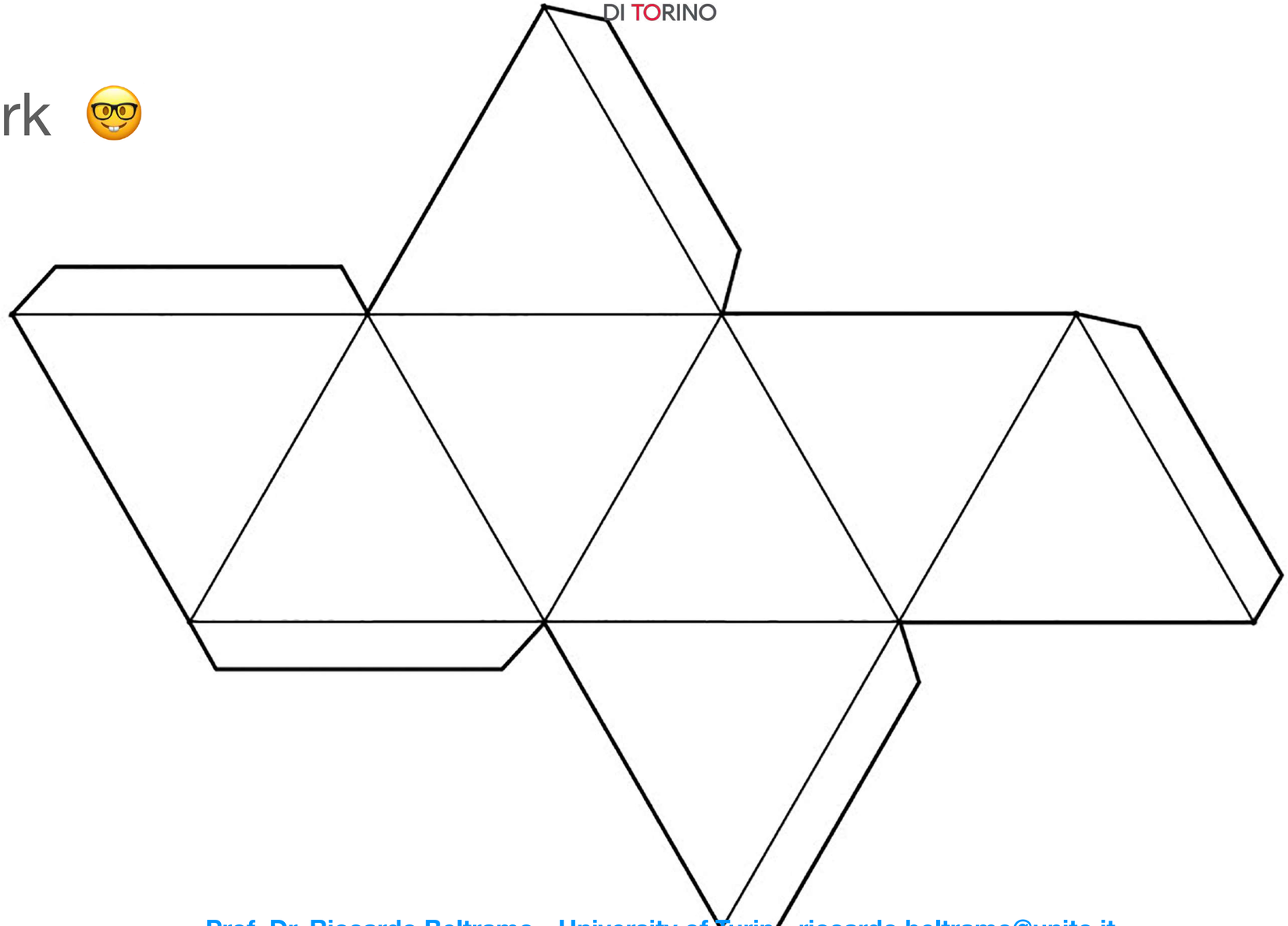
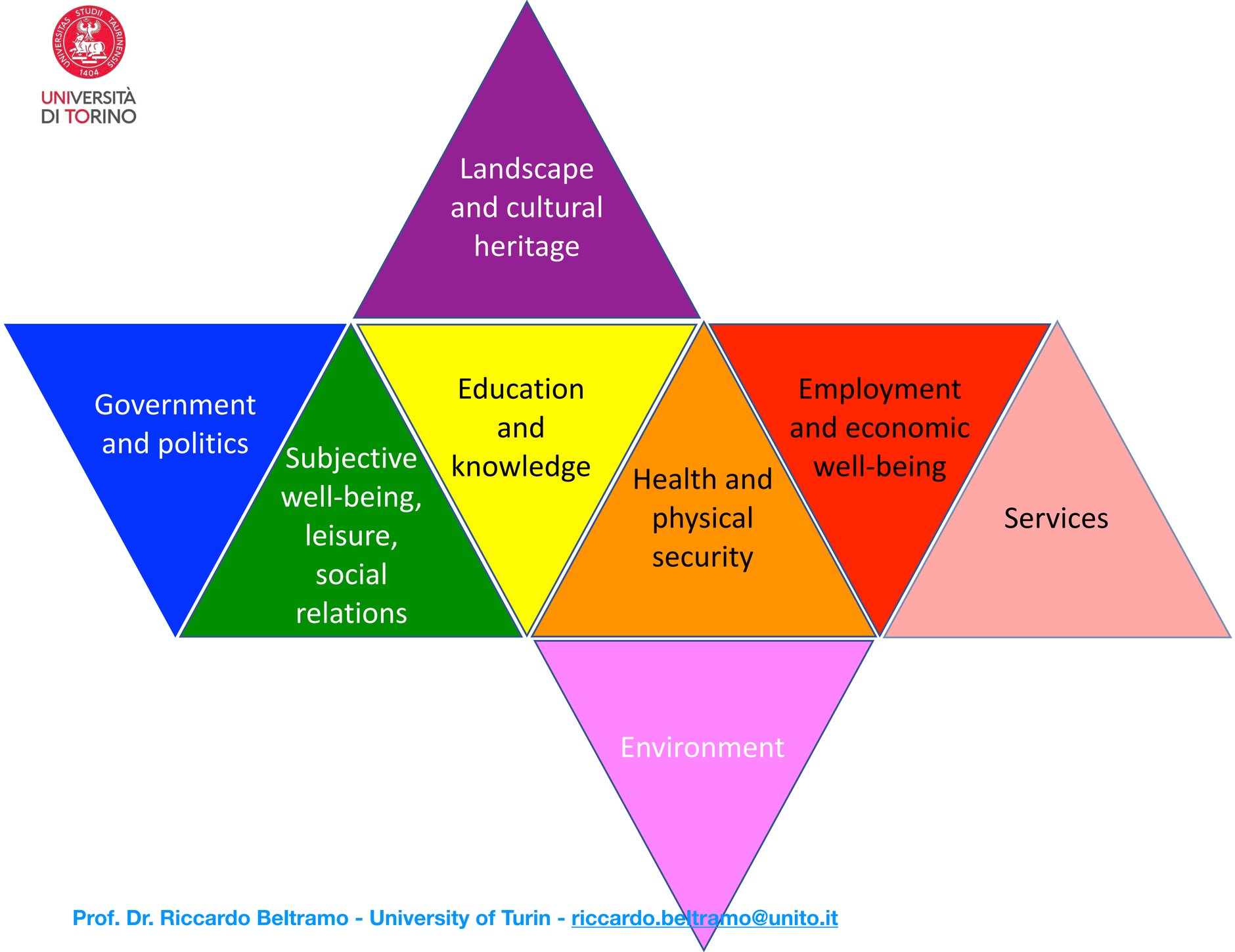
- **Items added to quality of life researches** are, for example: *health, education, work, leisure time, economic well being, social relations, security, environment, landscape, cultural heritage, services available and innovation*

Homework 🤓





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Limitation and possible, future development…

Limitation

- Heterogeneity of the collected information, sources and formats
- Difficulties in the availability of information at a local level (Opensource *vs* Proprietary)
- The proposed set is a draft and needs to be tested
- Handed out questionnaires have involved tourists and residents able to fill in online forms

Future development

- Test of the set of indicators in other mountain and rural tourist destinations to understand its feasibility and relevance of results
- Focus groups to collect information by elderly/non technologically equipped people

Many thanks for your collaboration.

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http://scatol8.net