Via Regina
Project

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POLITECNICO DI MILANO
Polo Territoriale di Como

LaPs

IUBILANTES COMO

tiu

I CAMMINI DELLA REGINA
percorsi transfrontalieri legati alla Via Regina

Mission

- Promote a "Slow Tourism" model that enables the integration and development of historical paths between the municipality of Cernobbio (Italy) and the area of Breggia and Valle di Muggio (Switzerland)
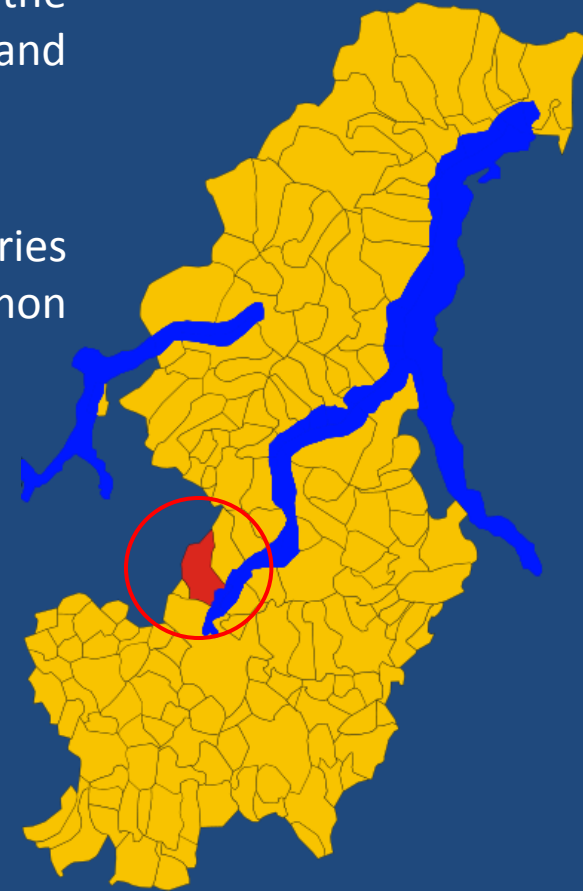
Vision

- Strengthen the common identity of the Via Regina territories through the protection and enhancement of the common cultural heritage

Objectives

- Dissemination of knowledge
- Understanding and protection of the territories
- Promotion of tourism

Final outcomes

- 2D desktop and mobile WebGIS
- Web Page Interface
- Business Plan
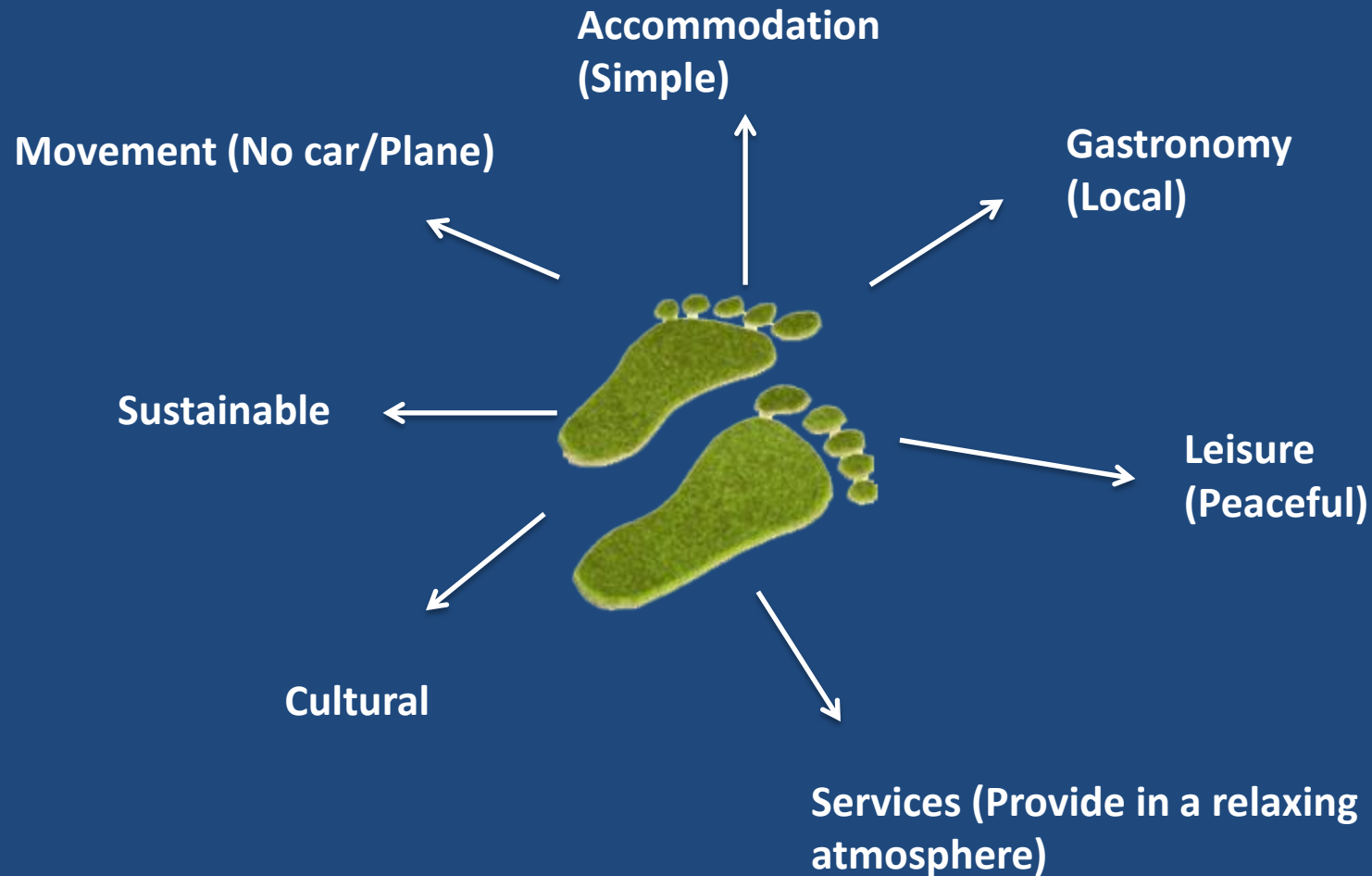
| **Overview** | **Literature Review & Case Studies** | Market Analysis | Segmentation & Targeting | **Positioning** | WebGIS Implementation | **Further Implementation** |

Slow Tourism at a glance…

Accommodation (Simple)

Movement (No car/Plane)

Gastronomy (Local)

Sustainable

Leisure (Peaceful)

Cultural

Services (Provide in a relaxing atmosphere)

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Literature Review

Academic Papers

- Weiermar, K., Mathies, C. (2004). "*The Tourism and Leisure Industry: Shaping the Future*". United States. Haworth Press.
- Dickinson, J. (2009). "*Slow Tourism Travel for a Lower Carbon Future*". England. Bournemouth University.
- Xi, S., Hongyong, X. (2010). "*GIS-Based Tourism Information System Design and Implementation*". China. International Conference on e-Education, e-Business, e-Management and e-Learning.
- Chang, G., Caneday, L. (2011). "*Web-based GIS in tourism information search: Perception, tasks and trip attribute*". United States. Elsevier Ltd.

Technical Data

- Trottman, N., Hadorn, C. (2009). "*Delimitazione delle categorie di sentieri escursionistici".* Switzerland. Sentieri Svizzeri.
- Hadorn, C. (2008). "*Segnaletica dei sentieri*". Switzerland. USTRA.

Case Studies

Switzerland Case Study

- Sammer, H., Amacher, M., Buffat, M. (2011). *Basi economiche dei sentieri escursionistici svizzeri.* Switzerland. ASTRA.
- Zaugg, E., Hadorn, C. (2007). *Obiettivi di qualità per i sentieri svizzeri.* Switzerland. ASTRA.
- PROMPT- Presentazione sintetica del progetto e dei suoi risultati (2005).

French Case Study

- www.france-randonnee.fr
- http://www.morbihan.cci.fr/pub/tourisme/N20/Note_de_tendance_slow_tourisme.pdf

Italia-Slovenia Case Study

- Moreno, Z., et al. (2011). *"Context Analysis of the Slow Tourism Area".* Italy. University of Trieste.
- Moreno, Z., et al. (2011). *"Guidelines for the Slow Tourim".* Italy. University of Trieste.

Alpine Pearls

- http://www.alpine-pearls.com/

WebGIS Benchmark

- Giroparchi (http://www.giroparchi.it/it/map/wrap/)
- The Contrat de Rivière Haute-Sûre WebGIS
  (http://www.crhs-sig.eu/mapserver_crhs/index.php?lang=en)
- Switzerland Mobility (http://map.wanderland.ch/?lang=en)
- Canton Ticino WebGIS (http://www.ti-sentieri.ch/)

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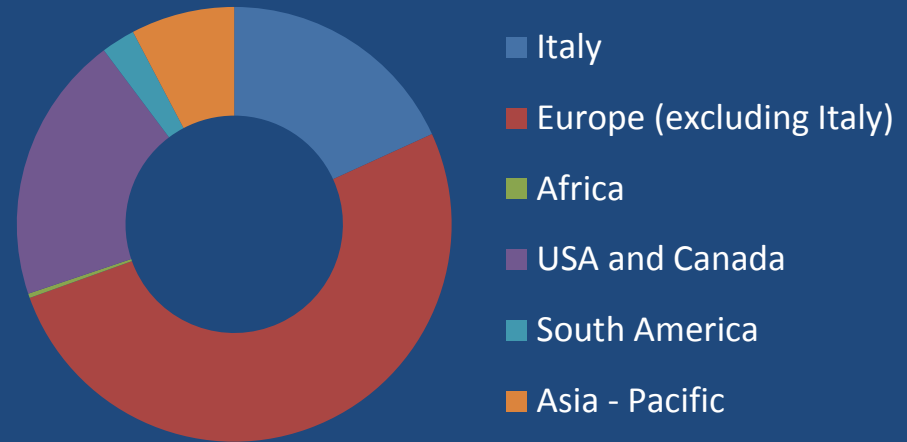
Data Gathering

Secondary Data:
- Comune di Cernobbio
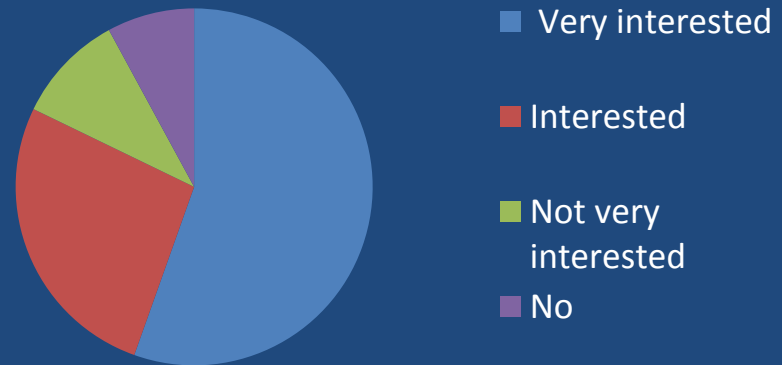- Iubilantes Organization
- Provincia di Milano
- Comune di Como

Primary Data:
- Surveys
- Interviews

People coming to Cernobbio

- Italy
- Europe (excluding Italy)
- Africa
- USA and Canada
- South America
- Asia - Pacific

Willingness to use WebGIS Application

- Very interested
- Interested
- Not very interested
- No

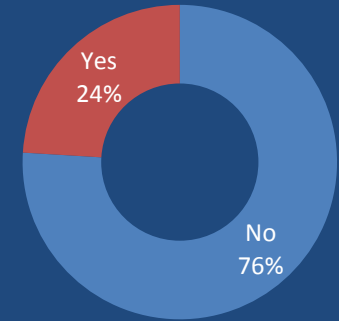| Overview | Literature Review & Case Studies | Market Analysis | Segmentation & Targeting | Positioning | App Implementation | Further Implementation |

Main Results of the Survey

- On average **70%** of the respondents said that they will like to perform activities, within the mountains, which involve **trekking** and **discovering of Italian Traditions**.
- When we asked about the **awareness** of different mountain and cultural paths in the surroundings of Cernobbio **75%** of the respondents answered that they **were not aware of any**.

- **80%** of the respondents did not know about the concept of **slow tourism** but they **are interested in knowing it**.
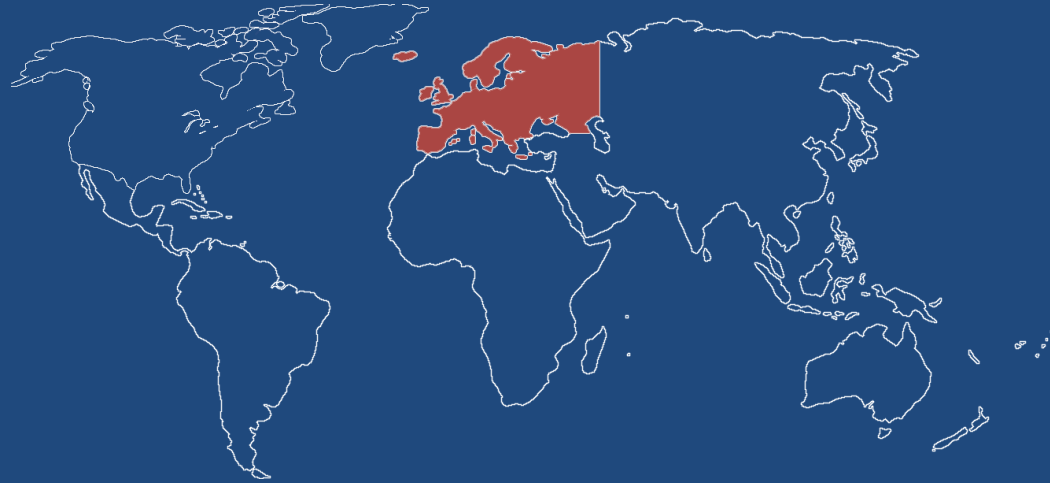
Awareness of Paths

Yes 24%
No 76%

Awareness of Slow Tourism Concept

Yes 17%
No 83%

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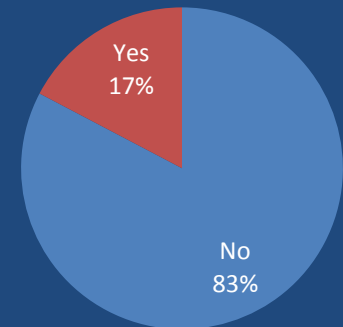
Segmentation & Targeting

Continents	% Visitors	Number of Visitors
Italy	**18,19**	21476
Europe (excluding Italy)	**51,32**	60597
Africa	0,33	386
USA and Canada	**19,94**	23547
South America	2,52	2978
Asia - Pacific	7,71	9103

Source Comune di Cernobbio, 2011-12

We carry out Targeting Analysis according to the following criterias:

- Size of the group
- Attracted by Slow Tourism concept
- Attracted by discovering traditions and culture
- Technology oriented

**Our focus group:
Italy and Europe
(70% of the tourists
in the area)**

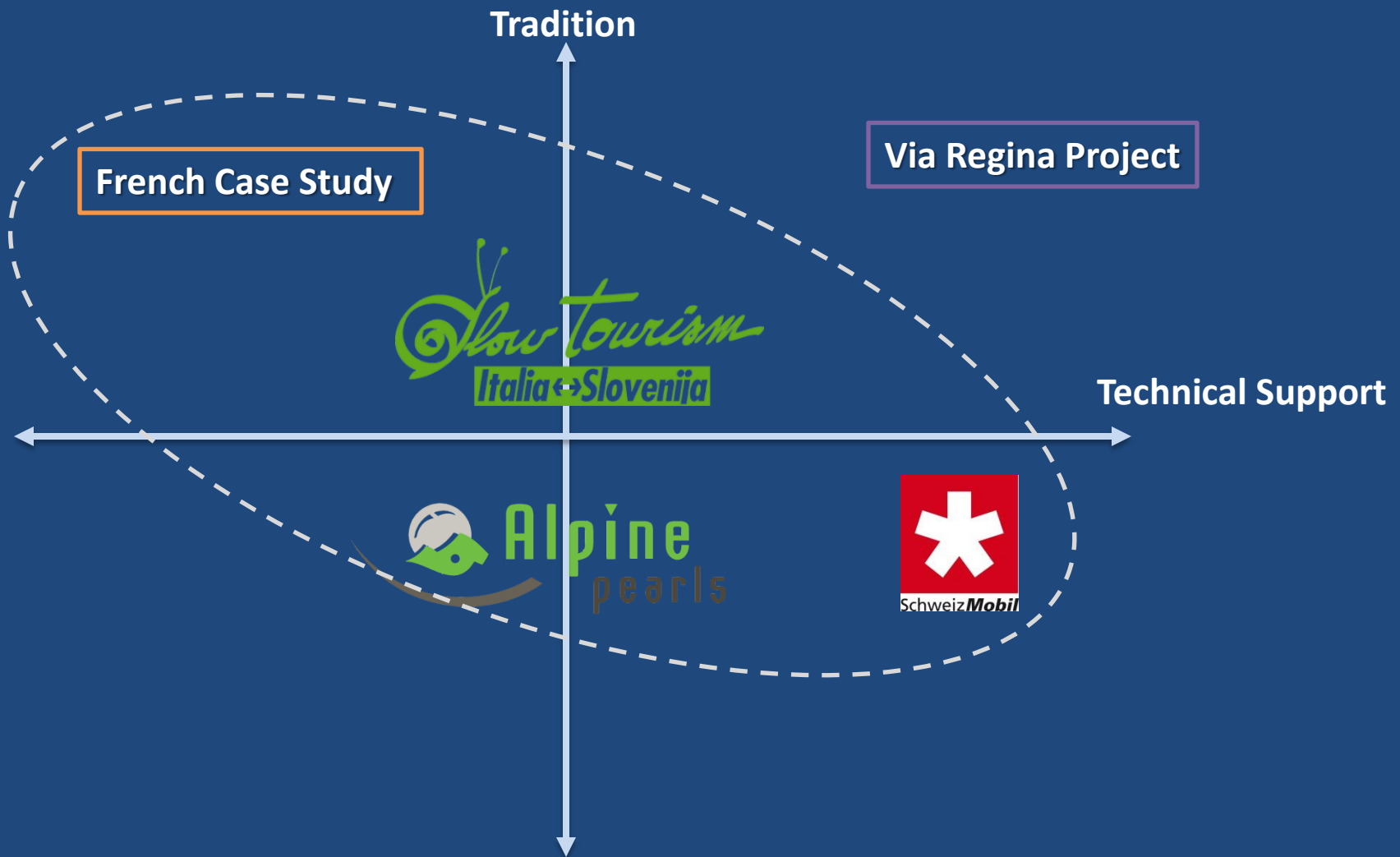| Overview	Literature Review & Case Studies	Market Analysis	Segmentation & Targeting	Positioning	WebGIS Implementation	Further Implementation

Tradition

French Case Study

Via Regina Project

Technical Support

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WebGIS Implementation

Collection of Geospatial Data

- We need to exploit other database (Geoportale Regione Lombardia) or asking directly to our stakeholders (i.e. Iubilantes) or external agency (i.e. Ufficio Beni Culturali Canton Ticino) for data collecting.

Data pre-processing on desktop base

- The data pre-processing has become essential to better deal with different data sources (unification of reference systems, creation of the database, getting data attributes, creation of suggested paths, etc.)

Data publication and Development of the WebGIS

- Layers were created, published on the server and inserted in the WebGIS viewer after configuring its style.

Software Architecture

User → **Client**

GeoExt

Ext JS

OpenLayers™

WMS
WFS

GeoServer

Apache

Our Server

Google Maps

OpenStreetMap

bing maps

Internet
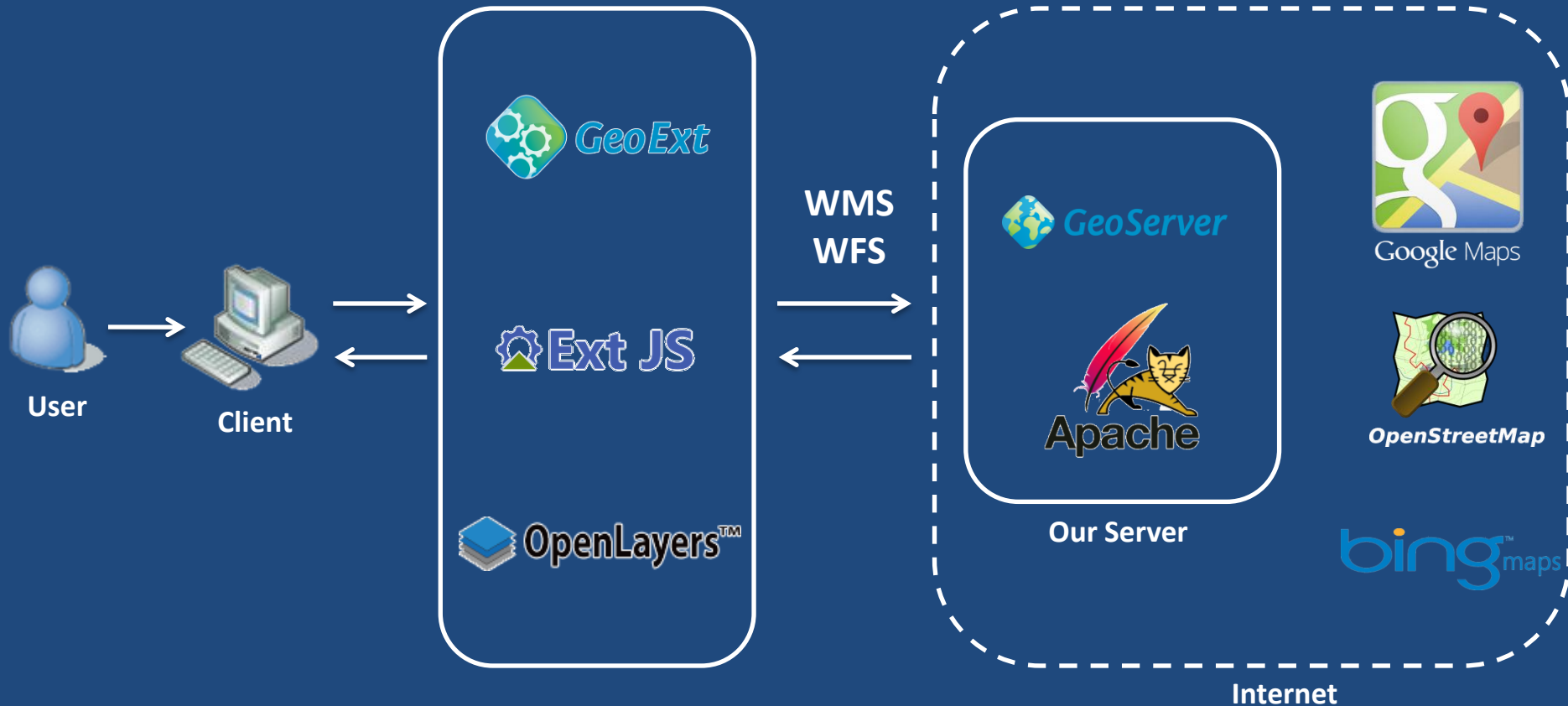
We used open source software and libraries, these tools let us access to the source code; they are free and available for any purpose.

Overview | Literature Review & Case Studies | Market Analysis | Segmentation & Targeting | Positioning | WebGIS Implementation | Further Implementation

First Results: WebGIS viewer
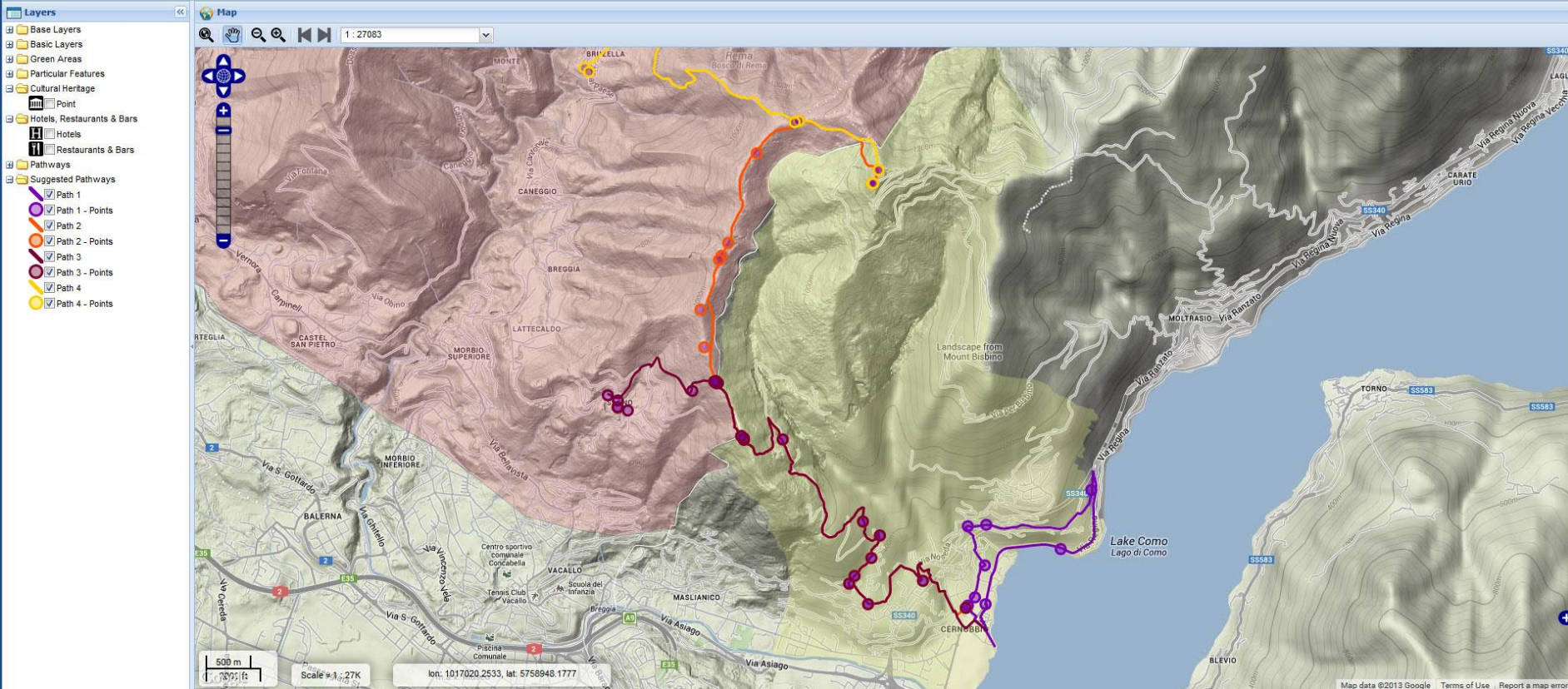
First Results: Layers Overview
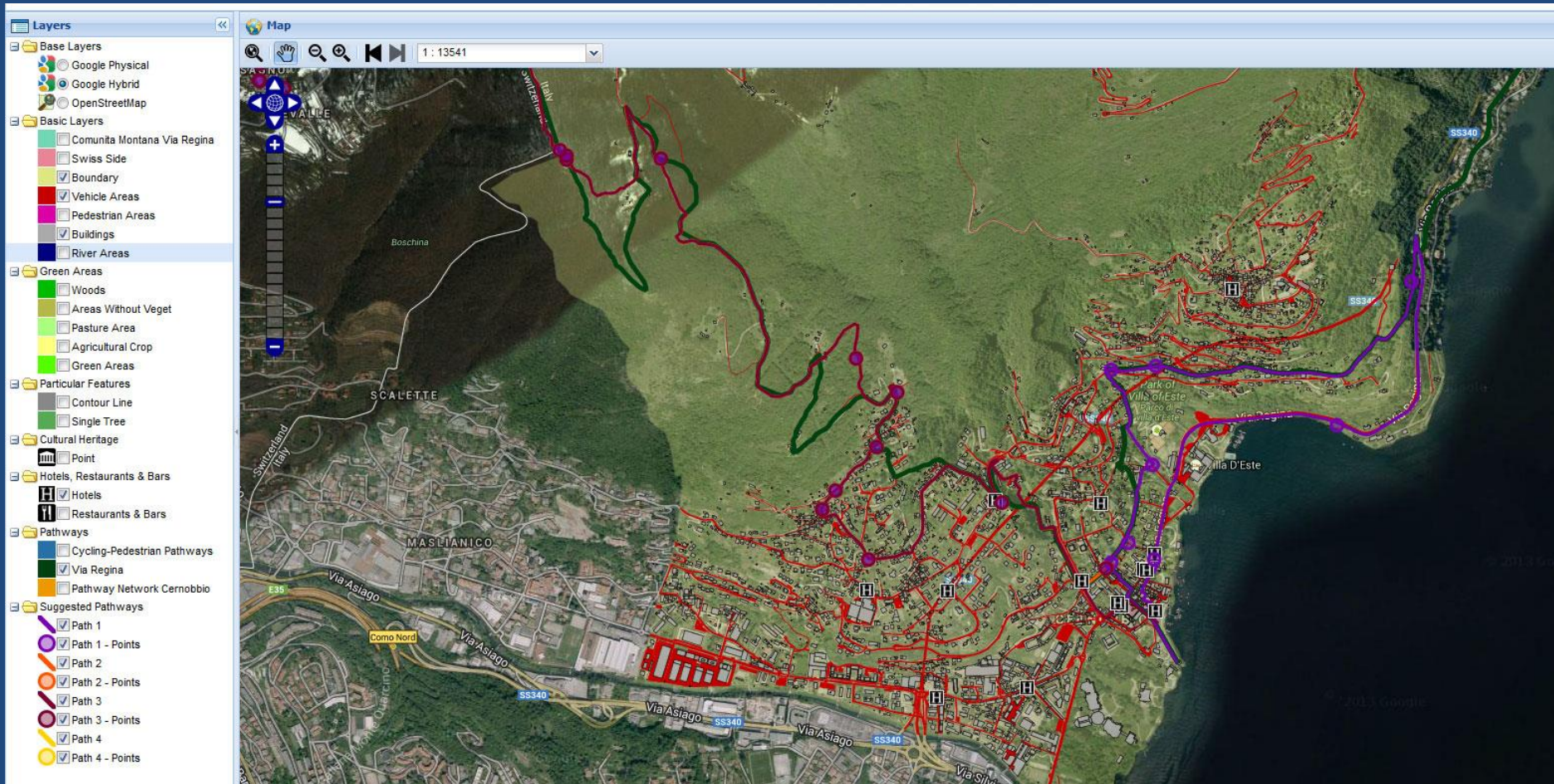
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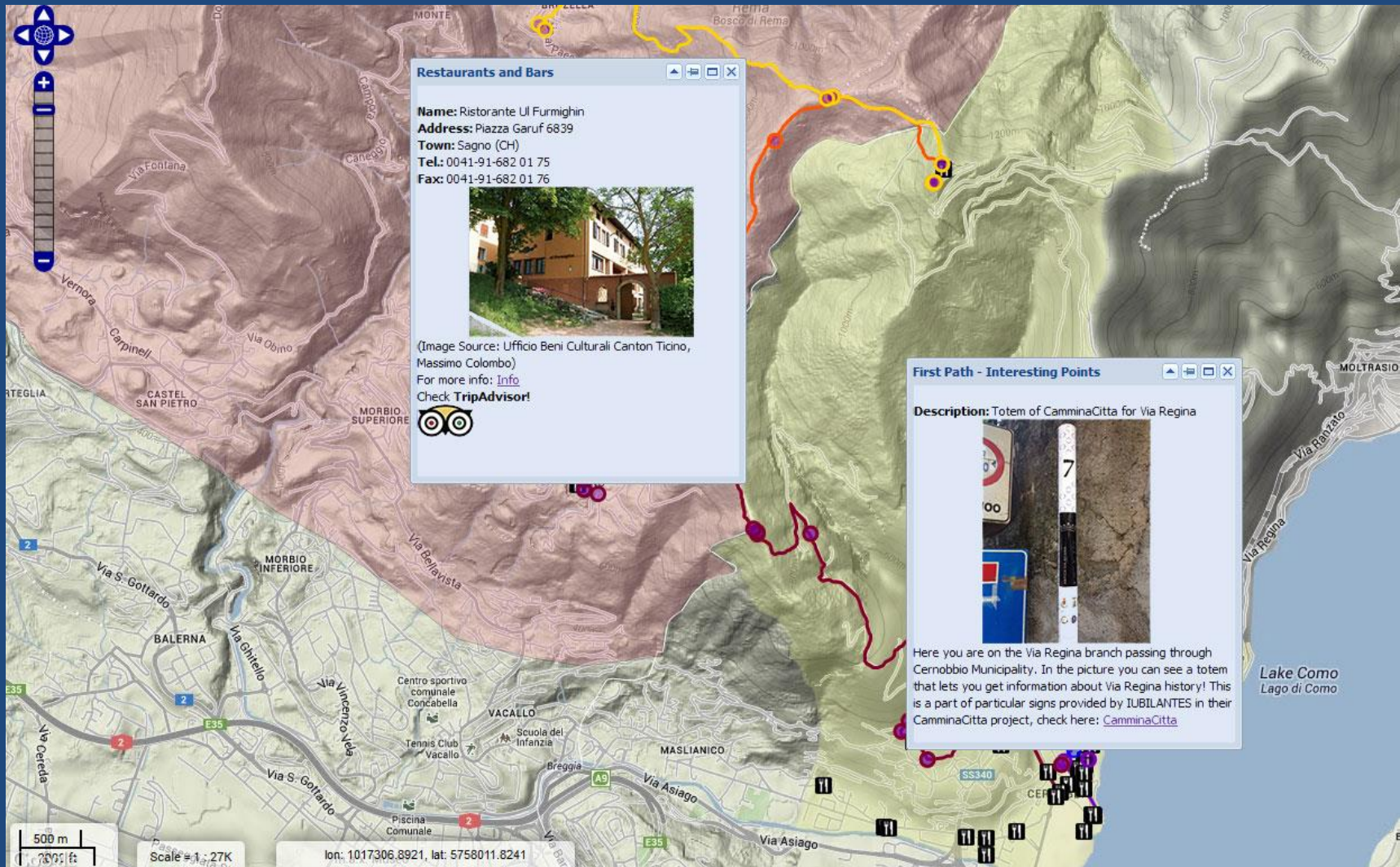
First Results: Interesting Points

Restaurants and Bars

Name: Ristorante Ul Furmighin
Address: Piazza Garuf 6839
Town: Sagno (CH)
Tel.: 0041-91-682 01 75
Fax: 0041-91-682 01 76

(Image Source: Ufficio Beni Culturali Canton Ticino, Massimo Colombo)
For more info: Info
Check **TripAdvisor!**

First Path - Interesting Points

Description: Totem of CamminaCitta for Via Regina

Here you are on the Via Regina branch passing through Cernobbio Municipality. In the picture you can see a totem that lets you get information about Via Regina history! This is a part of particular signs provided by IUBILANTES in their CamminaCitta project, check here: CamminaCitta

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Changes from Initial Idea:

We decided not to develop a 3D viewer for the following reasons:

- Training on that specific technologies too long with respect to the project time.
- Uncertainty for the quality and integration of the outcome with respect to our purpose

Further Implementation:

- WebGIS tools finalizations: it means creating the WPS service for advanced operation on data (e.g. computing of the terrain profile), improving popups suitability and adding other facilities information and curiosities related to our target (public transports, map of folkloristic events, historical events, trekking shops, bike rent, tourist office, etc.)
- Integration of the main WebGIS viewer in a Web page, representing the project main result. This Web page will synthesize the project results and provide detailed information on the published spatial data.
- Creation of a mobile WebGIS viewer, linked to the Web page and accessible from mobile devices.
- Creating Competitive Advantages to promote the Web Application, considering the main competitors.

Overview | Literature Review & Case Studies | Market Analysis | Segmentation & Targeting | Positioning | WebGIS Implementation | **Further Implementation**

Thanks
for your
attention