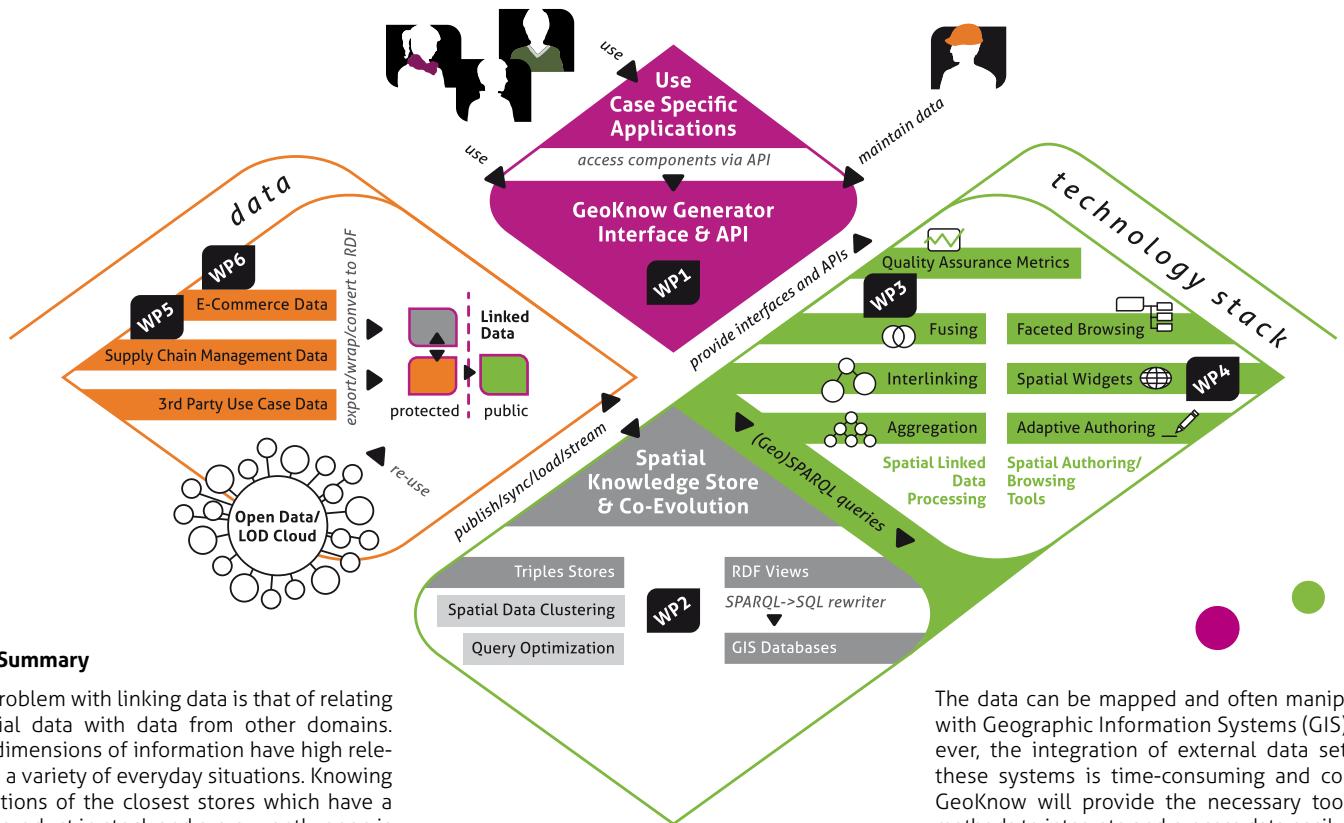


Develop tools for exploring, searching, authoring and curating the Spatial Data Web

Integrate linked geospatial data with large-scale, existing applications and services

Derive a testbed and boot-strapping network of high-quality spatial knowledge bases



## Project Summary

A core problem with linking data is that of relating geospatial data with data from other domains. Spatial dimensions of information have high relevance in a variety of everyday situations. Knowing the locations of the closest stores which have a specific product in stock and are currently open is a typical example. This geographic dimension of information is normally available, but dispersed among a multiplicity of information sources such as isolated GIS, enterprise warehouses, proprietary data formats such as Excel sheets or simple web pages.

The goal of the GeoKnow project is to make information seeking easier by allowing exploration, editing and interlinking of heterogeneous information sources with a spatial dimension by:

- The creation and maintenance of qualitative geospatial information from existing unstructured data such as OpenStreetMap, Geonames and Wikipedia. Developing quality assessment methods which anticipate geospatial search capability and the acquisition and aggregation of information resources.
- The reuse and exploitation of unforeseen discoveries found in geospatial data. Providing methods to acquire, analyse and categorise data that is rapidly evolving, immense, incomplete and potentially conflicting.








GeoKnow will produce a suite of tools and methodologies for exposing structured geospatial information on the Web. These tools will be packaged in the Linked Data Stack tool repository and include intelligent support querying of spatial information from multiple sources, geospatial-aware query optimisation, geospatial data integration and faceted visualisation of data. These contributions are integrated in the open source GeoKnow Generator framework providing a comprehensive toolset of easy-to-use applications covering a range of possible usage scenarios (e.g. mobility/traffic, energy/water, culture, etc).

## Geospatial Data and the Semantic Web

Geospatial data or geographic information is the data that identifies a geographic location of natural or constructed features and boundaries on the earth (e.g. oceans, buildings, countries, rivers, etc). Geographical knowledge bases are among the largest in existence and are highly important in a variety of everyday applications.

The data can be mapped and often manipulated with Geographic Information Systems (GIS), however, the integration of external data sets into these systems is time-consuming and complex. GeoKnow will provide the necessary tools and methods to integrate and process data easily across a wide range of data sources on the web of data.

## The GeoKnow Consortium

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	Unister Germany
	Athena Research and Innovation Center Greece
	Brox Germany
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