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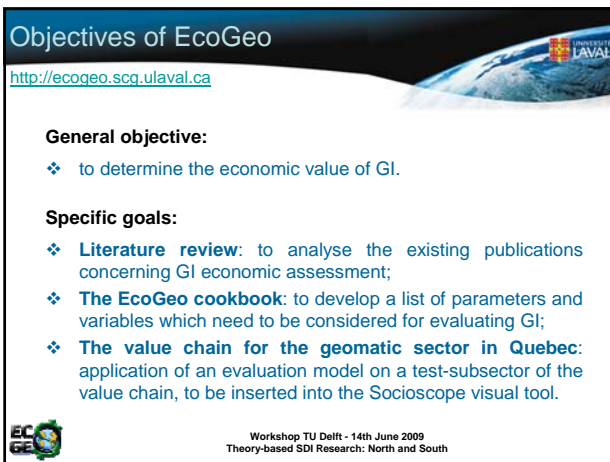
10 ans
DÉPARTEMENT DES SCIENCES GÉOMATIQUES
Une référence universitaire depuis 1967

EcoGeo project

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Theory-based SDI Research: North and South



Objectives of EcoGeo


<http://ecogeo.scg.ulaval.ca>

General objective:

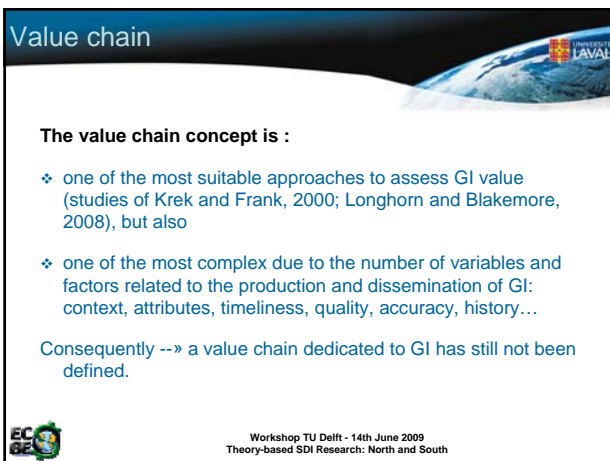
- ❖ to determine the economic value of GI.

Specific goals:

- ❖ **Literature review:** to analyse the existing publications concerning GI economic assessment;
- ❖ **The EcoGeo cookbook:** to develop a list of parameters and variables which need to be considered for evaluating GI;
- ❖ **The value chain for the geomatic sector in Quebec:** application of an evaluation model on a test-subsector of the value chain, to be inserted into the Socioscope visual tool.



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Value chain

The value chain concept is :

- ❖ one of the most suitable approaches to assess GI value (studies of Krek and Frank, 2000; Longhorn and Blakemore, 2008), but also
- ❖ one of the most complex due to the number of variables and factors related to the production and dissemination of GI: context, attributes, timeliness, quality, accuracy, history...

Consequently --> a value chain dedicated to GI has still not been defined.



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EcoGeo Cookbook

The EcoGeo Cookbook is

a framework that can be used by project partners and policy-makers to help determine the value of GI.

It aims to

identify, list and describe the most important variables and attributes relating to GI value identified in the literature (particularly by Krek, 2003 and 2004; Longhorn and Blakemore, 2008).

These attributes relate to:

- how GI is produced and used,
- the costs of GI production (e.g. transaction costs)
- the price definition.



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Which value?

SECTOR	WHAT TO EVALUATE	VALUE TO WHOM	HOW TO EVALUATE
PRIVATE SECTOR	COMMERCIAL, MONETARY (EXCHANGE) VALUE	The data owners and commercial vendors	Value to the first buyer is set to production cost recovery, profits margins, and return on investment (ROI).
		The data user	This type of value is typically reflected in the price that the consumer is willing to pay for the product or service offered
PUBLIC SECTOR	COMMERCIAL, MONETARY (EXCHANGE) VALUE	The data owners and commercial vendors	Financial value can also apply to public sector GI if use of the information helps deliver cost savings or aids in managing financial risk.
		The data user	Social GI has less quantifiable direct and indirect value to society resulting from the services offered by using GI data.
	SOCIO-ECONOMIC VALUE	The society as whole	Can include difficulties in evaluating elements such as better decision-making ability, quality of life, environmental health, etc.



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Attributes of GI value


INTRINSIC ATTRIBUTES of GI VALUE

- Value of the location attribute in GI
- Time dependency value of GI
- Adding value via information management and tools
- Value due to legal or other mandatory use requirements
- Value due to network effects
- Value due to quality of an information resource
- Value determinate by cost savings



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Cost of GI products




COSTS OF GI PRODUCTS

1. TRANSACTION COSTS

- 1.1 Measurement costs
- 1.2 Enforcement costs


2. DATA COLLECTION COSTS

- 2.1 Production costs
- 2.2 Transformation costs



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Price definition




GI demand is characterised by the varieties of:

- ❖ information needs
- ❖ willingness to pay for the information.

Value pricing: the producer sets the price of the product based on its value to the buyer.


PRICE DEFINITION

1. User's valuations and preferences
2. Differences in market segments, and reflect market changes.
3. Product differentiation
4. Avoid price dispersion




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Next steps



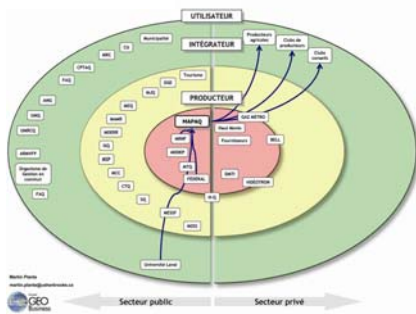
Next steps for EcoGeo:

- ❖ to define a value chain specific to the Quebec GI sector;
- ❖ to follow the generation of added value in the value chain using the cookbook framework;
- ❖ to apply an evaluation model on a test-subsector of the value chain, that will be inserted into the Socioscope visual tool.



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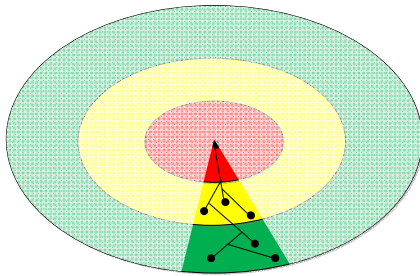
Socioscope



World Trade
North Atlantic
GEO

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Extrapolation of a test area



EC
GE

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Conclusion

With the definition of a value chain for the Quebec GI sector it will be possible to follow, with some approximation, the generation of added value on a specific network of GI flows, starting from the original producer and ending with the final consumer.

Thank you!

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