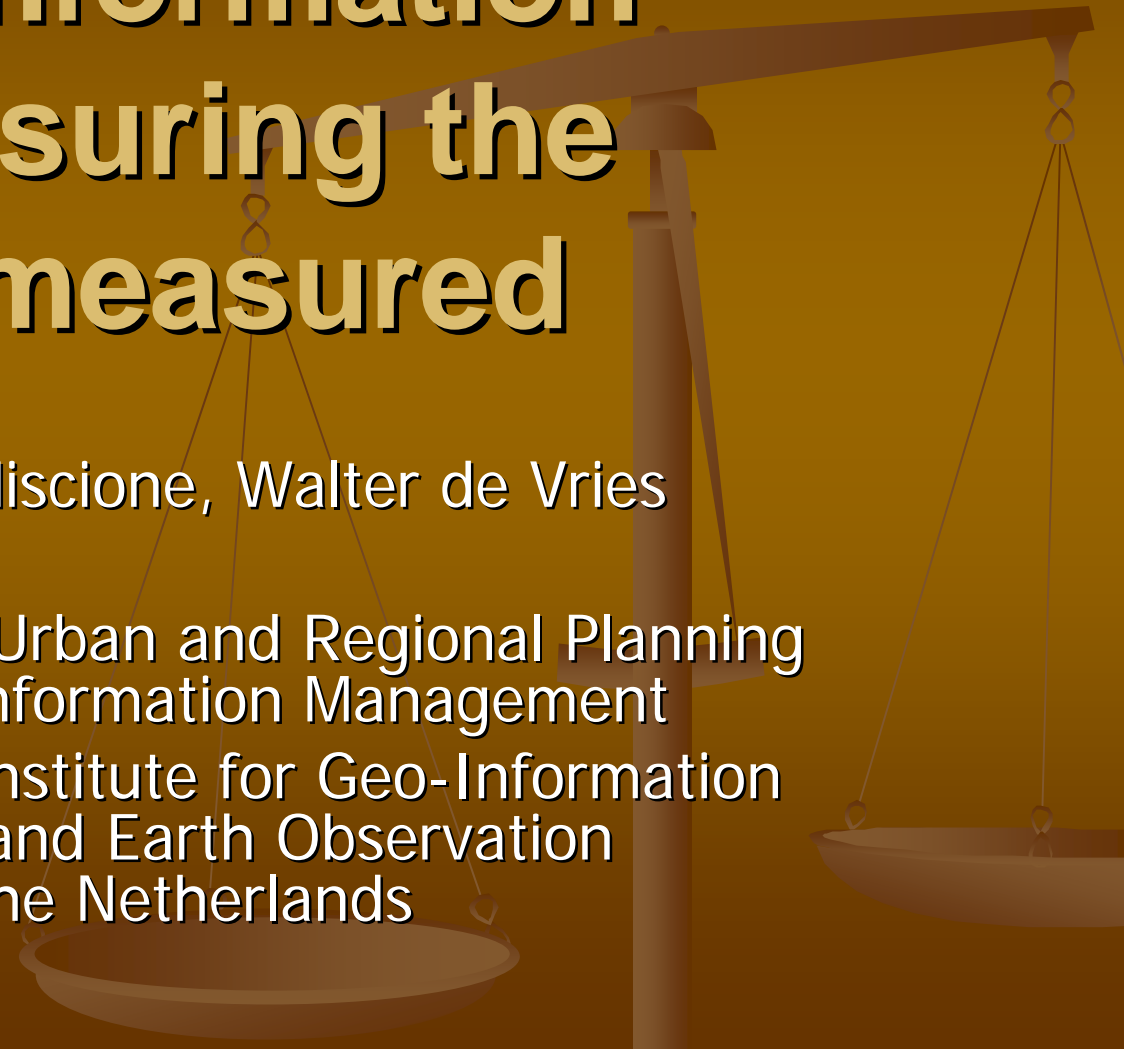


Approaching the Value of Geo-Information - Measuring the Unmeasured



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Issue of Pricing

Two approaches to value geo-information:

- one views the value of geo-information in its entirety (like a national SDI),
- one looks at price setting and conditions surrounding specific, individual geo-information products and services (like maps or images)

Value of Geoinformation in a Geoinformation Chain

The Granularity dilemma:

- How to measure the actual value of individual geo-information products, if the users of such products value the same product differently over time? (Rhind, 1992: *Perhaps the single most vital issue with respect to digital spatial data at present time is that its utility and value are often most highly related to the expertise, knowledge and imagination of the purchaser and the exploiter.*)

ARE THINGS DIFFERENT NOW?

- How to decompose or aggregate such changing values to an extent that one can generate patterns relating to the overall value of geo-information? In other words, is there a national value of geo-information?

Neoclassical Models are Unrealistic

(buyers are not perfectly informed)

ANOTHER APPROACH

Rather than on actual measuring, we would like to look at the relation between measuring itself and the context within which measures can be used (the domain in which measuring is accepted and makes sense)

Learning from another Experience

Corporate Responsibility (10 years ago, Déjean et al.: 2008):

Measurement of corporate social performance was answering the needs of companies' legitimacy increase in the financial sector

RATHER than their needs of performance enhancement.

SO

the inter-organizational relations in which price setting takes place, affects the prices being used and accepted

Therefore inter-organizational setting needs to be researched in order to determine how prices are (or can be) formed, and which prices accepted

Consequent Questions

- Which inter-organizational conditions can define the process of geo-information price setting? (looking at the context, rather than the 'object')
- Whose values are implied and/or inscribed into the measurement system?

A Starting Point

As we could not identify a stable production chain of geo-information, we start of by two archetypical conditions in which products may be valued:

- a market perspective (geo-information as object of trade, which implies value uncertainty at the bottom of the organization, where customers stay and choose) and
- a hierarchy/bureaucratic perspective (geo-information as part of protocols/procedures, which implies value uncertainty at the top of the organization, where political/administrative decisions are taken in a directive manner)

Market Perspective



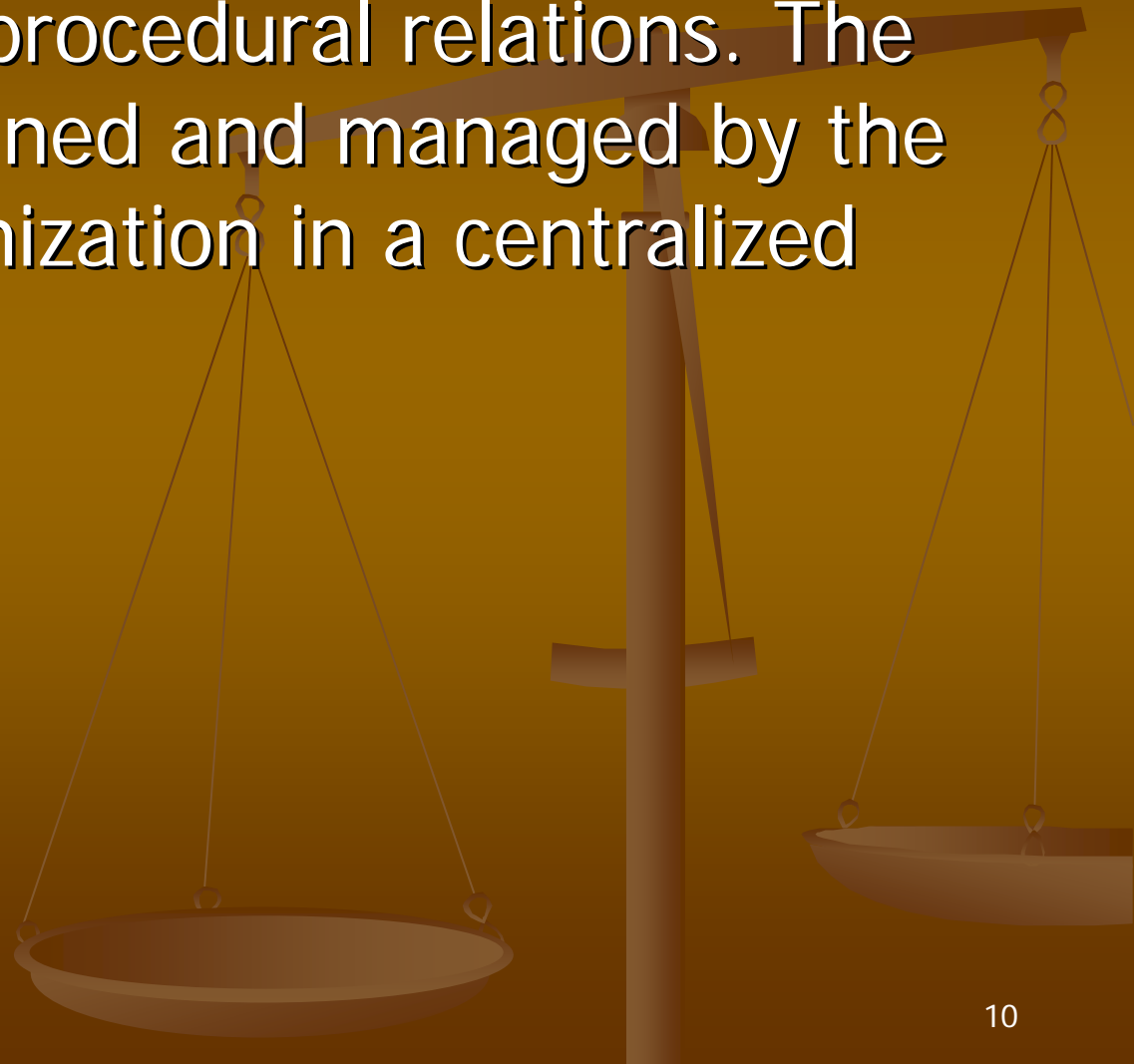
the value (as price) is determined by the “invisible hand” which pulls prices down: continuous bargaining of atomic actors reduces profit margins continuously, and pushes for innovation

No actor is assumed to be able to set prices completely independent from the market conditions

Given the always bounded rationality in which actors have to make their choices, it is widely assumed that what counts is the perception of value of goods.

Bureaucratic Perspective

draws on formal/procedural relations. The value is determined and managed by the top of the organization in a centralized manner



But no ideal-type exists...

- Values emerge and decline at both central and decentralized level, and depend on both the centre and the fringes
- For example, a state organization legitimizes the reliability of the information, whereas a set of private companies make it available
- Prices customers are willing to pay depend on both, and also depend on changing customers' intentions and conditions

What Empirical Granularity?

We propose to use 3 analytical aspects from information infrastructures studies:

- accreditation,
- coalition,
- standardization

And look at each of them from market and bureaucratic perspectives

Market (organizational uncertainty at the bottom)

Archetype IORs	Analytical aspects (infrastructural perspective)	Characteristics	Examples
Market (organizational uncertainty at the bottom)	Accreditation (those who can guarantee access)	Peer production; Community, distributed acceptance	OGC (OpenGIS consortium)
	Coalition	Networks of action (Braa et al.2004); Scaling of dispersed collaboration	Galileo
	Standardization	Sector association; Body for negotiation and representation of interests	EuroSDR; Bedrijvenplatform Geo-Informatie (Business platform Geo-information -13 NL)

Bureaucracy (organizational uncertainty at the top)

Bureaucracy (organizational uncertainty at the top)	Accreditation (those who can guarantee access)	Regulatory authorities; Centralized, independent body or regulation	ISO TC
	Coalition	Joint ventures; Merging of organizational sub-parts for a negotiated task	GSDI association, Eurographics, CODI
	Standardization	Franchising; Autonomy within the frame of controlling organization	INSPIRE

Open Questions

- How this discussion relating IOR / information infrastructure concepts could be continued?
- What the most relevant empirical granularity (of IORs) to look at price setting would be?
- What sort of examples would fit the classification in the above table?
- Whether different IORs operate price setting differently?

Thanks

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