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Some thoughts on measuring Semantic Interoperability on Public Sector Information

The previous title “The role of Web 3.0 or ideas on how to measures interoperability” was a bit ambitions in 20 minutes.

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Economic aspects of re-use of public information

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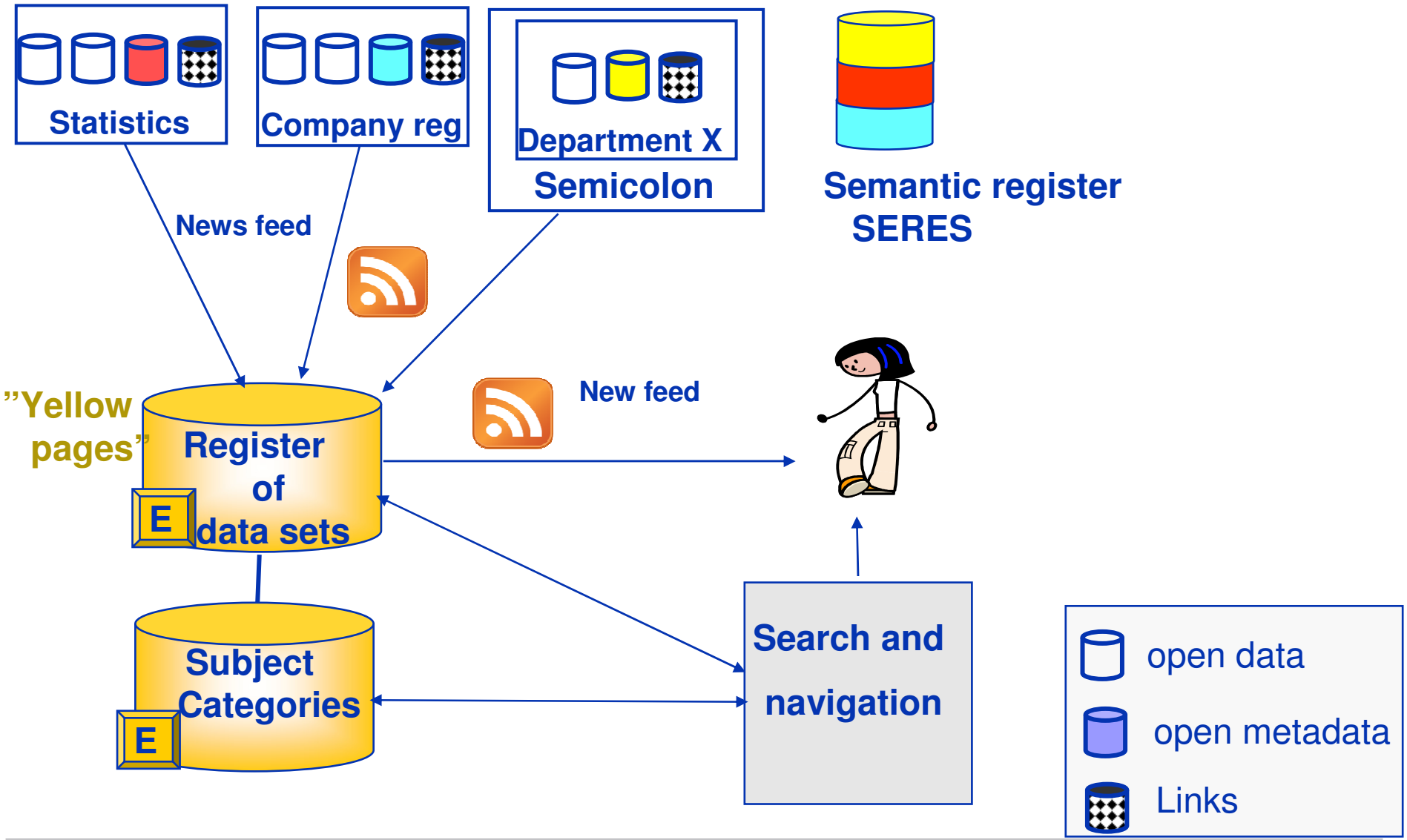
on the re-use of Public Sector Information

– Review of Directive 2003/98/EC –

2.1. Economic aspects

Recent studies indicate that the economic value of PSI is substantial, although measuring its value accurately is not a straightforward task. The MEPSIR study (2006) contracted by the Commission, for example, puts the **overall market size for the re-use of PSI in the European Union at €27 billion.**[1] Other recent figures available from the UK Office of Fair Trading (OFT) – The commercial use of public information (CUPI) Report[2] – indicate that the contribution of **PSI to the UK economy alone reached €730 million in 2006**.

Building the Public Sector Information map



If we measure: What can the scores be used for?

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Look to others models and learn what they have been used for:

- Dun & Bradstreet AAA ratings
- Certified. Certified by XX according to YY and therefore ”fit for trade”
- Semantic maturity levels (process oriented)
  - A possible sibling to the Capability maturity model integration (CMMI)
- Pre-requisite to participate in public tenders
  - Public sector demand, like ISO 9000 requirements

Other usages

- Transparency measurement criteria
- Public Sector Information directive fulfillment level

What can be measured on Public Sector Information?

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- The processes resulting in semantic interoperability
- The product having the ability of semantic interoperability: measuring properties of
  - IT-System
  - Data, and their: properties, data formats, models/ ontologies
  - Data sets (collections of data)
  - ID regime
  - The ontology itself and its quality
  - Linking between concepts in ontologies (the formal semantics of the links)
  - Protocols/ service level (semantic SOA)
- Compliance to
  - Laws and regulations, business protocols, national and international standards, information governance regime
- Ontology issues like
  - Quality of ontology engineering methodology
  - How Implicit versus explicit context is handled in ontologies, reuse criteria
  - Semantic drift, stable versus unstable ontology
  - Trust and provenance of both data and ontologies
- Descriptions on limitations of use, based on methodology used, population asked, level of aggregation, error correction methods

”The stairway” for Public Sector Information

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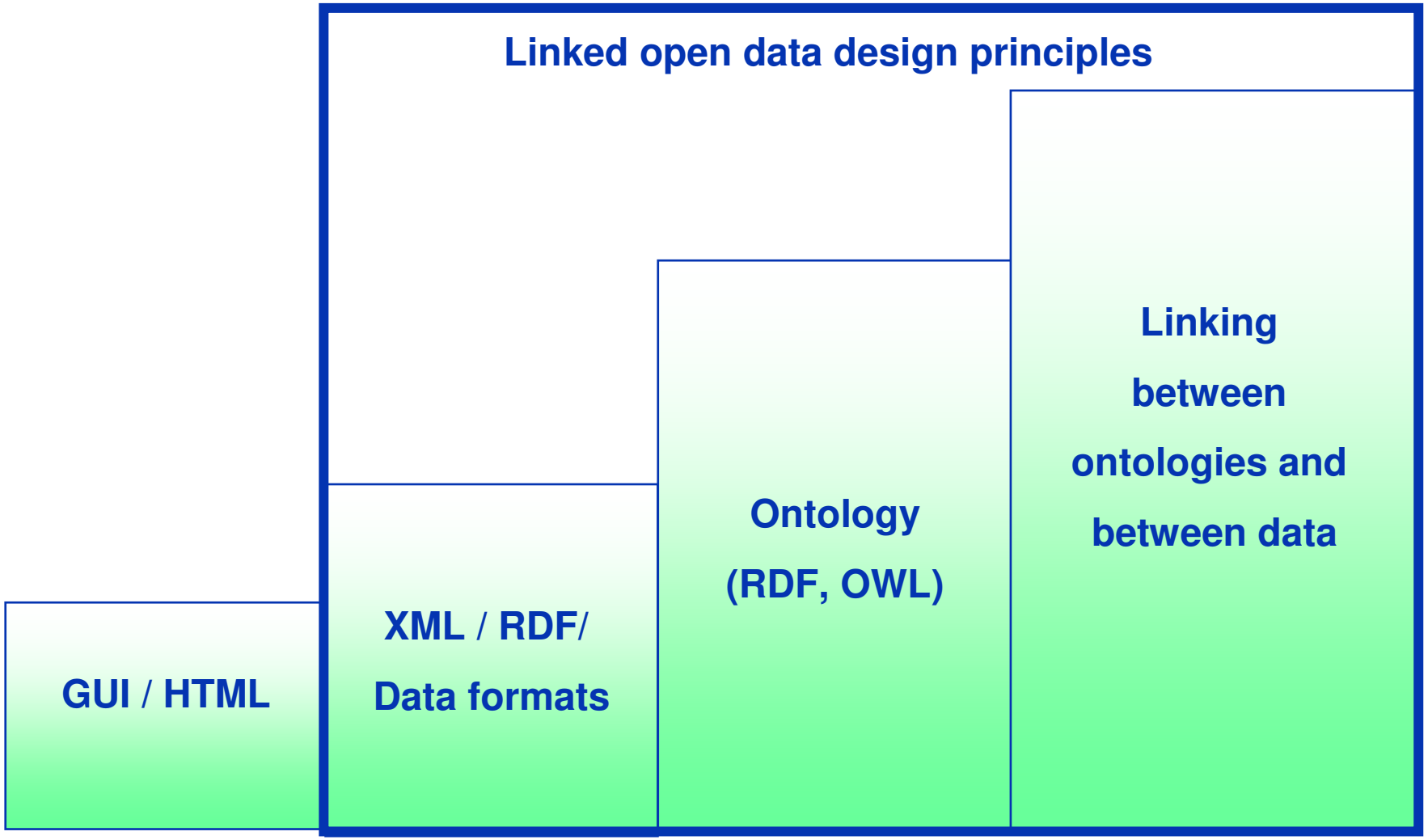

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