



Assessing GI enhancement

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Overview

- Introduction Assessing GI(I)
- Assessing value added market
- Supply/ Value chain
- Research comparing access to PSI policies in US and EU
- Another look at the research outcomes
- Conclusion

Assessing GI(I)

- A Multi-View Framework to Assess SDI, Cromptvoets, J., A. Rajabifard, B. van Loenen, T. Delgado, 2008. The University of Melbourne, Melbourne, Australia.
- Assessing value of GI(I) extremely difficult:
 - Longhorn: lies, damned lies and cost/benefit analyses
- Value adding to public sector geographic information important (value appropriation)


Assessing value added market

- Pira (2000) found:
 - Geo-information industry in Europe: €36bn
 - Geo-information industry Northern America: €641bn
 - US: value adding industry employing 3,2 million people
- => Europe should change its restrictive access policies into open access policies
- GITA (2005):
 - Quality of public sector GI in Europe far exceeds quality in US



PSI Directive

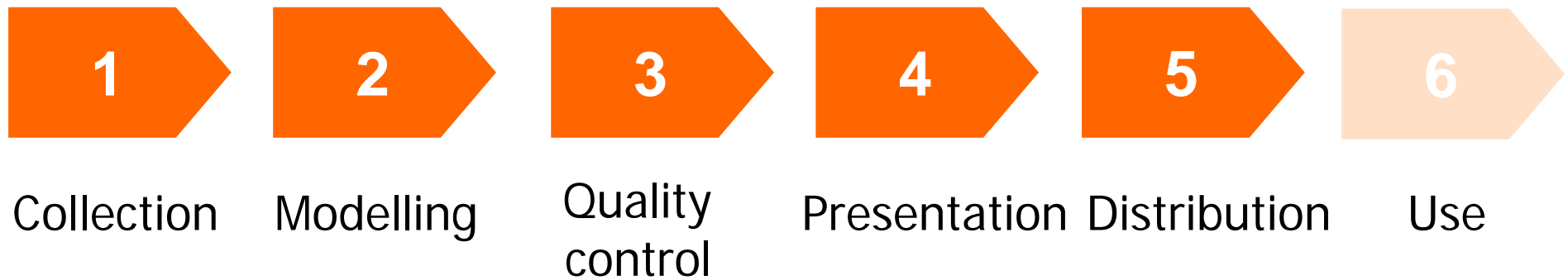
- December 2003: PSI Directive to stimulate re-use of public sector information
- Evaluation in December 2008: marginal impact
- How come?



Value adding and/ or supply chain

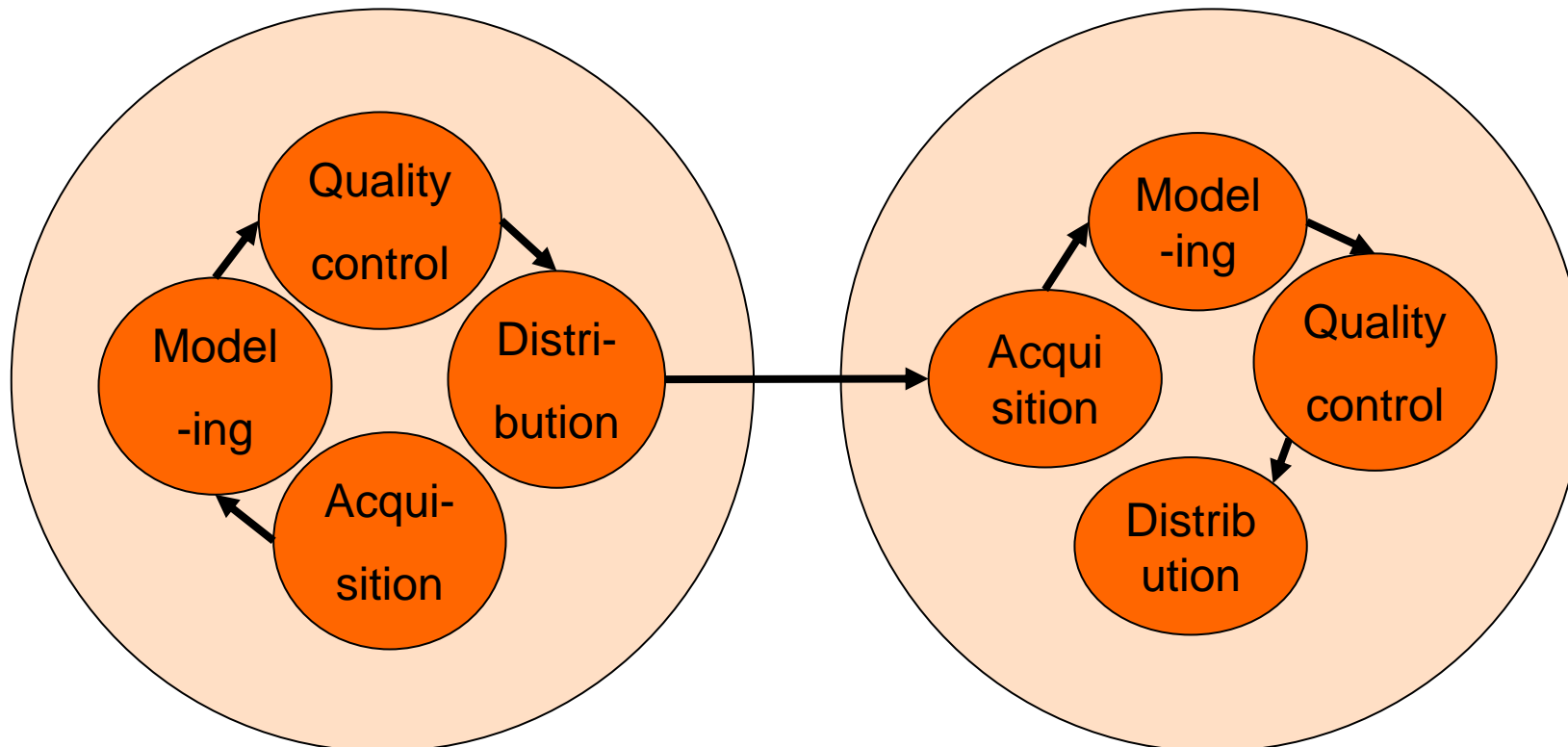
- The inputs and outputs required to deliver products and services to the customers of any organisation (Cox, 1999)
- “A sequence of operations undertaken by one or more producers, to transform geographic data to the final product” (Genovese et al. 2009)
- A value chain refers to the flow of revenue from users of any product or service

The supply/ value chain



Information product 1

Information product 2





Supply chain

Information provider



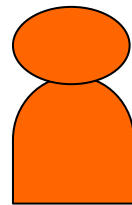
First service provider



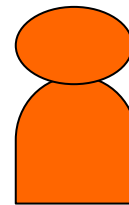
Second service provider



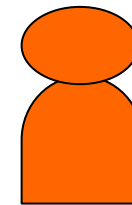
Value chain



User in information supplier



Professional user



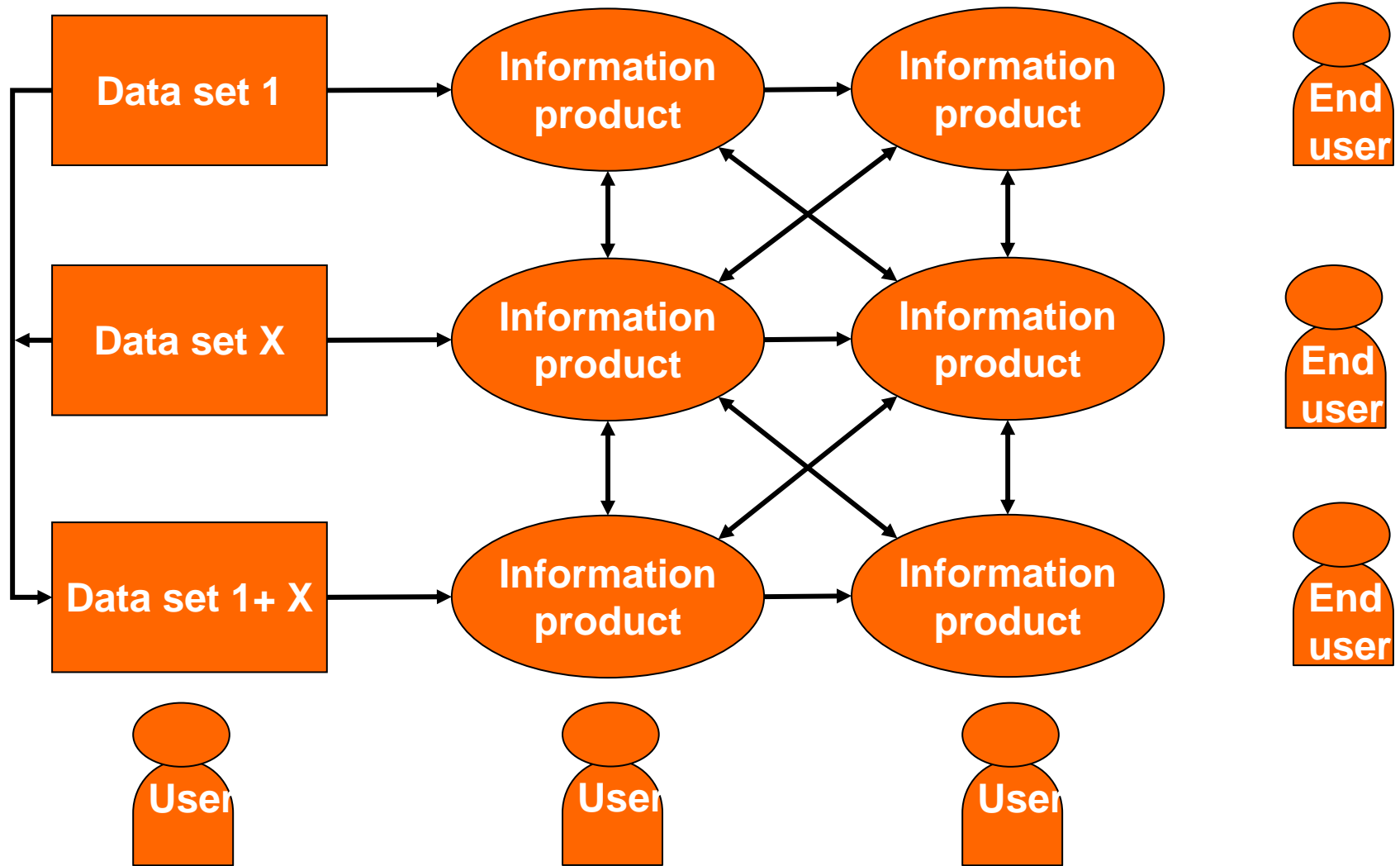
End user



Information provider

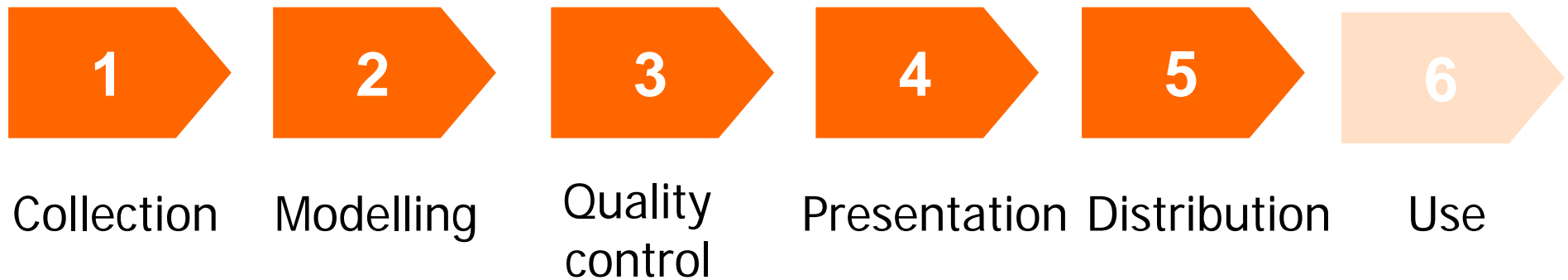
Service provider

Service provider



Roles of parties and value adding

- What is value adding?
 - If a data product is passed on from one organisation to another and some value is added



Roles of parties and value adding

- What is value adding?
 - If all steps within one organisation?



- GI enhancement chain

Two cases: US v. EU

- Road centre line data sets
- Parcel data sets

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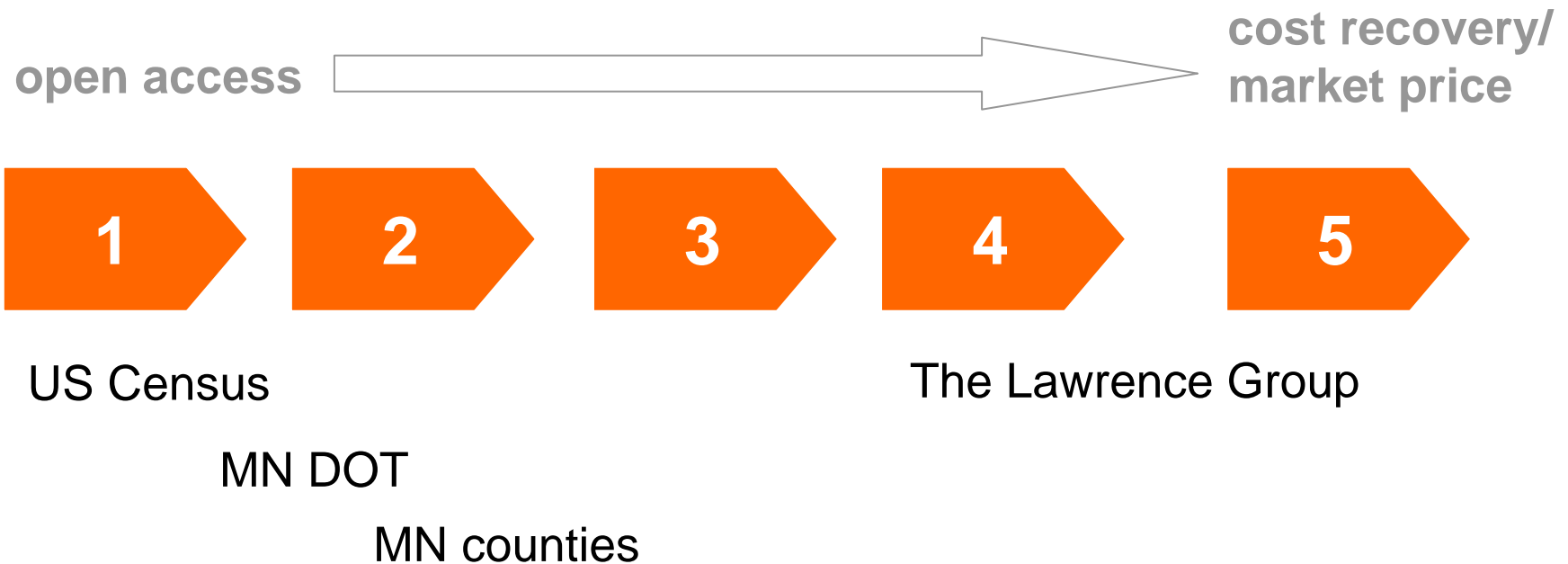
- Access policies

Road centre line data sets: Minnesota

- US Census TIGER files: based on 1:100,000 maps (open access)
- State department of transportation: major roads (free)
- County and towns: much accurate and timely information (not always free)

- Metropolitan region of Minneapolis and St. Paul
- The Lawrence Group adding value to PSI (e.g.):
 - integrating county data sets in one statewide data set
 - aligning the data sets, adding addresses, 3 monthly updates

The GI enhancement chain and access policies





EU: the Netherlands

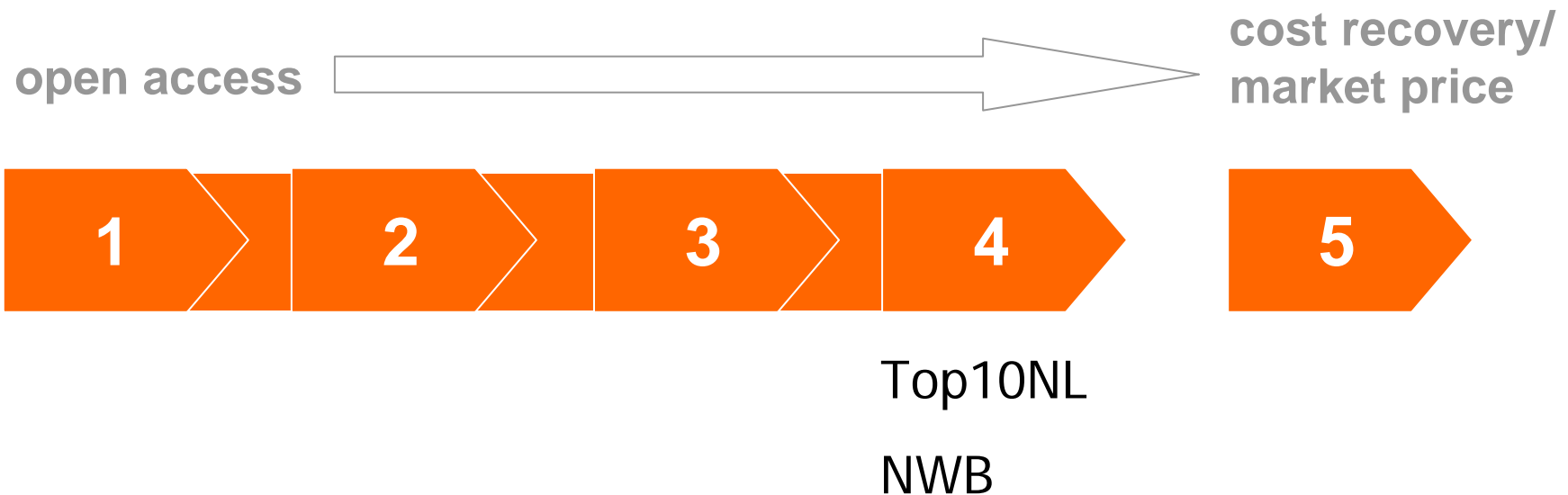
TOP10NL:

- Data set including road centre lines covering the entire Netherlands, consistent, object-oriented, GML 3 compliant
- Restrictive policy

National road data set (NWB):

- Integrating road centre lines from Ministry of Transportation, Local governments and top10nl
- Aligning the data sets
- Open access (foreseen)

The GI enhancement chain and access policies



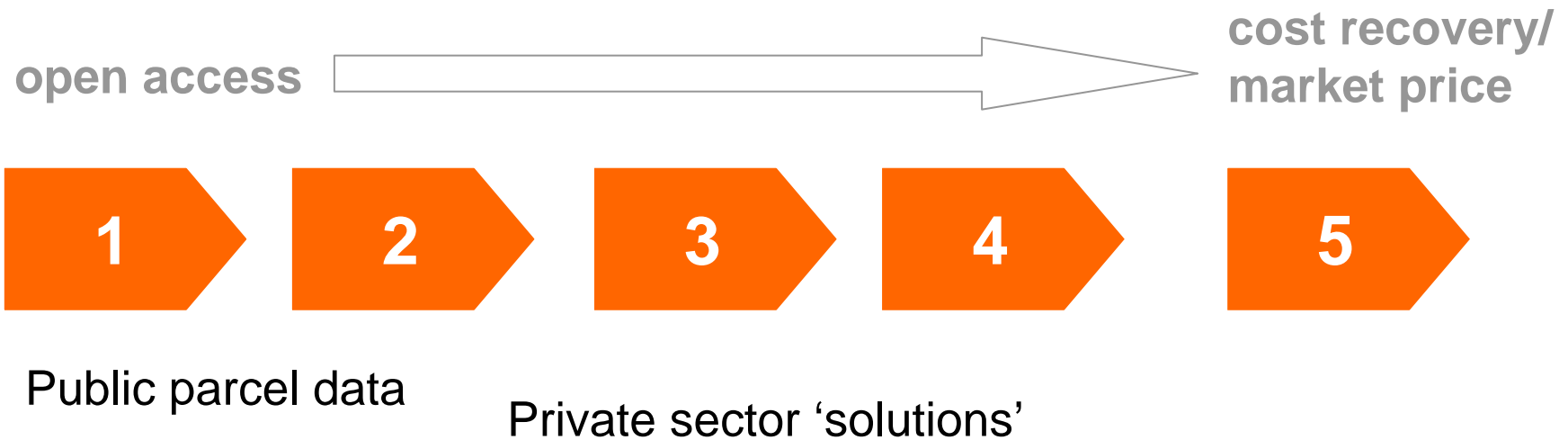
One US - EU example: parcel data (maps)

US:

- A framework data set within the NSDI
- A typical local government activity
- In many instances freely available

- Private sector value adding:
 - integrating the local data sets in one data set (normalized to one national standard)
 - clearinghouse function for local government data sets

The GI enhancement chain: US parcel data



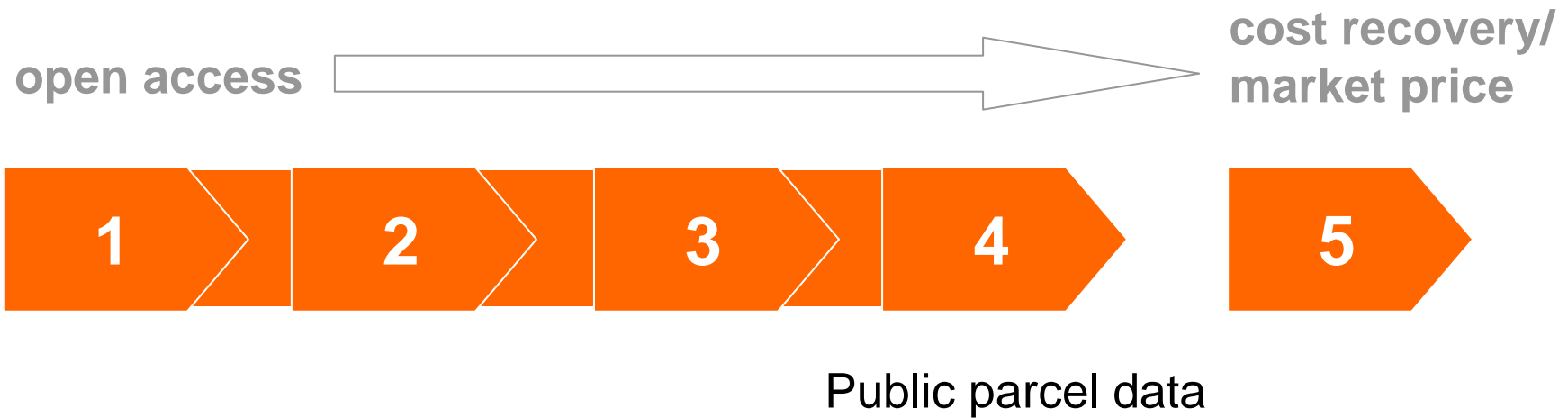
One US - EU example: parcel data (maps)

EU:

- A framework data set within the NSDI
- A typical central government activity
- Restrictive policies
- Ubiquitous for entire countries, consistent, standardized and comprehensive

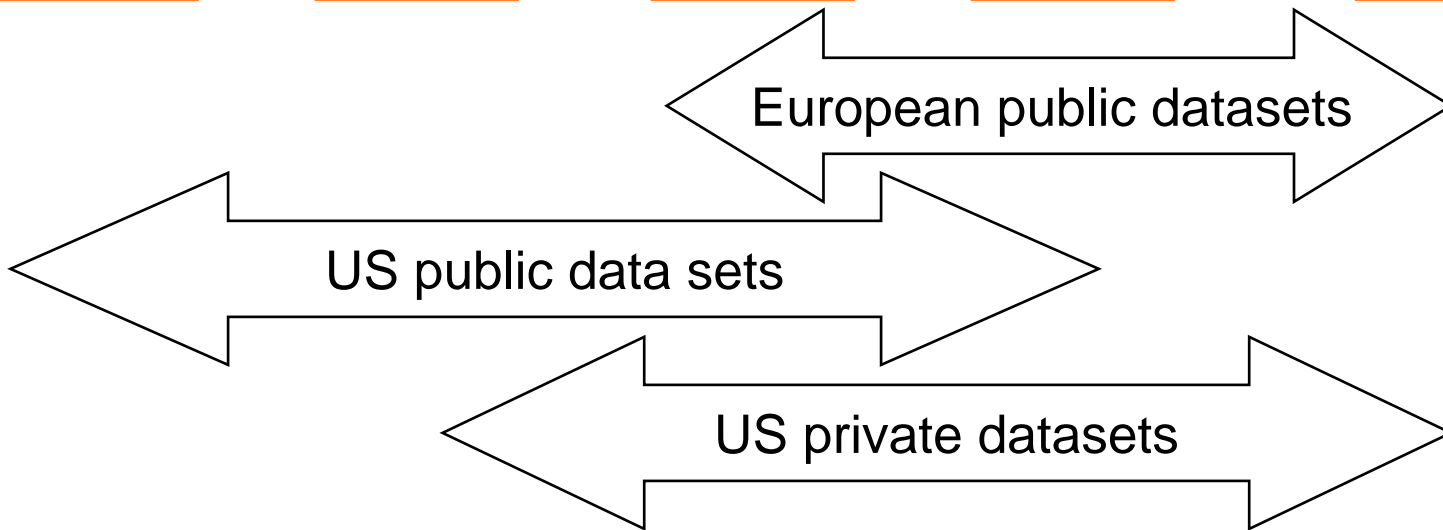
- EULIS:
 - Access/ Integrating across Europe

The GI enhancement chain: EU parcel data





open access  cost recovery/
market price





Value added GI-market?

- Is there a difference from a value added market perspective?
- Is there a difference between US and Europe from a GI enhancement perspective?

Assessing value added market

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Conclusions (based on limited # of examples)

- Value adding steps in value chain should be considered
- Especially the different roles of public and private parties
- Preliminary finding:
 - US private data sets comparable with EU public data sets, both in value added and policy
 - If so, then EU GII better prospects
- Expected benefits from policy change may be disappointing??

Further research

- What are the differences in public tasks in the US and EU?
- What are the true GI needs of public sector users?
 - Is US government doing with too less, or
 - is EU government doing with too much?
- Where to draw the line of government value adding relative to market value adding?



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