

# Linked Open Data Infrastructure for Public Sector Information

## - Example from Serbia -

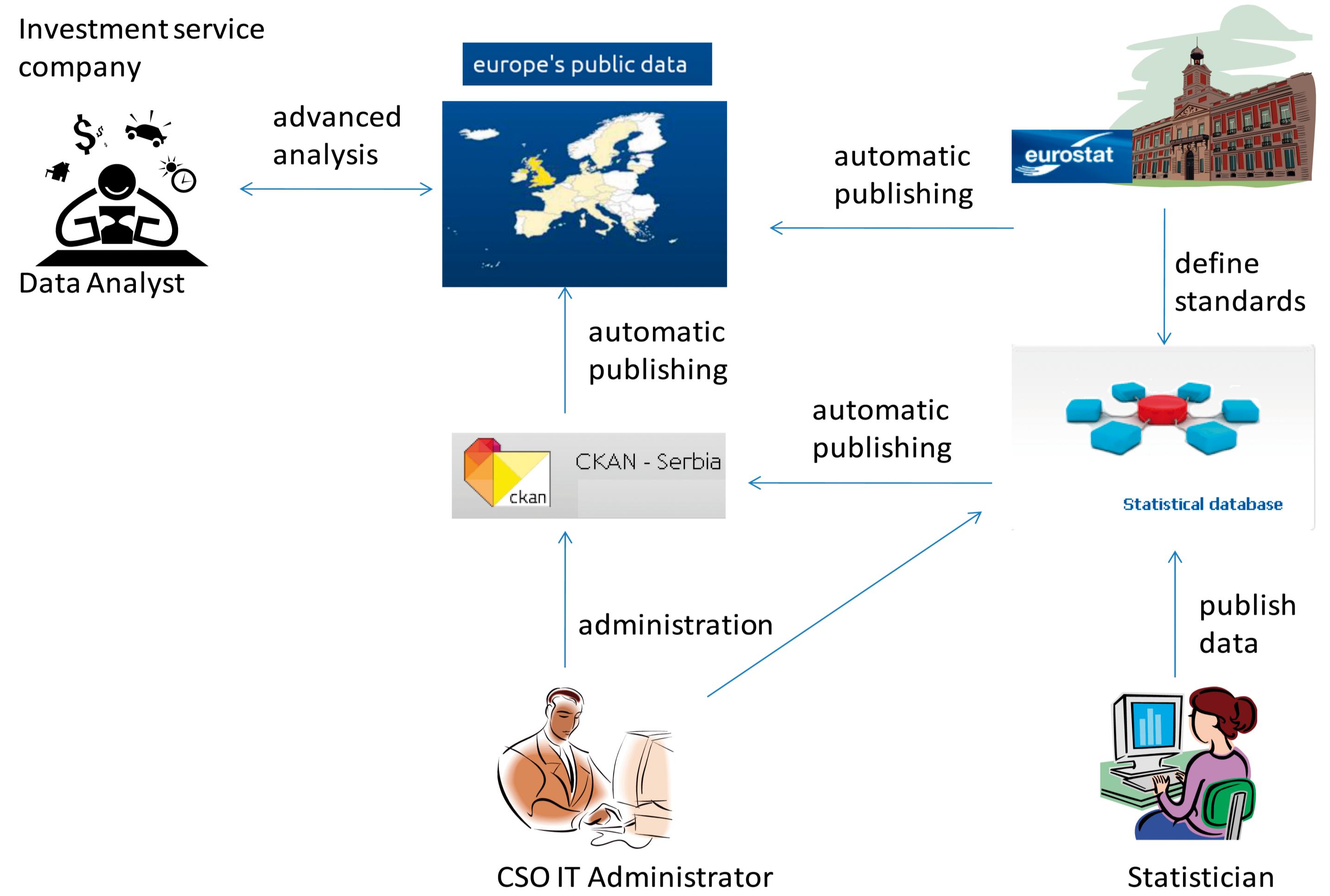
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### Goals

- Integration of public sector information from Serbia in the LOD cloud
- Showcase how an integrated and coherent collection of aligned state of the art software tools, the LOD2 Stack, can be used to deliver trusted, open and rich collections of interlinked datasets to the public.

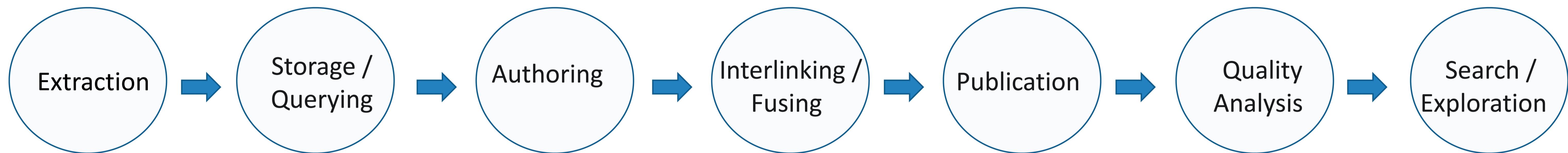
### Conclusions

- The LOD2 Stack provides a wide range of data transformation, enrichment and exploitation tools
- The Serbian CKAN increases the visibility and accessibility of Serbian public sector data
- The Data Cube RDF vocabulary is mature enough to be used for publishing statistical data
- The Serbian LOD is interlinked with DBpedia and Eurostat
- LOD2 stack components used
  - XSLT, LODGrefine, OntoWiki (CSV2RDF, CubeViz), Virtuoso, Silk, PoolParty, SparQLed, LODStats



### Example

- Statistical Office of the Republic of Serbia, <http://stat.gov.rs/>
- Input data from dissemination database <http://webrzs.stat.gov.rs/WebSite/public/ReportView.aspx>
- Publishing to the Serbian CKAN, <http://rs.ckan.net>



Extraction & Loading    Querying & Exploration    Authoring    Linking    Enrichment    Online Tools and Services    Configuration

This is Version 1.1 of the LOD2 Stack, which comprises a number of tools for managing the life-cycle of Linked Data. The life-cycle comprises in particular the stages

- Extraction of RDF from text, XML and SQL
- Querying and Exploration using SPARQL
- Authoring of Linked Data using a Semantic Wiki
- Semi-automatic link discovery between Linked Data sources
- Knowledge-base Enrichment and Repair

You can access tools for each of these stages using the menu on top.

The LOD2 Stack is developed by the LOD2 project consortium comprising 15 research groups and companies. The LOD2 project is co-funded by the European Commission within the 7th Framework Programme (GA no. 257934).

You can find further information about the LOD2 Stack and the LOD2 project at <http://lod2.eu>.

LOD2 Demonstrator, <http://fraunhofer2.imp.bg.ac.rs/lod2demo>

CKAN - Serbia — [Добављајте скуп података](#) [Тражи](#) [Групе](#) [О сервису](#)

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Statistical Office of the Republic of Serbia

Премјед Ресурси (2) Историја Статистика Годишњава Аутомација

Followers (0)

Лиценца: Other (Public Domain) [OPEN DATA](#)

Тагови: government statistics

Групе: Statistical Office

Сродни склопови података

is a parent of rzs-economy-and-finance-statistics (Statistics by theme)  
 is a parent of rzs-population-and-social-conditions-statistics (Statistics by theme)  
 is a parent of rzs-industry-trade-and-services-statistics (Statistics by theme)  
 is a parent of rzs-science-and-technology-statistics (Statistics by theme)

### Multidimensional Data Model in RDF

```

<qb:DataSet rdf:about="RS-DATA/National_accounts/Quarterly_GVA_by_activities/data_2012_01_19">
  <rdfs:label rdf:datatype="http://www.w3.org/2001/XMLSchema#string">Quarterly GVA by activities</rdfs:label>
  <dc:terms:subject rdf:resource="http://purl.org/linked-data/sdmx/2009/subject#2.2"/>
  <dc:publisher rdf:datatype="http://www.w3.org/2001/XMLSchema#string">Statistical Office of the Republic of Serbia</dc:publisher>
  <rdfs:comment>Source: RZS (http://www.stat.gov.rs/) - RZS Database.</rdfs:comment>
  <rdfs:seeAlso rdf:resource="http://webrzs.stat.gov.rs/WebSite/public/ReportView.aspx"/>
  <qb:structure rdf:resource="RS-DATA/National_accounts/dsd#Quarterly_GVA_by_activities"/>

<qb:Observation rdf:about="RS-DATA/National_accounts/Quarterly_GVA_by_activities/data_2012_01_19#obs1">
  <qb:dataProvider rdf:resource="RS-DATA/National_accounts/Quarterly_GVA_by_activities/data_2012_01_19"/>
  <sdmx:attribute:unitMeasure rdf:resource="RS-DIC/esa95-unit#MIO_NAT"/>
  <rs:geo rdf:resource="RS-DIC/geof#S"/>
  <rs:time rdf:resource="RS-DIC/time#2001Q1"/>
  <rs:activityNACE2 rdf:resource="RS-DIC/nace_rev2#TOTAL"/>
  <sdmx-measure:obsValue>136364.2</sdmx-measure:obsValue>
</qb:Observation>
  
```

### Used vocabularies

- RDF Data Cube, <http://purl.org/linked-data/cube#>
- SDMX-RDF, Statistical Data and Metadata eXchange, <http://purl.org/linked-data/sdmx#>
- SKOS, Simple Knowledge Organization System <http://www.w3.org/2004/02/skos/core#>
- void, Vocabulary of Interlinked Datasets, <http://rdfs.org/ns/void#>
- Dublin Core Terms, <http://dublincore.org/documents/dcmi-terms/>