



EUROPEAN  
DATA PORTAL

# The European Data Portal

Barriers and benefits in working with Open Data  
Heleen Vollers

9 May 2017, Wageningen, the Netherlands

<https://www.youtube.com/watch?v=HyFQSlm6HDg&t=17s>



We harvest **open data**  
from  
**public administrations**  
across **Europe**



# What does the European Data Portal have for me?



**We offer** metadata, visualisations, quality checks



**We train** data publishers via eLearning and workshops



**We showcase** events, news, best practices, reports



**We measure** open data maturity across Europe



**We convene** meetings, webinars, events



**We collect** open data stories, feedback



**We share** our source code and promote open source



# The European Data Portal

- facts & figures -

**632,000**  
datasets

Metadata in  
**24** Languages

**34** countries  
**73** catalogues



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English (en) ▼

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European Data Portal



What we do ▾

Data ▾

Providing Data ▾

Using Data ▾

Resources ▾

## Search Datasets

Enter keywords...

Search Q

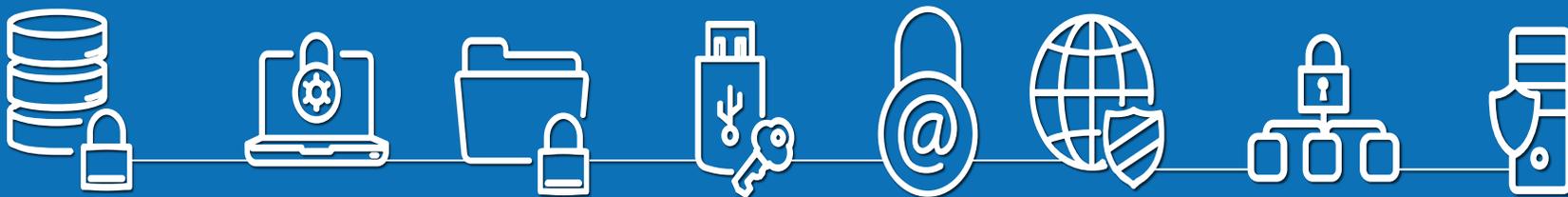
SPARQL Search



# Open Data

Maturity in 2016

EU28+ countries

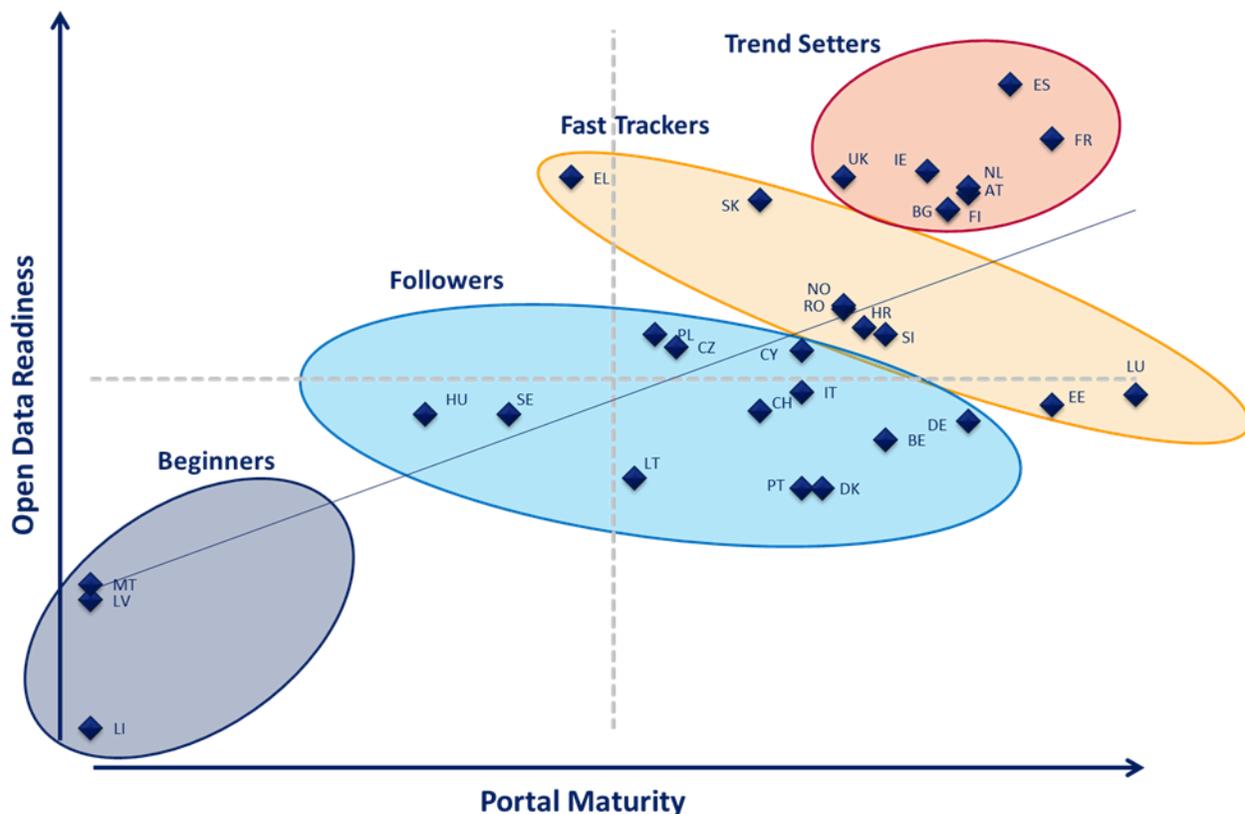


The categorisation of countries in groups, indicating their maturity level, illustrates the increase compared to last year as well

## Categorisation

-  **Trend Setters:** Spain, France, Ireland, Netherlands, Austria, UK, Bulgaria, Finland
-  **Fast Trackers:** Slovakia, Greece, Romania, Norway, Slovenia, Croatia, Luxembourg, Cyprus
-  **Followers:** Poland, Czech Republic, Estonia, Italy, Germany, Switzerland, Belgium, Sweden, Hungary, Denmark, Portugal, Lithuania
-  **Beginners:** Malta, Latvia, Liechtenstein

Open Data Maturity category	Number of countries 2015	Number of countries 2016
Beginner	7	3
Follower	14	12
Fast tracker	N/A	8
Trendsetter	10	8



EU28+ Open Data Maturity clusters

Number of beginners, followers and trendsetters in 2015 and 2016



# Netherlands – Open Data Trend Setter



### Open Data Policy

- ✓ Open Data policy in place
- ✓ National 5 year strategy
- ✓ Priority domains identified
- ✓ Pre-defined approach to ensure data sets are up-to-date
- ✓ More than 5 events held annually

100%

### Top data set & domains

- Most downloaded dataset: Basisregister adressen en gebouwen
- Top 5 most consulted domains:
  1. Geospatial
  2. Transport and infrastructure
  3. Earth observation
  4. Statistics
  5. Gov. cccountability and democracy

### Overview Netherlands

*Presence Open Data Policy – 98%*

Metric	Netherlands	EU average
Presence Open Data Policy	98%	98%
Impact of Open Data	43%	75%
Use of Open Data	75%	43%

### Usability

- ✓ API accessible
- ✓ Possibility to give feedback
- ✓ Search data sets
- ✓ Download data sets
- ✗ Contribute to portal

### Licensing Norms

- ✓ Free of charge
- ✓ Open licensed
- ✓ Policy encourages to use CC0 licence

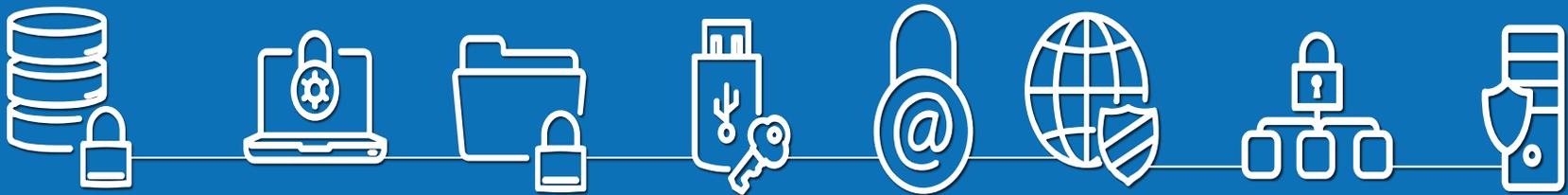
100%

### Coordination

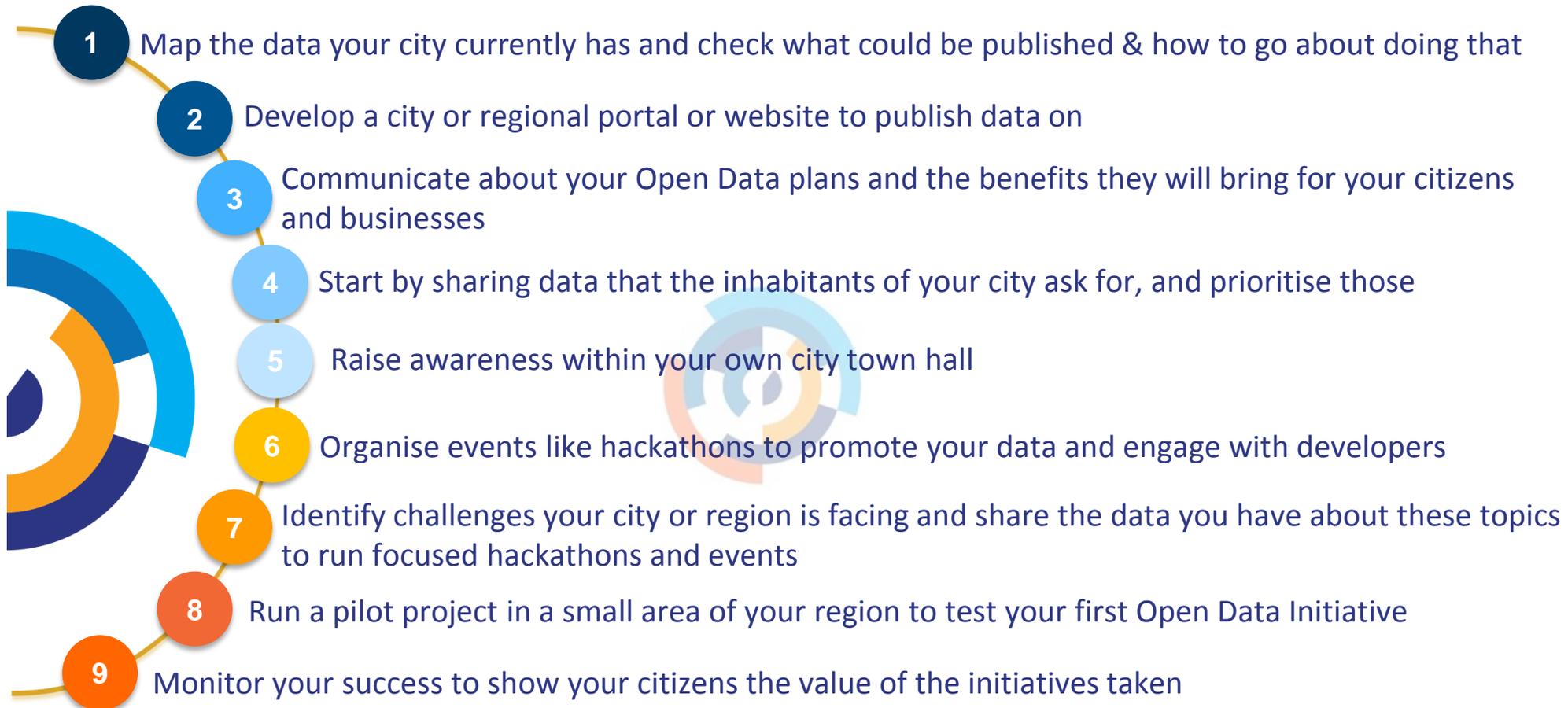
- ✓ National guidelines on publication
- ✓ Many regional data initiatives
- ✓ Many regional portals integrated

92%

# What about Open Data at the city level?



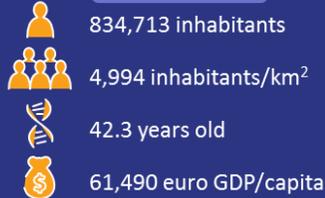
*8 city examples that show the potential value of sharing more data as Open Data to develop a more effective city. But how can you do that?*



# Open City Data best practices – from Amsterdam to Copenhagen

## Amsterdam

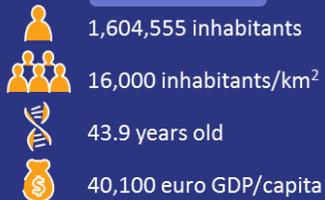
### Amsterdam



- 2012: Won the World Smart Cities Award thanks to its Open Data Programme for transport and mobility.
- One of the leaders looking at an intelligent transport system improving capacity and managing traffic flows.

## Barcelona

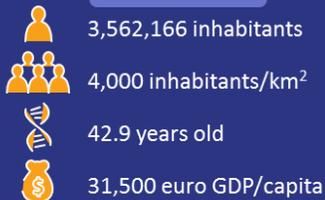
### Barcelona



- 2015: chosen as the Smartest City in the world.
- Wants to become a benchmark technology centre for smart cities.
- Data should a.o. stimulate the creation of new services with social & commercial value; teach staff and students about Open Data.

## Berlin

### Berlin



- Has a specific section on its portal providing an overview of the applications built with Open Data such as expanding data provision; creating success stories; citizen involvement; improving data accessibility.

## Copenhagen

### Copenhagen



- Has its own Copenhagen Solutions Lab to govern Smart City projects across all sectors in the city creating triple helix partnerships.
- Introduced Smart Citizen Borgerpanel which allows citizens to participate in testing and developing new innovative solutions and digital technologies.

# Open City Data best practices – from London to Vienna

London	<p>London</p> <ul style="list-style-type: none"><li>8,538,689 inhabitants</li><li>5,432 inhabitants/km<sup>2</sup></li><li>34 years old</li><li>49,088 euro GDP/capita</li></ul>	<ul style="list-style-type: none"><li>‘<a href="#">Data for London</a>’: Six strategy themes of Data for London.</li><li>Smart Cities and Communities Lighthouse programme (H2020):</li><li>Aims to demonstrate how innovative uses of technology can improve the lives of their residents.</li></ul>
Paris	<p>Paris</p> <ul style="list-style-type: none"><li>2,240,621 inhabitants</li><li>21,000 inhabitants/km<sup>2</sup></li><li>39.1 years old</li><li>80,528 euro GDP/capita</li></ul>	<ul style="list-style-type: none"><li>Has its own initiative ‘meetup’ group called Paris Open Innovation.</li><li>Has an open call aimed at encouraging citizens and entrepreneurs to solve different city problems using Open Data.</li><li>5 projects were selected in May 2016 to be tested in Paris itself.</li></ul>
Stockholm	<p>Stockholm</p> <ul style="list-style-type: none"><li>923,516 inhabitants</li><li>4,900 inhabitants/km<sup>2</sup></li><li>39 years old</li><li>62,145 euro GDP/capita</li></ul>	<ul style="list-style-type: none"><li>‘<a href="#">Re-use of Open Data – City of Stockholm</a>’.</li><li>Wants to become smartest city in the world by 2040.</li><li>Three focus areas: low energy districts, integrated infrastructures, and sustainable urban mobility.</li></ul>
Vienna	<p>Vienna</p> <ul style="list-style-type: none"><li>1,840,573 inhabitants</li><li>4,326 inhabitants/km<sup>2</sup></li><li>43 years old</li><li>47,200 euro GDP/capita</li></ul>	<ul style="list-style-type: none"><li>Wants to be one of the best cities when looking at quality of life, infrastructure and innovation.</li><li>Example: Stadtmenschen Wien: inhabitants of Vienna volunteer to support their neighbours that are in difficult life situations.</li></ul>

# Cities highlighted in upcoming EDP cities report II



**Dublin, Ireland**



**Florence, Italy**



**Gdansk, Poland**



**Ghent, Belgium**



**Helsinki, Finland**



**Lisbon, Portugal**



**Thessaloniki, Greece**



**Vilnius, Lithuania**

# How do companies translate Open Data into value at city-level?

## Four examples of businesses operating at city level



### SmartAppCity

**SmartAppCity** is a Spanish application that offers a 'multiplatform' for citizens and visitors. It brings together all city services based on Open Data: tourist information, information from the city council, public transport schedules, services and products from local businesses, etc.

### Fluicity



**Fluicity** is a citizen network bringing together citizens and the local government (mobile app). Fluicity helps third-party data holders to broadcast their Open Data, disseminates own data back to the citizens and helps to make Open Data actionable by enriching it with qualitative data.



### WiseTown

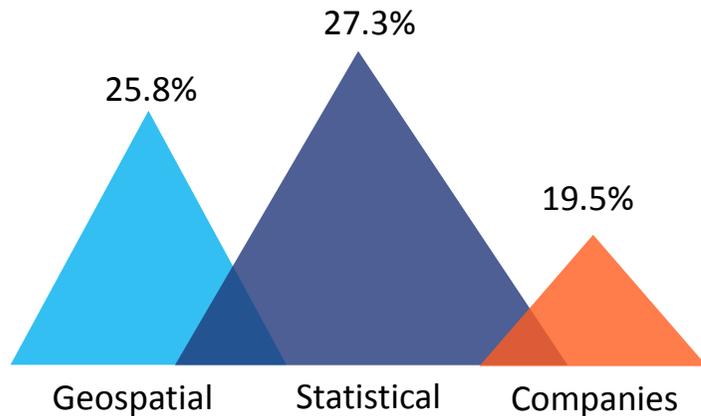
**WiseTown** is an Italian application for the communication management between citizens and local governments on subjects such as urban quality, safety and shared planning while integrating social networks, Open data and IoT.

### SmartUp Cities



The Spanish Company **SmartUp Cities** offers Smart City solutions. They not only provide sensors to municipalities by which data can be collected (e.g. parking sensors), but also assists them in processing and accessing the data and converting it into actionable intelligence.

# Companies are re-using three data domains the most



## Top 3 Open Data domains re-used most

- 👤 Clear **popularity of three types** of Open Data domains
- 👤 Domains expected to have the **highest economic impact**
- 👤 **More data on companies** requested most

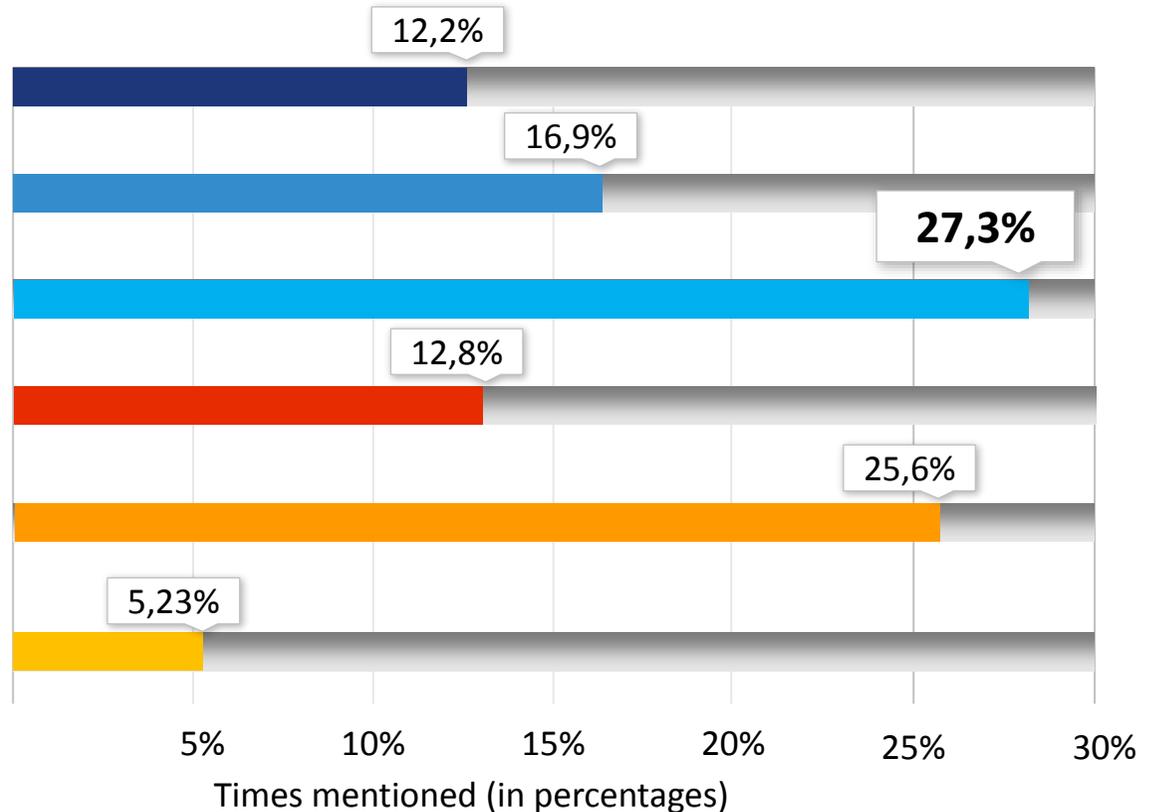
## Top 4 combinations of Open Data categories

- 👤 **Regions & Cities** data is often combined with the other 3 categories
- 👤 On average companies use **5 categories** of Open Data
- 👤 **36%** of the companies **aggregate** the data, regardless of its nature



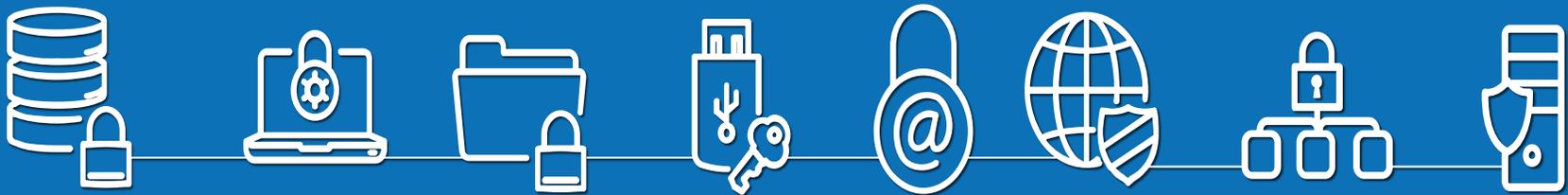
## My company is...

- relying on data from a specific organisation
- relying on real-time data
- relying on quality data
- relying on a specific dataset
- relying on the systematic and continued publication of specific data sets
- not using data as a critical business source



The systematic and continued publication of quality Open Data is essential for re-users, and to a lesser extent real-time data

# What about Open Data barriers?



# Barriers hinder the Open Data community to reap the full potential of the re-use of Open Data

## Heterogeneity

- Of formats, standards and structures
- Hindering the development of automated processes

## Quality

- In detail and completeness
- Making the data less of interest

## Metadata

- In correctness and standardisation
- Creating the stringent need to control

## Availability

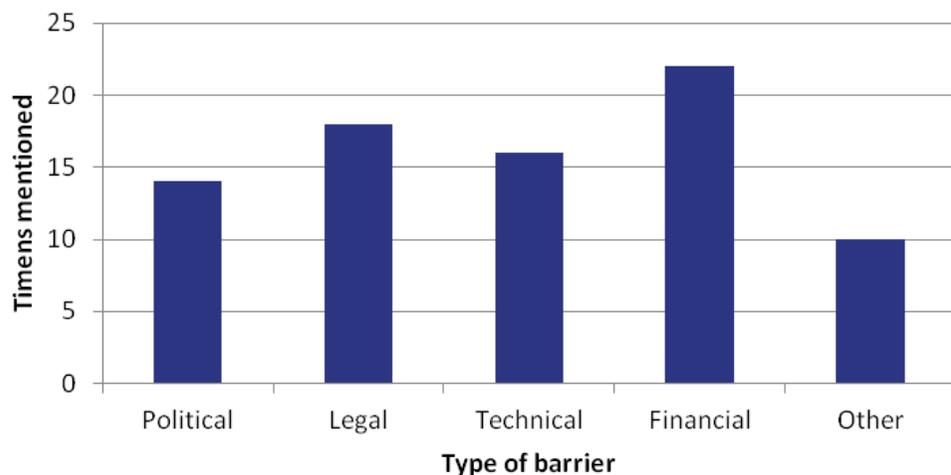
- In discovering and accessing the data
- Creating available yet unused datasets

## Awareness

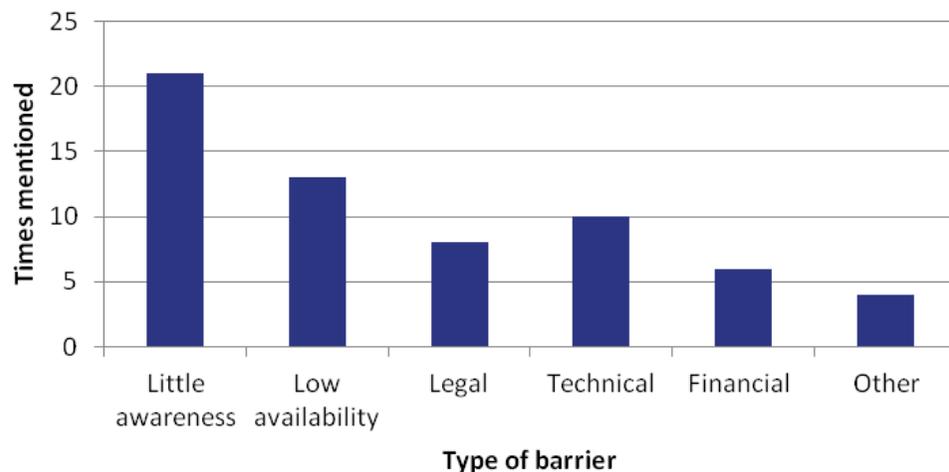
- On the specific needs of re-users, and on the availability of Open Data
- Creating a mismatch between the re-users and providers



## Barriers for Open Data publishers



## Barriers for re-users of Open Data



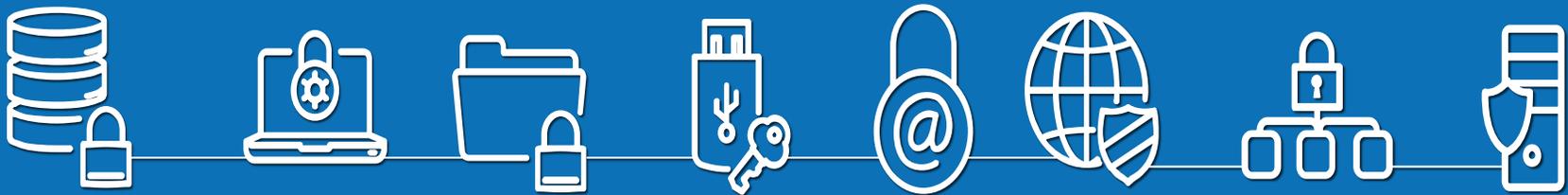
### Main barriers for publishers:

- 🇪🇺 Financial: main barrier for 71% of EU countries
- 🇪🇺 Legal: 2<sup>nd</sup> most important barrier for 58%
- 🇪🇺 Technical: 3<sup>rd</sup> barrier for 52%
- 🇪🇺 Political: 4<sup>th</sup> barrier for 45%
- 🇪🇺 Other, such as organisational barriers and lack of awareness

### Main barriers for re-users:

- 🇪🇺 Lack of awareness: main barrier for 68%
- 🇪🇺 Low availability: 2<sup>nd</sup> most important for 42%
- 🇪🇺 Technical: 3<sup>rd</sup> barrier for 32%
- 🇪🇺 Legal: 4<sup>th</sup> barrier for 26%
- 🇪🇺 Financial: 5<sup>th</sup> barrier for 19%
- 🇪🇺 Other, such as political barriers

# What about Open Data benefits?



# € 325 Billion

Direct Market Size

2016 – 2020 for

the EU 28+



# Open Data has both a direct and an indirect impact on the economy

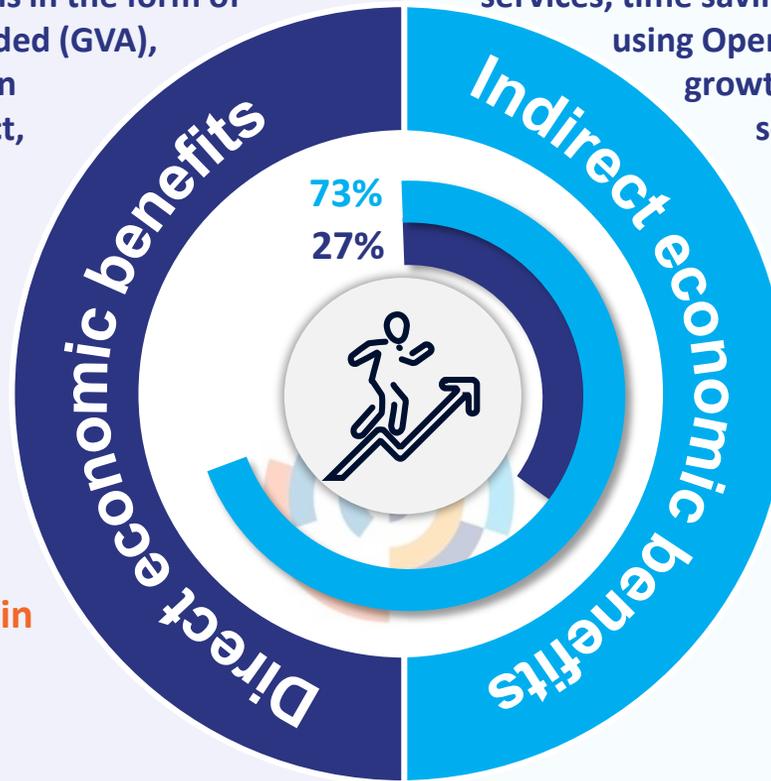
 Direct benefits are monetised benefits that are realised in market transactions in the form of revenues and Gross Value Added (GVA), the number of jobs involved in producing a service or product, and cost savings.



> **25,000** Jobs  
created in Open  
Data in 2020



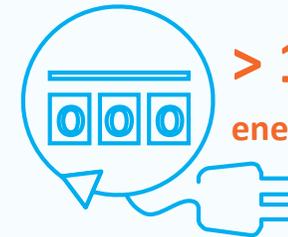
> **€ 1.7 Bn** in  
savings in Public  
Administration



 Indirect economic benefits are i.e. new goods and services, time savings for users of applications using Open Data, knowledge economy growth, increased efficiency in public services and growth of related markets.



> **2,549**  
hours  
wasted finding  
parking



> **16%** less  
energy used

## Open Data benefits:

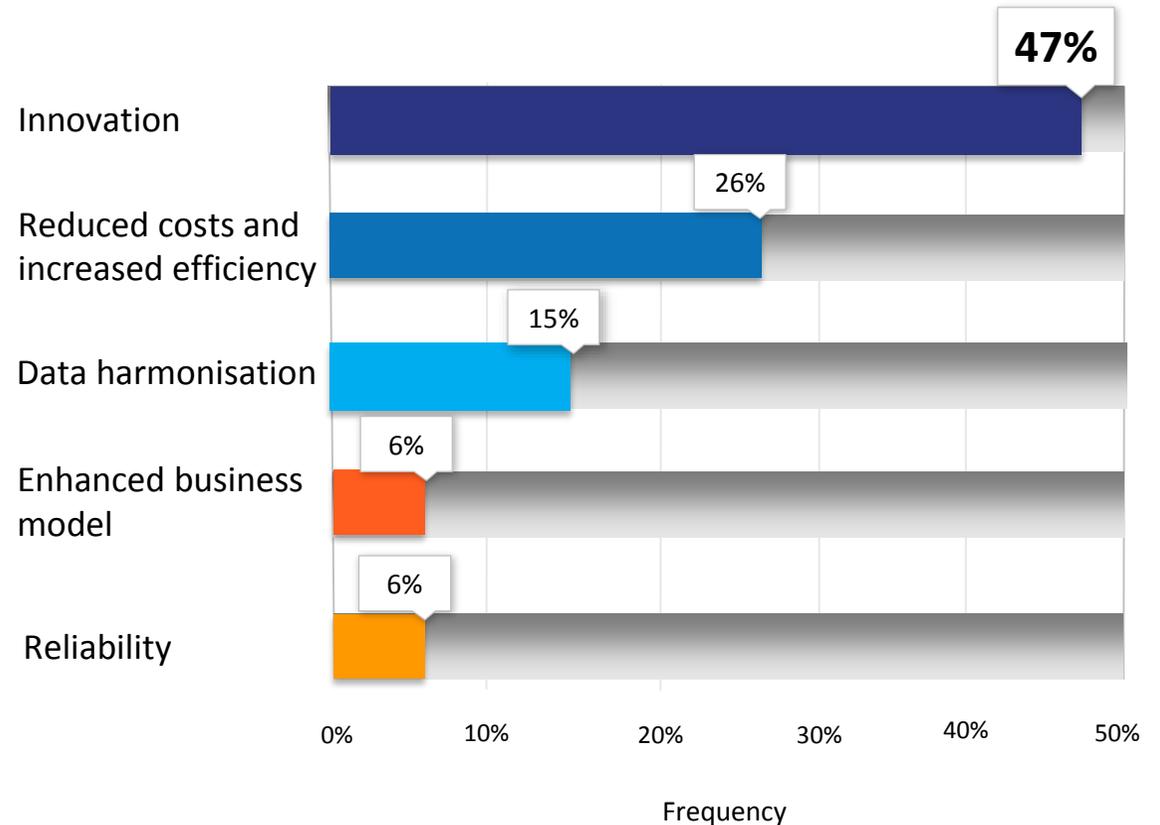
-  Developing **entirely new services**
-  Enhancing **efficiency**
-  Accessing **low cost** data resources
-  **Harmonising** data and interoperability



## Open Data benefits: Open Opps

“The company would not exist without Open Data or Open technologies in general!”

## Main benefits of working with Open Data





## Search Datasets

Enter keywords...

Search

SPARQL Search



# Go and try it out.

[data.europa.eu/europeandataportal](https://data.europa.eu/europeandataportal)



Recommendations for Open Data Portals:  
from setup to sustainability



## Barriers in working with Open Data



## Re-using Open Data

A study on companies transforming Open Data into economic & societal value

