

Annex 1

1 Survey

1.1 Survey metrics

1.1.1 Target

Organisations active in the Belgian open data ecosystem as re-users of open data.

1.1.2 Objective

- Overview of the current state of the open data in Belgium in 2016
- First approach to explain the relation between innovation and open data.

1.1.3 Questions

Consent

- Geolocalisation
- Organisations's address
- Organisation's website
- Profit or non-profit organisation ?
- In which sector of activity is your organisation active? [Agriculture, forestry and fishing ; Mining and quarrying ; Manufacturing ; Electricity, gas, steam and air conditioning supply ; Water supply, sewerage, waste management and remediation activities ; Construction ; Wholesale and retail trade, repair of motor vehicles and motorcycles ; Transportation and storage ; Accommodation and food service activities ; Information and communication ; Financial and insurance activities ; Real estate activities ; Professional, scientific and technical activities ; Administrative and support service activities ; Public administration and defence, compulsory social security ; Education ; Human health and social work activities ; Arts, entertainment and recreation ; Other service activities ; Activities of households as employers, undifferentiated goods - and service – producing activities of households for own use ; Activities of extra territorial organisations and bodies]

- In what type of business are you active? [B2B, B2C, B2G, none of those]
- How many full-time equivalent employees are working in your organisation? [0-5 ; 6-15 ; 16-30 ; 31-100 ; 101-250 ; >250]
- When did your company start open data projects? [yyyy]
- What is the average number of employees directly working on open data products or services? [0-5 ; 6-15 ; 16-30 ; >30]
- Is your main source of revenue related to open data? [Yes or No]
- Which data domain are you using mostly? [Economy and finance ; Education, culture and sport ; Energy ; Environment ; Government and public sector ; Health ; International issues ; Justice, legal system and public sector ; Regions and cities ; Population and society ; Science and technology ; Transport]
- What are the types of revenues sources for your organisation, related to open data projects? [Consulting fees, Analytics fees, Lead Generation, Advertising, Subscription models, Other]
- Have you hired new data developer(s)/data scientist(s) since your organisation started an open data project? [Yes, working full time on open data projects ; Yes, working part time on open data projects ; No]
- What type of re-user? [Aggregator, Developer, Enabler, Enricher, Other]
- Are you combining open data and internal data? [Yes or No]
- What is your distribution mechanism? [Mobile application ; Website ; Other]
- From which geographical areas do you use mostly data? [Local ; Regional ; National ; European ; Global]

- How did you access the data? [Open data platform ; Website of the data provider ; E-mail directly to the data provider ; API ; Other]
- What is the average increase in revenues/ decrease in costs due to data projects? [0-5% ; 5-25% ; 25-50% ; >50%]
- Do you use available support tools for open data? For example: workshops on open data, online support (e-learning) etc. [Often ; Sometimes ; Rarely ; Never]
- What are your key open data challenges? [Data access & availability ; Data licensing ; Tools & software ; Other]
- How many people are using your open data product/service? [<100 ; 100-1000 ; >1000]

1.2 List of disclosable companies which answered to the survey

DDSoft vzw

NextRide

VrijeParking

Cumul.io

BAREFOOT SA

Université de Namur

GeoLives

Sagacify

FlatTurtle

GIM

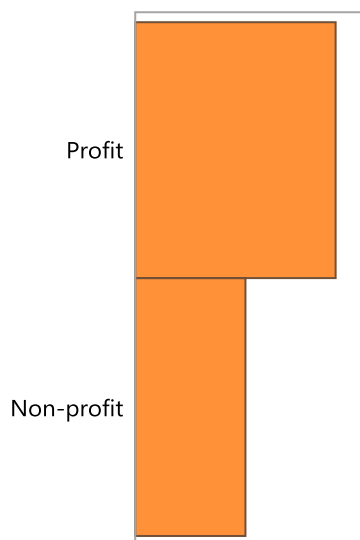
Hogeschool PXL / PXL University College

Startups.be

1.3 Survey analysis

1.3.1 Distributions

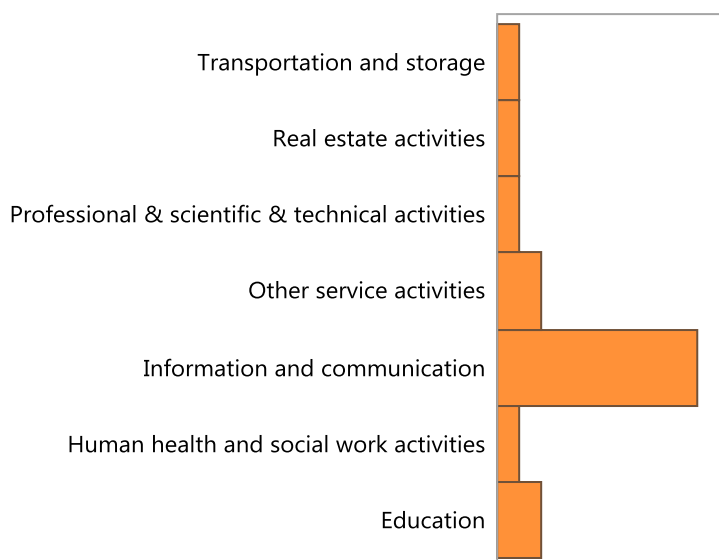
1.3.1.1 Profit orientation



Frequencies

Data missing	0	
Level(s)	2	
Level	Count	Prob.
Non-profit	6	0,35294
Profit	11	0,64706
Total	17	1,00000

1.3.1.2 Sector of activity



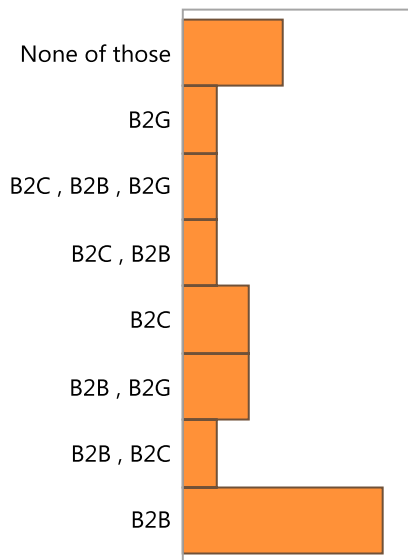
Level	Count	Prob.
Education	2	0,11765
Human health and social work activities	1	0,05882
Information and communication	9	0,52941
Other service activities	2	0,11765
Professional & scientific & technical activities	1	0,05882

Data missing	0
Level(s)	7

Real estate activities	1	0,05882
Transportation and storage	1	0,05882
Total	17	1,00000

Frequencies

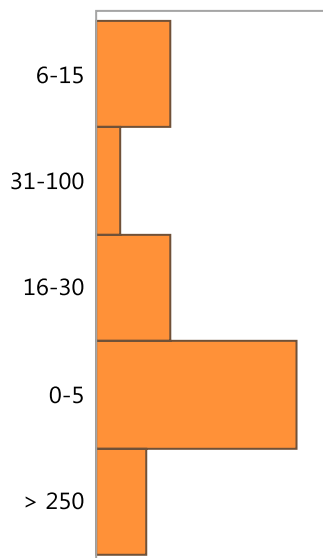
1.3.1.3 Business orientation



Frequencies

Level	Count	Prob.
B2B	6	0,35294
B2B , B2C	1	0,05882
B2B , B2G	2	0,11765
B2C	2	0,11765
B2C , B2B	1	0,05882
B2C , B2B , B2G	1	0,05882
B2G	1	0,05882
None of those	3	0,17647
Total	17	1,00000
Data missing	0	
Level(s)	8	

1.3.1.4 Full-Time Employees

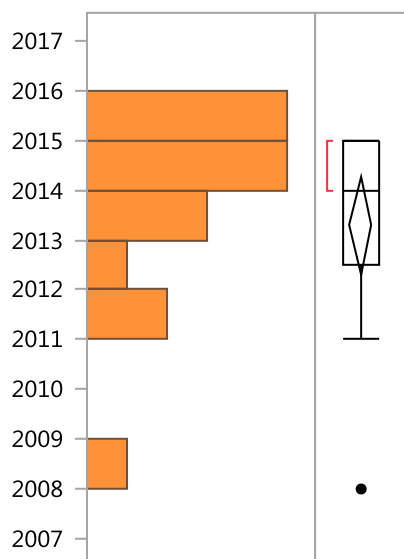


Frequencies

Level	Count	Prob.
> 250	2	0,11765
0-5	8	0,47059
16-30	3	0,17647
31-100	1	0,05882
6-15	3	0,17647
Total	17	1,00000

Data missing	0
Level(s)	5

1.3.1.5 Starting year of Open Data project(s)



100.0%	maximum	2015
99.5%		2015
97.5%		2015
90.0%		2015
75.0%	quartile	2015
50.0%	median	2014
25.0%	quartile	2012,5
10.0%		2010,4
2.5%		2008
0.5%		2008
0.0%	minimum	2008

Quantiles

Summary statistics

Average	2013,2941
Standard deviation	1,8962036
Error on standard deviation	0,4598969
Upper limit for the confidence interval at 95%	2014,2691

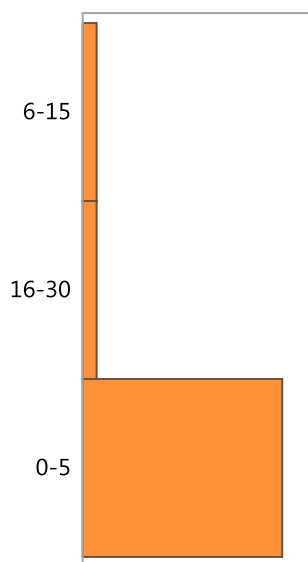
Lower limit for the confidence interval at 95%

2012,3192

Total count observations

17

1.3.1.6 Number of employees working on Open Data project(s)



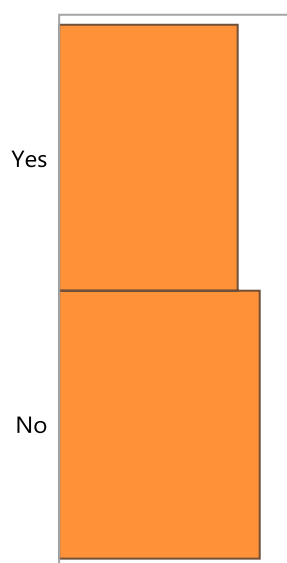
Frequencies

Level	Count	Prob.
0-5	15	0,88235
16-30	1	0,05882
6-15	1	0,05882
Total	17	1,00000

Data missing 0

Level(s) 3

1.3.1.7 Open Data compose the main source of revenue



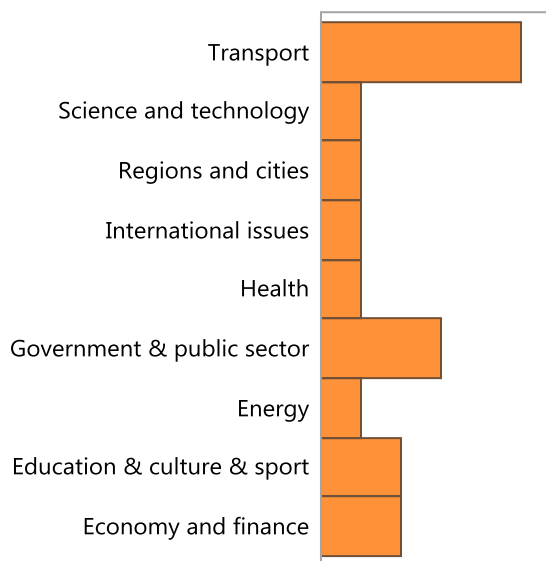
Frequencies

Level	Count	Prob.
No	9	0,52941
Yes	8	0,47059
Total	17	1,00000

Data missing 0

Level(s) 2

1.3.1.8 Data domain used



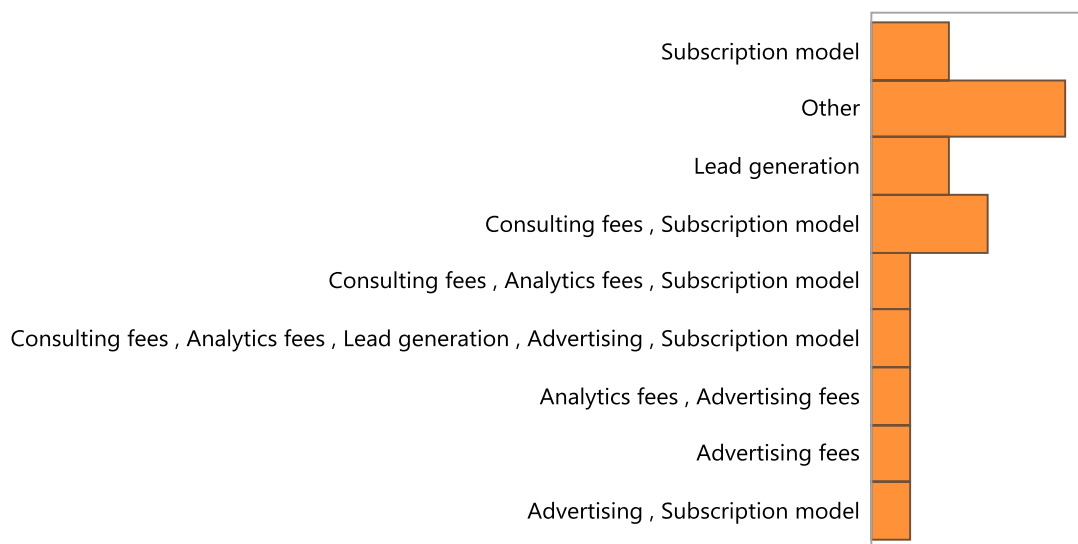
Frequencies

Level	Count	Prob.
Economy and finance	2	0,11765
Education & culture & sport	2	0,11765
Energy	1	0,05882
Government & public sector	3	0,17647
Health	1	0,05882
International issues	1	0,05882
Regions and cities	1	0,05882
Science and technology	1	0,05882
Transport	5	0,29412
Total	17	1,00000

Data missing 0

Level(s) 9

1.3.1.9 Type revenue from Open Data (Revenue model)



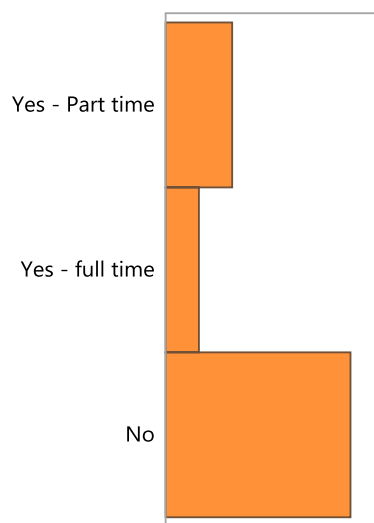
Level	Count	Prob.
Advertising , Subscription model	1	0,05882
Advertising fees	1	0,05882
Analytics fees , Advertising fees	1	0,05882
Consulting fees , Analytics fees , Lead generation , Advertising , Subscription model	1	0,05882

Consulting fees , Analytics fees , Subscription model	1	0,05882
Consulting fees , Subscription model	3	0,17647
Lead generation	2	0,11765
Other	5	0,29412
Subscription model	2	0,11765
Total	17	1,00000

Data missing	0
Level(s)	9

Frequencies

1.3.1.10 New employee recruited for Open Data project(s) since the start of Open Data activities

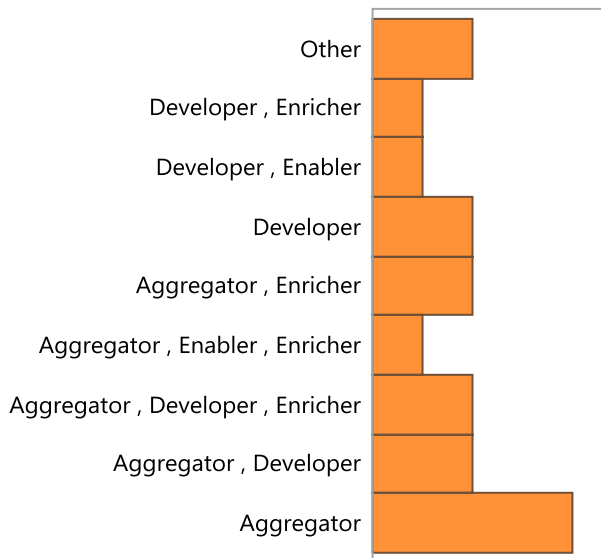


Frequencies

Level	Count	Prob.
No	11	0,64706
Yes - full time	2	0,11765
Yes - Part time	4	0,23529
Total	17	1,00000

Data missing	0
Level(s)	3

1.3.1.11 Type of Open Data re-user

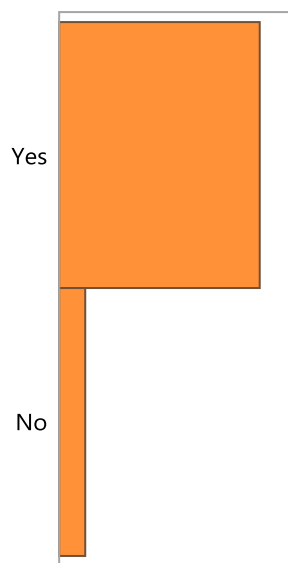


Frequencies

Level	Count	Prob.
Aggregator	4	0,23529
Aggregator, Developer	2	0,11765
Aggregator, Developer, Enricher	2	0,11765
Aggregator, Enabler, Enricher	1	0,05882
Aggregator, Enricher	2	0,11765
Developer	2	0,11765
Developer, Enabler	1	0,05882
Developer, Enricher	1	0,05882
Other	2	0,11765
Total	17	1,00000

Data missing	0
Level(s)	9

1.3.1.12 Internal combination of Open Data and private data

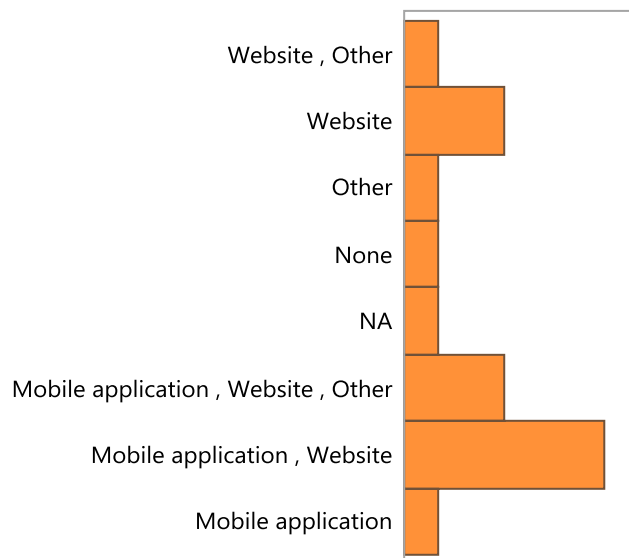


Frequencies

Level	Count	Prob.
No	2	0,11765
Yes	15	0,88235
Total	17	1,00000

Data missing	0
Level(s)	2

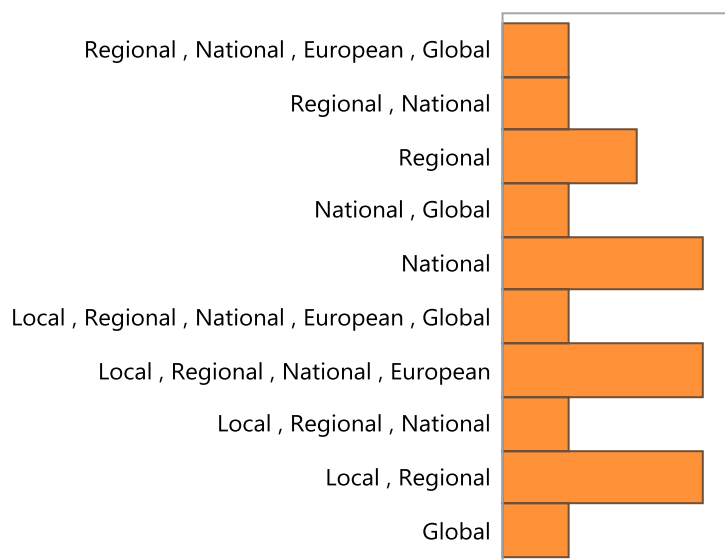
1.3.1.13 Distribution mechanism of Open Data services



Frequencies

Level	Count	Prob.
Mobile application	1	0,05882
Mobile application , Website	6	0,35294
Mobile application , Website , Other	3	0,17647
NA	1	0,05882
None	1	0,05882
Other	1	0,05882
Website	3	0,17647
Website , Other	1	0,05882
Total	17	1,00000
Data missing	0	
Level(s)	8	

1.3.1.14 Data geographical sources



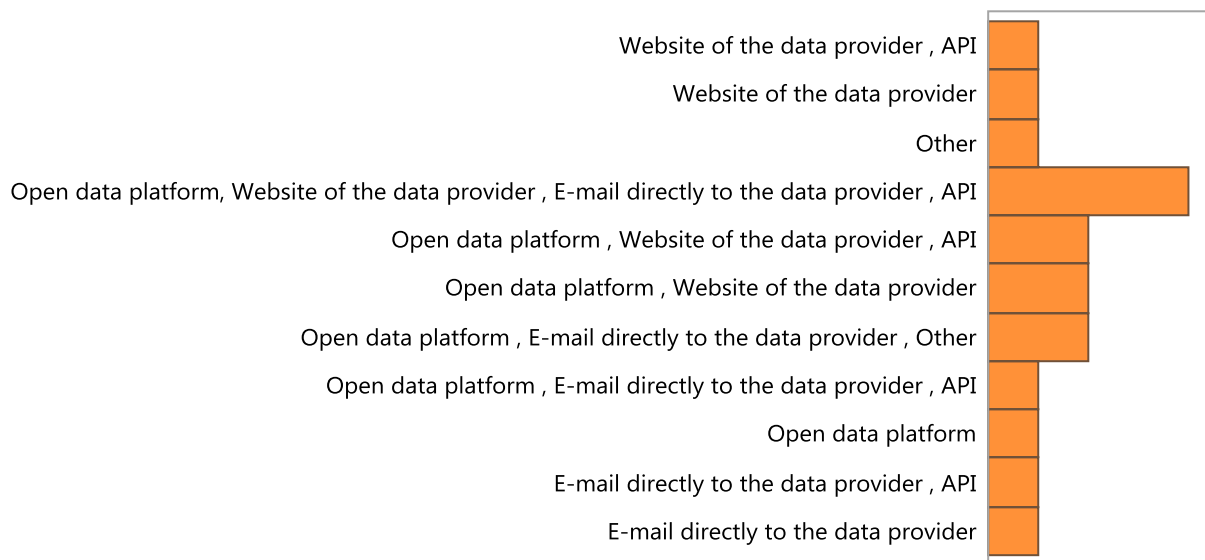
Frequencies

Level	Count	Prob.
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Data missing	0
Level(s)	10

Global	1	0,05882
Local , Regional	3	0,17647
Local , Regional , National	1	0,05882
Local , Regional , National , European	3	0,17647
Local , Regional , National , European , Global	1	0,05882
National	3	0,17647
National , Global	1	0,05882
Regional	2	0,11765
Regional , National	1	0,05882
Regional , National , European , Global	1	0,05882
Total	17	1,00000

1.3.1.15 Data access

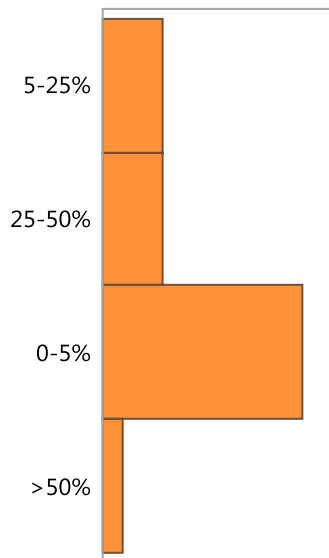


Frequencies

Level	Count	Prob.
E-mail directly to the data provider	1	0,05882
E-mail directly to the data provider , API	1	0,05882
Open data platform	1	0,05882
Open data platform , E-mail directly to the data provider , API	1	0,05882
Open data platform , E-mail directly to the data provider , Other	2	0,11765
Open data platform , Website of the data provider	2	0,11765
Open data platform , Website of the data provider , API	2	0,11765
Open data platform, Website of the data provider , E-mail directly to the data provider , API	4	0,23529
Other	1	0,05882
Website of the data provider	1	0,05882
Website of the data provider , API	1	0,05882
Total	17	1,00000

Data missing	0
Level(s)	11

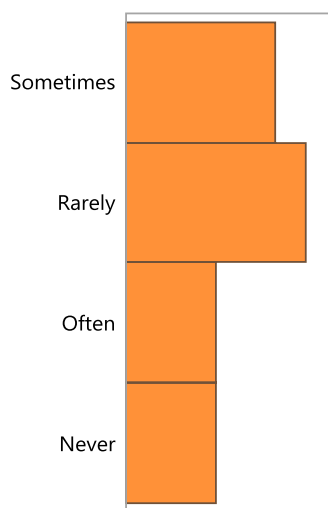
1.3.1.16 Improvement percentage (increase of revenues/decrease of costs)



Frequencies

Level	Count	Prob.
>50%	1	0,05882
0-5%	10	0,58824
25-50%	3	0,17647
5-25%	3	0,17647
Total	17	1,00000
Data missing	0	
Level(s)	4	

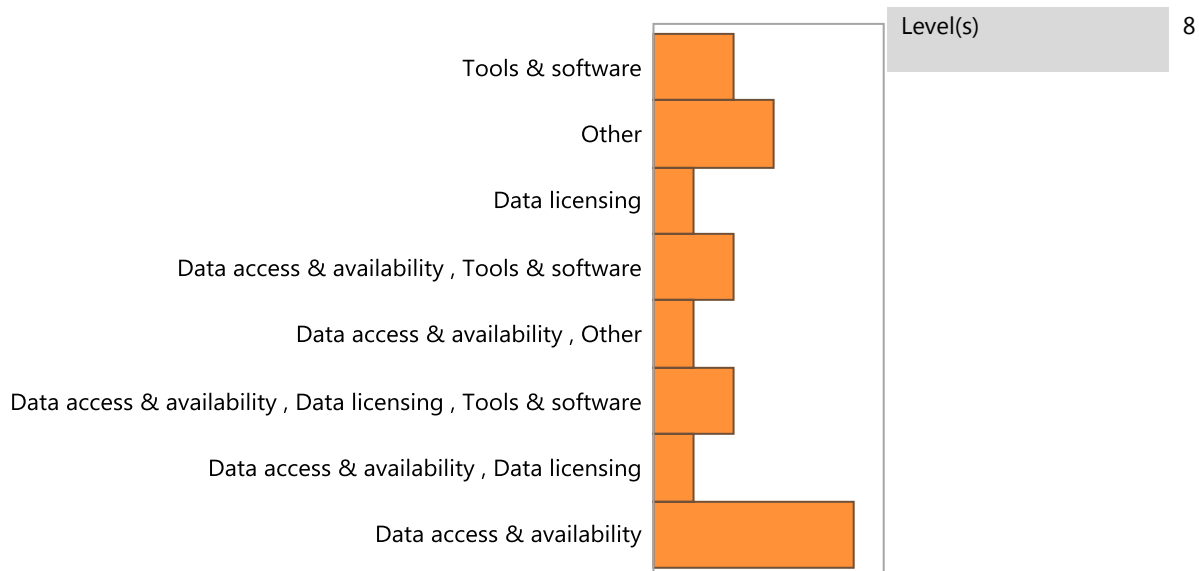
1.3.1.17 Use of Open Data support tools



Frequencies

Level	Count	Prob.
Never	3	0,17647
Often	3	0,17647
Rarely	6	0,35294
Sometimes	5	0,29412
Total	17	1,00000
Data missing	0	
Level(s)	4	

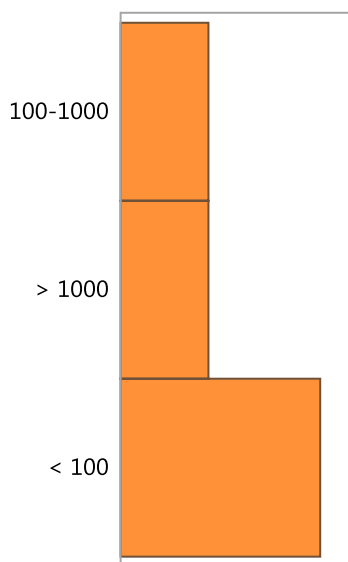
1.3.1.18 Challenges related to Open Data



Frequencies

Level	Count	Prob.
Data access & availability	5	0,29412
Data access & availability , Data licensing	1	0,05882
Data access & availability , Data licensing , Tools & software	2	0,11765
Data access & availability , Other	1	0,05882
Data access & availability , Tools & software	2	0,11765
Data licensing	1	0,05882
Other	3	0,17647
Tools & software	2	0,11765
Total	17	1,00000

1.3.1.19 Number of end-users

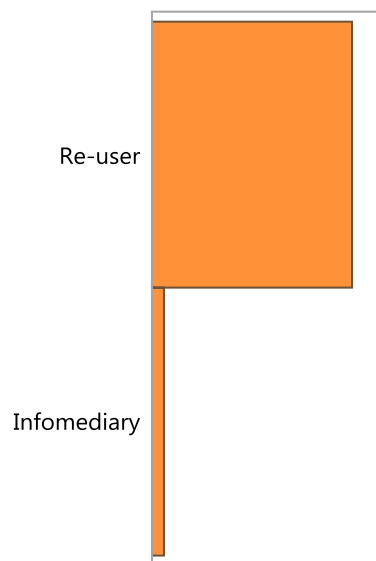


Frequencies

Level	Count	Prob.
< 100	9	0,52941
> 1000	4	0,23529
100-1000	4	0,23529
Total	17	1,00000

Data missing	0
Level(s)	3

1.3.1.20 Type of Open Data actor



Frequencies

Level	Count	Prob.
Infomediary	1	0,05882
Re-user	16	0,94118
Total	17	1,00000

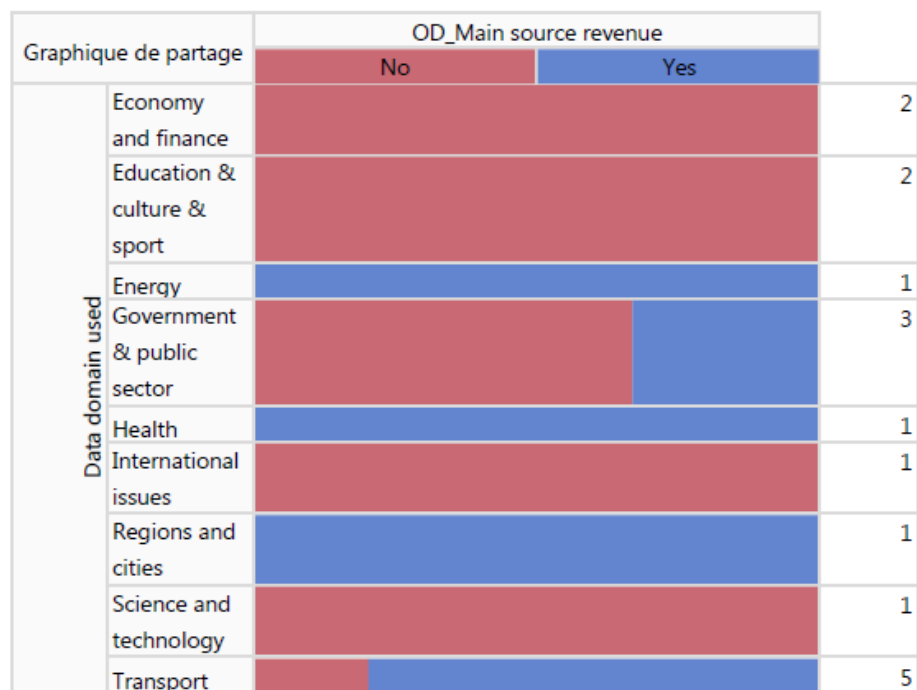
Data missing 0

Level(s) 2

1.3.2 Categorical analysis

1.3.2.1 Open Data as main source of revenue per Data domain used

Fréquence Partage		OD_Main source revenue		
		No	Yes	Réponses totales
Data domain used	Economy and finance	2	0	2
	Education & culture & sport	2	0	2
	Energy	0	1	1
	Government & public sector	2	1	3
	Health	0	1	1
	International issues	1	0	1
	Regions and cities	0	1	1
	Science and technology	1	0	1
	Transport	1	4	5
		100,0%	0,0%	
		0,0%	100,0%	



1.3.2.2 Open Data distribution mechanism per Data domain used

Fréquence Partage Taux		OD_Distribution mechanism							
		Mobile application	NA	None	Other	Website	Réponses totales	Total des cas	Total des cas correspondants
Data domain used	Economy and finance	1	0	0	2	2	5	2	2
		20,0%	0,0%	0,0%	40,0%	40,0%			
		50,0%	0,0%	0,0%	100,0%	100,0%			
	Education & culture & sport	1	0	0	0	2	3	2	2
		33,3%	0,0%	0,0%	0,0%	66,7%			
		50,0%	0,0%	0,0%	0,0%	100,0%			
	Energy	0	1	0	0	0	1	1	1
		0,0%	100,0%	0,0%	0,0%	0,0%			
		0,0%	100,0%	0,0%	0,0%	0,0%			
	Government & public sector	0	0	1	1	1	3	3	3
		0,0%	0,0%	33,3%	33,3%	33,3%			
		0,0%	0,0%	33,3%	33,3%	33,3%			
Health	1	0	0	0	1	2	1	1	
	50,0%	0,0%	0,0%	0,0%	50,0%				
	100,0%	0,0%	0,0%	0,0%	100,0%				
International issues	1	0	0	0	1	2	1	1	
	50,0%	0,0%	0,0%	0,0%	50,0%				
	100,0%	0,0%	0,0%	0,0%	100,0%				
Regions and cities	1	0	0	0	1	2	1	1	
	50,0%	0,0%	0,0%	0,0%	50,0%				
	100,0%	0,0%	0,0%	0,0%	100,0%				
Science and technology	1	0	0	0	0	1	1	1	
	100,0%	0,0%	0,0%	0,0%	0,0%				
	100,0%	0,0%	0,0%	0,0%	0,0%				
Transport	4	0	0	2	5	11	5	5	
	36,4%	0,0%	0,0%	18,2%	45,5%				
	80,0%	0,0%	0,0%	40,0%	100,0%				

Graphique de partage		OD_Distribution mechanism					
		Mobile application	NA	None	Other	Website	
Data domain used	Economy and finance						5
	Education & culture & sport						3
	Energy						1
	Government & public sector						3
	Health						2
	International issues						2
	Regions and cities						2
	Science and technology						1
	Transport						11

1.3.2.3 Data geographical source per Data domain used

Fréquence		Data geographical sources							
Partage Taux		European	Global	Local	National	Regional	Réponses totales	Total des cas	Total des cas correspondants
Data domain used	Economy and finance	1	1	1	2	1	6	2	2
		16,7%	16,7%	16,7%	33,3%	16,7%			
		50,0%	50,0%	50,0%	100,0%	50,0%			
	Education & culture & sport	0	0	1	1	1	3	2	2
		0,0%	0,0%	33,3%	33,3%	33,3%			
		0,0%	0,0%	50,0%	50,0%	50,0%			
	Energy	1	1	1	1	1	5	1	1
		20,0%	20,0%	20,0%	20,0%	20,0%			
		100,0%	100,0%	100,0%	100,0%	100,0%			
	Government & public sector	1	1	0	2	3	7	3	3
		14,3%	14,3%	0,0%	28,6%	42,9%			
		33,3%	33,3%	0,0%	66,7%	100,0%			
Health	0	0	0	0	1	1	1	1	
	0,0%	0,0%	0,0%	0,0%	100,0%				
	0,0%	0,0%	0,0%	0,0%	100,0%				
International issues	1	0	1	1	1	4	1	1	
	25,0%	0,0%	25,0%	25,0%	25,0%				
	100,0%	0,0%	100,0%	100,0%	100,0%				
Regions and cities	0	0	0	1	0	1	1	1	
	0,0%	0,0%	0,0%	100,0%	0,0%				
	0,0%	0,0%	0,0%	100,0%	0,0%				
Science and technology	0	0	0	1	0	1	1	1	
	0,0%	0,0%	0,0%	100,0%	0,0%				
	0,0%	0,0%	0,0%	100,0%	0,0%				
Transport	1	1	4	2	4	12	5	5	
	8,3%	8,3%	33,3%	16,7%	33,3%				
	20,0%	20,0%	80,0%	40,0%	80,0%				

Graphique de partage		Data geographical sources					
		European	Global	Local	National	Regional	
Data domain used	Economy and finance	1	1	1	2	1	6
	Education & culture & sport	0	0	2	2	3	3
	Energy	1	1	1	1	1	5
	Government & public sector	1	1	2	3	2	7
	Health	0	0	0	0	1	1
	International issues	1	0	2	1	1	4
	Regions and cities	0	0	0	1	0	1
	Science and technology	0	0	0	1	0	1
	Transport	1	1	2	1	2	12

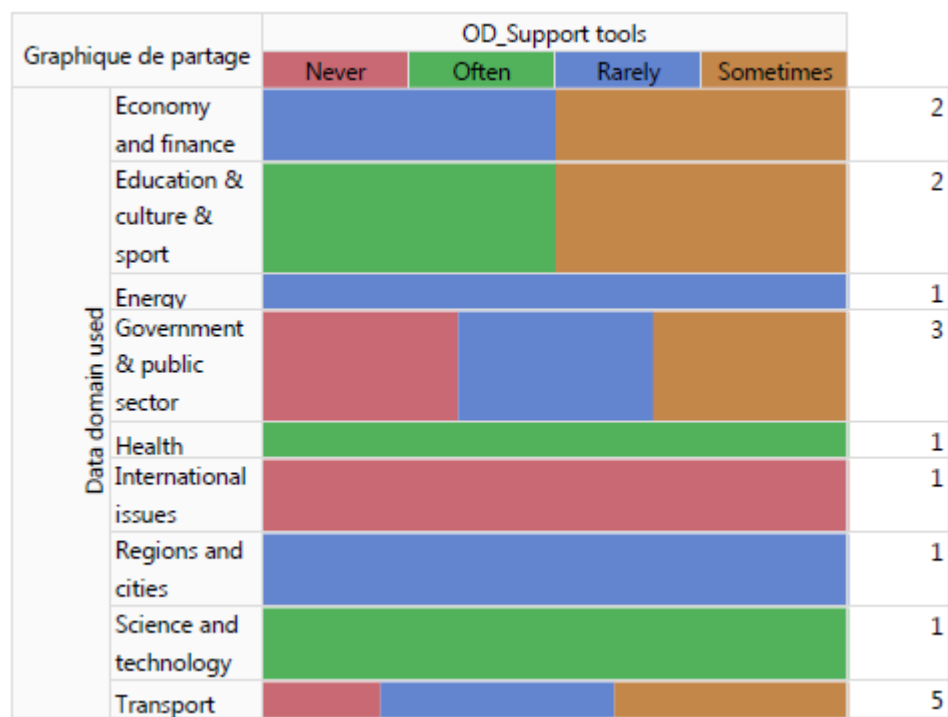
1.3.2.4 Internal combination of Open Data and private data per Data domain used

Fréquence Partage		OD_Internal combination		
		No	Yes	Réponses totales
Data domain used	Economy and finance	0 0,0%	2 100,0%	2
	Education & culture & sport	1 50,0%	1 50,0%	2
	Energy	0 0,0%	1 100,0%	1
	Government & public sector	0 0,0%	3 100,0%	3
	Health	1 100,0%	0 0,0%	1
	International issues	0 0,0%	1 100,0%	1
	Regions and cities	0 0,0%	1 100,0%	1
	Science and technology	0 0,0%	1 100,0%	1
	Transport	0 0,0%	5 100,0%	5

Graphique de partage		OD_Internal combination		
		No	Yes	
Data domain used	Economy and finance			2
	Education & culture & sport			2
	Energy			1
	Government & public sector			3
	Health			1
	International issues			1
	Regions and cities			1
	Science and technology			1
	Transport			5

1.3.2.5 Use of Open Data support tools per Data domain used

Fréquence Partage		OD_Support tools				Réponses totales
		Never	Often	Rarely	Sometimes	
Data domain used	Economy and finance	0 0,0%	0 0,0%	1 50,0%	1 50,0%	2
	Education & culture & sport	0 0,0%	1 50,0%	0 0,0%	1 50,0%	2
	Energy	0 0,0%	0 0,0%	1 100,0%	0 0,0%	1
	Government & public sector	1 33,3%	0 0,0%	1 33,3%	1 33,3%	3
	Health	0 0,0%	1 100,0%	0 0,0%	0 0,0%	1
	International issues	1 100,0%	0 0,0%	0 0,0%	0 0,0%	1
	Regions and cities	0 0,0%	0 0,0%	1 100,0%	0 0,0%	1
	Science and technology	0 0,0%	1 100,0%	0 0,0%	0 0,0%	1
	Transport	1 20,0%	0 0,0%	2 40,0%	2 40,0%	5



1.3.2.6 Open Data challenges per Data domain used

Fréquence		OD_Challenges						
		Data access & availability	Data licensing	Other	Tools & software	Réponses totales	Total des cas	Total des cas correspondants
Partage Taux								
Data domain used	Economy and finance	2 40,0% 100,0%	1 20,0% 50,0%	0 0,0% 0,0%	2 40,0% 100,0%	5	2	2
	Education & culture & sport	1 33,3% 50,0%	1 33,3% 50,0%	0 0,0% 0,0%	1 33,3% 50,0%	3	2	2
	Energy	1 100,0% 100,0%	0 0,0% 0,0%	0 0,0% 0,0%	0 0,0% 0,0%	1	1	1
	Government & public sector	1 25,0% 33,3%	1 25,0% 33,3%	2 50,0% 66,7%	0 0,0% 0,0%	4	3	3
	Health	1 100,0% 100,0%	0 0,0% 0,0%	0 0,0% 0,0%	0 0,0% 0,0%	1	1	1
	International issues	0 0,0% 0,0%	0 0,0% 0,0%	0 0,0% 0,0%	1 100,0% 100,0%	1	1	1
	Regions and cities	0 0,0% 0,0%	0 0,0% 0,0%	1 100,0% 100,0%	0 0,0% 0,0%	1	1	1
	Science and technology	0 0,0% 0,0%	0 0,0% 0,0%	0 0,0% 0,0%	1 100,0% 100,0%	1	1	1
	Transport	5 62,5% 100,0%	1 12,5% 20,0%	1 12,5% 20,0%	1 12,5% 20,0%	8	5	5

Graphique de partage		OD_Challenges				
		Data access & availability	Data licensing	Other	Tools & software	
Data domain used	Economy and finance					5
	Education & culture & sport					3
	Energy					1
	Government & public sector					4
	Health					1
	International issues					1
	Regions and cities					1
	Science and technology					1
	Transport					8

1.3.2.7 Number of end-users per Data domain used

Fréquence Partage		Number client			Réponses totales
		< 100	> 1000	100-1000	
Data domain used	Economy and finance	2	0	0	2
		100,0%	0,0%	0,0%	
	Education & culture & sport	1	0	1	2
		50,0%	0,0%	50,0%	
	Energy	1	0	0	1
		100,0%	0,0%	0,0%	
	Government & public sector	3	0	0	3
		100,0%	0,0%	0,0%	
	Health	1	0	0	1
		100,0%	0,0%	0,0%	
International issues	0	1	0	1	
	0,0%	100,0%	0,0%		
Regions and cities	0	1	0	1	
	0,0%	100,0%	0,0%		
Science and technology	1	0	0	1	
	100,0%	0,0%	0,0%		
Transport	0	2	3	5	
	0,0%	40,0%	60,0%		

Graphique de partage		Number client			
		< 100	> 1000	100-1000	
Data domain used	Economy and finance				2
	Education & culture & sport				2
	Energy				1
	Government & public sector				3
	Health				1
	International issues				1
	Regions and cities				1
	Science and technology				1
	Transport				5

1.3.2.8 Open Data distribution mechanism per Type of Open Data actor

Fréquence Partage Taux		OD_Distribution mechanism					Réponses totales	Total des cas	Total des cas correspondants
		Mobile application	NA	None	Other	Website			
Type of actor	Infomediary	0 0,0%	1 100,0%	0 0,0%	0 0,0%	0 0,0%	1	1	1
	Re-user	10 34,5%	0 0,0%	1 3,4%	5 17,2%	13 44,8%	29	16	16

Graphique de partage		OD_Distribution mechanism					
		Mobile application	NA	None	Other	Website	
Type of actor	Infomediary						1
	Re-user						29

1.3.2.9 Type of Open Data revenue (revenue models) per Type of Open Data re-user

Graphique de partage		OD_Type revenue								
		Advertising	Advertising fees	Analytics fees	Consulting fees	Lead generation	Other	Subscription model		
OD_Type reuser	Aggregator								6	
	Aggregator, Developer								2	
	Aggregator, Developer, Enricher								2	
	Aggregator, Enabler, Enricher									5
	Aggregator, Enricher								5	
	Developer									4
	Developer, Enabler								1	
	Developer, Enricher								1	
	Other								2	

1.3.2.10 Data geographical source per type of actor

Fréquence Partage Taux		Data geographical sources							
		European	Global	Local	National	Regional	Réponses totales	Total des cas	Total des cas correspondants
Infomediary		1	1	1	1	1	5	1	1
		20,0%	20,0%	20,0%	20,0%	20,0%			
		100,0%	100,0%	100,0%	100,0%	100,0%			
Re-user		4	3	7	10	11	35	16	16
		11,4%	8,6%	20,0%	28,6%	31,4%			
		25,0%	18,8%	43,8%	62,5%	68,8%			

Graphique de partage		Data geographical sources						
		European	Global	Local	National	Regional		
Type of actor	Infomediary							5
	Re-user							35

1.3.2.11 Data access per Type of Open Data actor

Fréquence Partage Taux		Data access							
		API	E-mail directly to the data provider	Open data platform	Other	Website of the data provider	Réponses totales	Total des cas	Total des cas correspondants
V Médiateur d'information	Infomediary	1 25,0%	1 25,0%	1 25,0%	0 0,0%	1 25,0%	4	1	1
	100,0%	100,0%	100,0%	0,0%	100,0%				
F Re-utilisateur	Re-user	8 20,5%	8 20,5%	11 28,2%	3 7,7%	9 23,1%	39	16	16
	50,0%	50,0%	68,8%	18,8%	56,3%				

