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INTRODUCTION

Digitization, advances in artificial intelligence, the Internet of things, are all realities that are evolving at an ever-increasing rate and that are causing a transformation in the economic system. Data, its management, and analysis have become a necessary element for business progress, which makes the Infomediary Sector one of the most influential factors in our economy.

<u>Asedie</u> represents infomediary companies, which reuse information from the Public and / or Private Sector, they analyze and process this information to create value-added products, intended for third-party companies and the general public. Our objective is not only to promote the Sector, but to contribute to raising awareness in society of its benefits.

To clearly see the Infomediary Sectors impact on the economy, it is necessary to translate important indicators about the companies' employees, sales, or the subscribed capital into figures.

This <u>Report</u>, in its 9th edition, is prepared annually with the objective to be able to demostrate the Sector's actual size. It is prepared with Public Sector data, collected from all levels of the Administration, which is then processed by our team of experts and professionals with the tools made available to us by the Infomediary Sector. The analysis, normalization and consolidation of the data collected is part of the added value that we provide in this report, as well as the analytical capacity necessary to be able to present the said information in a careful and structured way.

The social and economic crisis caused by COVID-19 has also caused challenges in the report's preparation. The delay in the presentation of the companies' accounts caused a hold up in publishing this report. However, the coronavirus' real impact will be reflected in the economic indicators in next year's edition, as it will analyze information from 2020. With this in mind, we believe that it is more necessary than ever for Asedie to promote measures that contribute to generating confidence in commercial transactions.

Each year, advances are made that offer more possibilities when working with data, generating new opportunities to create value-added products and / or services. However, despite this progress, we continue to encounter challenges when it comes to accessing information. The lack of a consolidated "data culture" not only in society but also in the different Public Sector levels, the lack of digitization and the low quality of data are some of the barriers that make it difficult to access and re-use information.

In Asedie we firmly believe that in order to face these challenges, overcome existing barriers and to continue promoting open data, the collaboration with the Public Sector, holder of the said information, is essential. For this reason, throughout this year we have continued to work jointly with the Public Sector, seeking and developing measures that contribute to promoting the principles of transparency, access to and data opening.

This collaboration is embodied in a new <u>Collaboration Protocol</u> recently signed with the Region of Murcia's Transparency, Participation and Public Administration department, adding to those previously signed with the <u>National Geographic Information Centre</u> y the <u>Castilla y León region</u>. Along with these Protocols, throughout this year we have continued to promote collaboration with different public bodies, such as the Spanish Property and Mercantile Registrars and the Spanish General Notaries Council through the signing of different agreements.

The collaboration that Asedie maintains with the Public Sector can also be seen in the Associations designation as a Member of the Ministry of Economic Affairs and Digital Transformation's Advisory Council for Digital Transformation, and of its Permanent Commission for the economy, societies, and the administrations digitization and also as an expert consultant for the Ministry of Territorial Policy and Public Functions different Open Government Forum working groups.

Asedie has also adhered to the <u>"Digital Pact"</u>, an initiative launched by the Spanish Data Protection Agency, which seeks to transmit to society the commitment to the fundamental right of data protection and privacy, as well as the importance of using technology in responsible and ethical way.

This collaboration should not be understood as only between the Public and the Private Sector, but also the collaboration at public-public level should be contemplated. Due to this and after last year's success, we have once again included the survey sent to the representatives in charge of open data in the 17 Autonomous Spanish regions. Some of objectives were: to know the Public Sector's needs, the challenges they face, their opinions about the Infomediary Sector and of course, to promote collaboration between regions. In the same line of collaboration, we have again included different Public Sector Good Practices examples.

Advancing in the promotion of gaining access to Public Sector information, in Asedie we have carried out a task of monitoring a set of six datasets that, were selected as priority, and called "Top 3 Asedie" by the association between 2019 and 2020. The first group was formed of three datasets: Associations, Cooperatives, and Foundations, the second group by Commercial Establishments, SAT Registries, and Industrial zones. The objective is that these datasets are published the most homogeneous way possible and in as many Spanish regions as possible, in order to increase their value. Throughout this report the progress achieved and the challenges for the coming year will be outlined.

Likewise, continuing with the drive to open data, in 2020 Asedie requested the opening of 35 datasets in 20 General State Administration public entities (9 ministries and 11 organisms), monitoring the responses received.

To gage the Sectors real progress, an analysis of different indicators that allow the comparation of the current progress with that of past editions have been included, among which the evolution of different economic indicators stands out. And, for yet another year, new infomediary companies' success stories, that can serve as examples how Public Sector information has been re-used have been incorporated.

In Asedie, as always, we have directed our efforts in promoting constant innovation, to collaborate and guarantee the advancement and proper functioning of both our current economic system and our society.

With this in mind we present the 9th edition of our Infomediary Sector Report.



METHODOLOGY

The Multisectoral Information Association, ASEDIE, brings together, among others, the main companies in the Economic and Financial Information subsector, this allows Asedie easier access to the most complete commercial information databases in the market, therefore for the elaboration of this report Asedie counts on an exhaustive universe of companies operating in Spain.

With this information, Asedie applies a **methodology** that has already been verified over the nine editions, and is **summarized in** the following steps:

Firstly, based on different criteria, such as the CNAE (National Classification of Economic Activities) or key concepts presented in the company's social object, the global base of Spanish companies is filtered, to obtain the universe of candidate companies for this report.

The following tasks are performed on the previous result:

- For companies considered as infomediary in the previous report: verification that they remain active. Those that are no longer operative, are removed. In this edition, a revision of the companies was realised to confirm that they are still considered to be infomediary.
- Companies discarded in previous editions of the report: remain so.
- Each new company, that was not present in the previous report is revised by teams of two which, by consensus, to determine whether or not they are considered as Informediary if selected, a subsector is then be allocated.

- Companies not considered in the previous report (for example, because they are too recent), but marked as "to follow-up" are as in the last point, individually verified and validated by consensus.

In parallel, with the collaboration of certain public entities and based on the knowledge of the Spanish economy in general and the Infomediary Sector in particular, a "scouting" or additional exploration of possible candidates is carried out, which if identified are also individually verified and validated by consensus.

Once the infomediary companies that will be part of the report have been identified, all the economic data available is added. An estimate is made for companies that do not have sales or employee data for said year, but do from the previous, applying the same upwards or downwards percentage that the subsector it belongs to has experienced.

Finally, on the previous result, the different analyses that this report composes are carried out.

The main difficulties encountered in the report's elaboration are:

- Limitations when it comes to obtaining information from the Public Sector.
- The inability to access the most up-to-date information as it is not yet available. In the specific case of this report, the financial information used for sales and employees corresponds to 2019, since at the report's closing the companies analyzed financial information for 2020, was not yet available.
- Additionally, some companies have delays in the deposit of their annual accounts and therefore in its publication or do not publish excessive information, this can limit the access to updated and accurate information.

-Large corporations exist that have some

departments or areas that undertake infomediary activities. The failure to determine the proportion of these activities in their sales or employee numbers causes their inclusion in the study to be discarded.

- Finally, the company activity indicated in its registration information (CNAE, Social object), is not always the one that it exercises in the reality, causing inaccuracies and even confusions in the automatic selection process, therefore forcing an individual investigation of each candidate company for it to be considered infomediary.

In relation to the subsectors, those from the previous report have been maintained, as detailed in the following table:

Subsector	Description
Technical Consulting	Infomediation tasks assessment (legal, informatics, computing, marketing)
Culture	Activities related to cultural education, document management companies and activities related to libraries, archives and museums.
Directory Services	Companies dedicated to the creation of directories and mailing addresses, location and advertising for businesses and individuals based on directories of telephone subscribers.
Economic & Financial	Companies dedicated to economic and mercantile risk information about companies and individuals. Creditworthiness and solvency information, credit bureaus. Recovery agencies.
Publishing	Companies that generate editorial content (guides, etc.) that use information from structured databases for their generation.
Market Research	Activities related to market research studies and conducting public opinion polling and investigation to improve directory databases.
Geographic Information	Geographic and cadastral information, both graphical and alphanumeric information including urban planning.
Infomediation Technology	Design and / or development for third parties of software for the download, treatment, anonymization, analysis, publication and commercialization of information from sources accessible to the public.
Meteorological	Meteorological information, weather and climate forecasts.
Tourism	Tourist information, hotels, routes and accommodation.



DISTRIBUTION

Distribution of 700 infomediary companies in different analytical areas

By Autonomous Region

The Infomediary Sector is represented in all the Spanish Autonomous Regions and the Autonomous City of Melilla

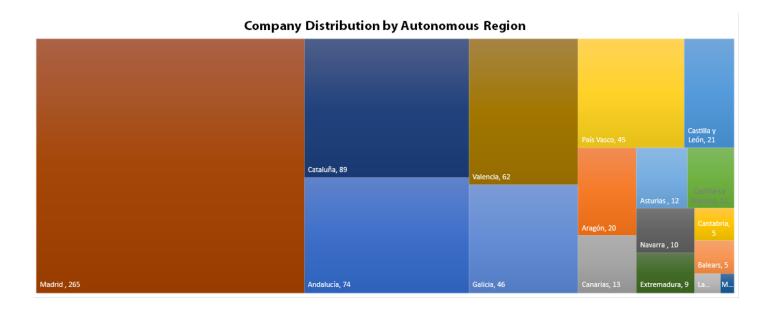
Community	Company	%
Andalucía	74	11%
Aragón	20	3%
Canarias	13	2%
Cantabria	5	1%
Castilla y León	21	3%
Castilla-La Mancha	11	2%
Cataluña	89	13%
Madrid	265	38%
Navarra	10	1%
Valencia	62	9%
Melilla	1	0%
Extremadura	9	1%
Galicia	46	7%
Balears	5	1%
La Rioja	2	0%
País Vasco	45	6%
Asturias	12	2%
Murcia	10	1%
Total	700	100%

38% of the companies are based in Madrid

The Region of Madrid stands out with 38% of the infomediary companies being based there.

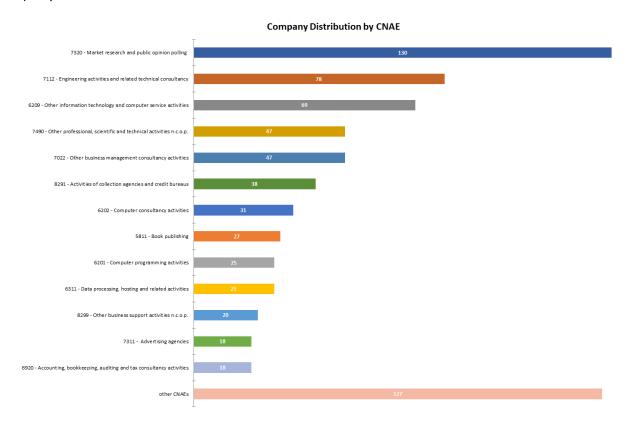
A second group of three regions (Cataluña, Andalucia and the Valencian Community), with between 9% and 13% of companies, comprise 32% of the total.

The remaining 12 Autonomous Regions and the Autonomous City of Melilla bring together 30% of the infomediary companies.



By CNAE

Using the National Classification of Economic Activities Code declared by each Infomediary company as criteria.



More than 80% of the infomediary companies are concentrated in 13 cnaes, among which "7320 – Market research and public opinion polling" stands out with 19%, followed by "7112 – Technical engineering services and other related activities with technical advice" with 11% and "6209 – Other services related to information technology and computing" 10%.

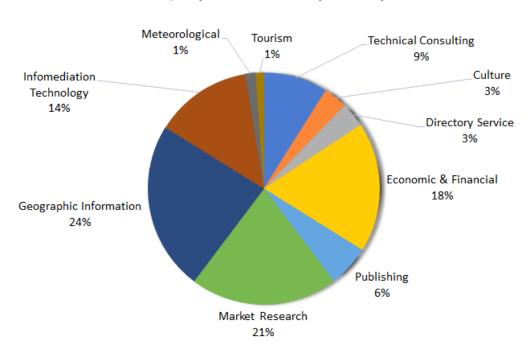
CNAE	Companies	%
7320 - Market research and public opinion polling	130	19%
7112 - Engineering activities and related technical consultancy	78	11%
6209 - Other information technology and computer service activities	69	10%
7490 - Other professional, scientific and technical activities n.c.o.p.	47	7%
7022 - Other business management consultancy activities	47	7%
8291 - Activities of collection agencies and credit bureaus	38	5%
6202 - Computer consultancy activities	31	4%
5811 - Book publishing	27	4%
6201 - Computer programming activities	25	4%
6311 - Data processing, hosting and related activities	25	4%
8299 - Other business support activities n.c.o.p.	20	3%
7311 - Advertising agencies	18	3%
6920 - Accounting, bookkeeping, auditing and tax consultancy activities	18	3%
other CNAEs	127	18%
Total	700	100%



By subsector

The high sector diversification at a CNAE level hinders the classification of the said data, therefore to better categorise the companies the CNAEs have been unified into "subsectors".

Company Distribution by Activity



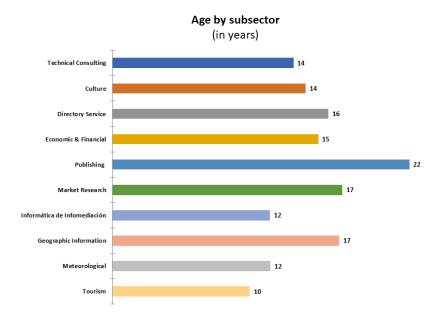
3 subsectors 63%

Subsector	Companies	%
Technical Consulting	63	9%
Culture	23	3%
Directory Service	24	3%
Economic & Financial	127	18%
Publishing	41	6%
Market Research	144	21%
Geographic Information	165	24%
Infomediation Technology	95	14%
Meteorological	10	1%
Tourism	8	1%
Total	700	100%

The Geographic Information, Market Research and Economic & Financial subsectors, account for 63% of the Sector, adding up to a total 436 companies.

A second group of three sectors (Infomediation Technology, Technical Consulting and Publishing) have a total of 28%. The four remaining sectors (Culture, Directory Services, Meteorological and Tourism), together do not reach 10% of the total.

Age analysis of the 700 Infomediary companies



Age	Companies	%
1. 1 to 5 years	144	21%
2. 6 to 10 years	117	17%
3. 11 to 15 years	127	18%
4. 16 to 20 years	117	17%
5. More then 20 years	195	28%
Total	700	100%

The average age of the infomediary companies has a reasonably proportional distribution by sections. The average age is 16 years, with the Publishing subsector having the highest average and the Tourism subsector with the youngest average of 10 years.

Of the total number of infomediary companies,
40% (281) were created in the last 10 years. The
subsector that has created the most companies in
that time period is the Economic & Financial with
58 companies. The one, that in proportion has
created more companies in the last 10 years is the
Meteorological with 60%.

Subsector	Number of companies	Companies created between 2009-2019	Proportion %
Technical Consulting	63	33	52%
Culture	23	6	26%
Directory Service	24	9	38%
Economic & Financial	127	58	46%
Publishing	41	11	27%
Market Research	144	48	33%
Geographic Information	165	52	32%
Infomediation Technology	95	54	57%
Meteorological	10	6	60%
Tourism	8	4	50%
Total general	700	281	40%

Company Distribution by Age

More then 20 years 28% 20% 6 to 10 years 17% 11 to 15 years 18%

The oldest company in the sector was founded in 1947 and belongs to the Directory Service subsector.

Subsector	Number of companies	Foundation year of the oldest	Age
nnical Consulting	63	1.955	65
ure	23	1.995	25
ctory Service	24	1.947	73
nomic & Financial	127	1.973	47
lishing	41	1.960	60
ket Research	144	1.963	57
graphic Information	165	1.969	51
mediation Technology	95	1.982	38
eorological	10	1.997	23
rism	8	2.002	18
al	700		



SALES

Sale analysis for 591 Infomediary companies with information available (84% of the sample)

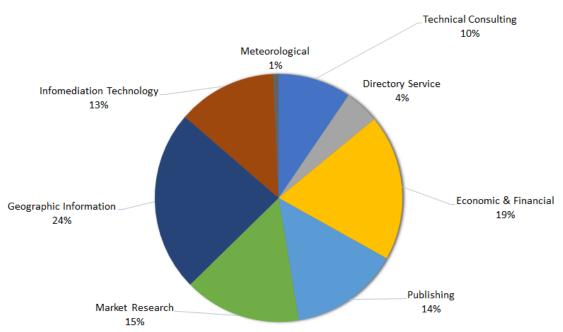
2.543.042.052€

Aggregated turnover in the Infomediary Sector amount.

By subsector

The two main subsectors, "Geographic Information" and "Economic &vFinancial", have a sales volume of around 20% of the total.

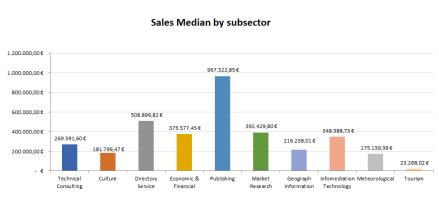
Sales Distribution by Subsector



Half of the subsectors account for 85% of the total sales. Geographic Information stands out with a turnover of more than 600 million euros (23.6%).

The average sales per company in the Sector amounts to more than 4 M€ (€ 4,302,947.64)

Subsector	Sales 2019	%
Technical Consulting	241.771.715,88 €	9,5%
Culture	5.840.417,96 €	0,2%
Directory Service	114.519.770,80€	4,5%
Economic & Financial	483.558.628,30€	19,0%
Publishing	362.388.216,24€	14,3%
Market Research	387.889.009,84€	15,3%
Geographic Information	600.459.041,38 €	23,6%
Infomediation Technology	328.515.693,55€	12,9%
Meteorological	17.940.574,15 €	0,7%
Tourism	158.984,27 €	0,0%
Total general	2.543.042.052,37€	100%



Subsector	Sales
Technical Consulting	269.591,60€
Culture	181.796,47 €
Directory Service	508.899,82€
Economic & Financial	375.577,45€
Publishing	967.322,85€
Market Research	392.429,80€
Geograph Information	216.238,01€
Infomediation Technology	348.388,73 €
Meteorological	175.139,39€
Tourism	23.268,02€

In relation to the median sales by subsector, the Publishing subsector stands out, practically doubling the next ("Directory Services") with a value close to one million euros.

Evolution

Because of the lack of submitted account information in 2018 and 2019 not all the sales data was available and therefore, the analysis has been conducted for 529 companies (76% of the sample) that have presented the said information.

6,4% Infomediary Sector Growth

The Infomediary Sectors evolution as a whole has been positive, with a growth of 6.4% being above that of the Gross Domestic Product, which was 3.4%.

Six subsectors have had a positive evolution, highlighting "Technical Consulting" and "Publishing" with growths above 17%, while on the contrary, four have seen a negative evolution, with "Tourism" and "Market Research" leading the way.

Subsector	2018	2019	Variation
Technical Consulting	172.531.490,77 €	205.360.675,65€	19,0%
Culture	5.750.143,11 €	5.745.713,76€	-0,1%
Directory Service	89.169.379,29€	85.957.186,27 €	-3,6%
Economic & Financial	417.097.336,44€	423.026.556,84€	1,4%
Publishing	224.785.030,73€	264.530.034,57 €	17,7%
Market Research	169.694.932,16€	158.888.408,61 €	-6,4%
Geographic Information	506.587.673,87€	538.616.673,27 €	6,3%
Infomediation Technology	126.831.401,56€	139.348.713,22€	9,9%
Meteorological	15.179.842,73€	17.294.468,76€	13,9%
Tourism	177.012,11€	154.000,74 €	-13,0%
Total general	1.727.804.242,77€	1.838.922.431,69€	6,4%
GDP avalution 2010*	1 202 103	1 244 772	3 4%

^{*(}Millones de euros). Fuente INE - Contabilidad Nacional Anual: principales agregados



EMPLOYEES

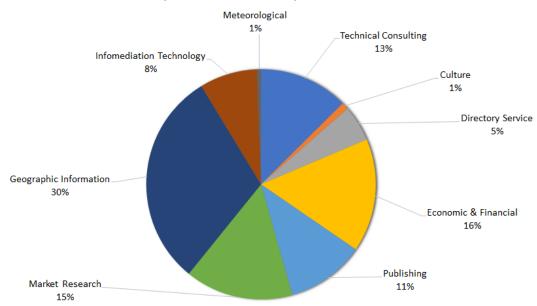
Employee analysis for the 588 Infomediary companies that have information available (84% of the sample)

21.998 Employees

By subsector

On one hand, half of the subsectors combined do not exceed 15% of the total, while on the other, in the remaining half the "Geographic Information" subsector stands out with 30.5% of the total number of employees in the Infomediary Sector.

Employment Distribution by Subsector

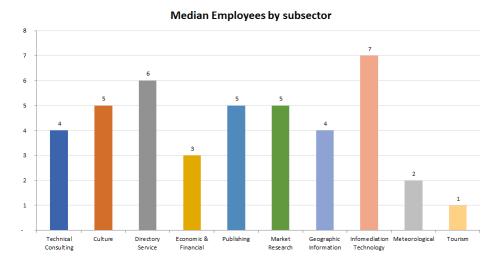


After the "Geographic Information" subsector, both the "Economic & Financial" and "Market Research" subsectors have a similar percentage of around 15%

The average number of employees per company in the Infomediary Sector amounts to 37.

Subsector	Employees 2019	%
Technical Consulting	2.770	12,6%
Culture	219	1,0%
Directory Service	1.108	5,0%
Economic & Financial	3.504	15,9%
Publishing	2.429	11,0%
Market Research	3.351	15,2%
Geographic Information	6.700	30,5%
Infomediation Technology	1.789	8,1%
Meteorological	126	0,6%
Tourism	2	0,0%
Total	21.998	100%





Subsector	Employees
Technical Consulting	4
Culture	5
Directory Service	6
Economic & Financial	3
Publishing	5
Market Research	5
Geographic Information	4
Infomediation Technology	7
Meteorological	2
Tourism	1

The median employees per subsector does not exceed at best 7 employees, far from the average of 37, which signals a high concentration of employees in few companies.

Evolution

To calculate the employment evolution, a total of 542 companies (77% of the sample) with employee numbers available for 2018 and 2019 were used.

Subsector	2018	2019	Variation
Technical Consulting	2.646	2.952	11,6%
Culture	214	175	-18,4%
Directory Service	1.078	1.048	-2,8%
Economic & Financial	3.368	3.418	1,5%
Publishing	1.964	1.961	-0,2%
Market Research	2.248	2.041	-9,2%
Geographic Information	6.411	6.937	8,2%
Infomediation Technology	1.638	1.805	10,2%
Meteorological	124	149	19,9%
Tourism	2	2	1,5%
Total general	19.693	20.488	4,0%

Equivalent to Full-time			
Employment*	17.944	18.377	2,3%

^{*(}Miles de puestos de trabajo). Fuente INE - Contabilidad Nacional Anual: principales agregados

4,0% growth in the Infomediary Sector

The growth of the Infomediary Sector as a whole was 4.0%, when the national average was 2.3%.

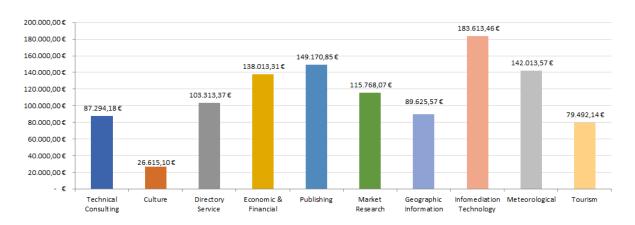
The highest percentage growth has occurred in the "Meteorological" subsector with 19.9%, although in regards to Infomediary Sector as a whole it is one of the most modest (0.6%). The greatest decrease has occurred in the "Culture" subsector with –18.4%, this subsector also like the last is smaller (1%) in relation to the Sector. In absolute terms, the greatest growth has occurred in the "Geographic Information" subsector with 527 new jobs and the greatest decrease in "Market Research" with a loss of 207.





The average turnover per employee in the Infomediary Sector was 89,765 euros in 2019. The variation with respect to 2018 is 29%

Average turnover per employee



From the subsector perspective, the highest average turnover per employee has been obtained in the "Infomediation Tecnology" subsector exceeding 180,000€, while the "Culture" subsector has had the worst average with about 27,000€ per employee.

Subsector	Sales 2019 Employees 2019		Average turnover per employee 2019
Technical Consulting	241.771.715,88€	2.770	87.294,18€
Culture	5.840.417,96€	219	26.615,10€
Directory Service	114.519.770,80€	1.108	103.313,37 €
Economic & Financial	483.558.628,30€	3.504	138.013,31 €
Publishing	362.388.216,24€	2.429	149.170,85 €
Market Research	387.889.009,84€	3.351	115.768,07 €
Geographic Information	600.459.041,38€	6.700	89.625,57 €
Infomediation Technology	328.515.693,55€	1.789	183.613,46€
Meteorological	17.940.574,15€	126	142.013,57 €
Tourism	158.984,27 €	2	79.492,14 €
Total general	2.543.042.052,37€	21.998	115.601,75€

However, if we take into account the evolution of the average turnover per employee for the 495 companies, (70.7% of the total) for which the sales and employee data is available for 2017, 2018 and 2019, the "Culture" subsector accumulates the highest growth (25.6%). On the contrary, the "Directory Service" subsector accumulates the greatest decrease (-23.4%).

Subsector	2017	2018	2019	Variation 2019 vs 2017
Technical Consulting	73.983,50€	65.674,20€	69.481,26€	-6,1%
Culture	24.884,75€	24.921,79€	31.259,46€	25,6%
Directory Service	84.044,63 €	85.354,83 €	64.391,16€	-23,4%
Economic & Financial	113.524,76€	123.590,02€	123.059,87€	8,4%
Publishing	117.846,16€	115.788,08 €	136.213,25€	15,6%
Market Research	77.811,80€	78.521,65€	79.246,90€	1,8%
Geographic Information	76.861,64€	79.037,20€	77.593,35€	1,0%
Infomediation Technology	78.190,38 €	77.910,52€	77.711,02€	-0,6%
Meteorological	126.889,84€	122.004,84€	117.427,25€	-7,5%
Tourism	79.955,45€	86.439,94€	78.317,37€	-2,0%
Average turnover per employee	87.815,80€	88.482,04€	88.587,10€	0,9%



By expenditure

Consulting

Service

Financial

The average expenditure per employee in the Infomediary Sector was 38,818€ in 2019. The variation with respect to 2018 has been -9.4%.

60.000,00€ 52.776,97€ 50.000,00€ 46 021 52 £ 44.095,94€ 43.745,64€ 39.610.80€ 40.000,00€ 38.086.14€ 33.650,08€ 30.000,00€ 26.591,60€ 25.588.11€ 23.778,64€ 20.000,00€ 10.000,00€

Average expenditure per employee

Only one subsector, "Meteorological" exceeds an average expenditure of 50,000 euros per employee, while only the subsector with an average expenditure of less than 25,000 euros is "Market Research", although it is closely followed by "Directory Service" and "Tourism".

Research

Information

Subsector	Salaries 2019	Employees 2019	Average expenditure per employee 2019
Technical Consulting	117.376.164,88€	3.082	38.086,14€
Culture	6.127.006,62€	182	33.650,08 €
Directory Service	36.886.533,00€	1.442	25.588,11 €
Economic & Financial	141.864.488,88 €	3.581	39.610,80€
Publishing	111.677.660,23 €	2.427	46.021,52 €
Market Research	76.110.895,79€	3.201	23.778,64 €
Geographic Information	320.147.071,65€	7.260	44.095,94€
Infomediation Technology	85.735.767,34€	1.960	43.745,64€
Meteorological	8.079.098,22€	153	52.776,97€
Tourism	53.980,94€	2	26.591,60€
Average salary per employee	904.058.667,55€	23.290	38.818,09€

In the evolution of the average expenditure per employee, 444 companies (63.4% of the total) that have salaries and employee data for the years 2017, 2018 and 2019 were considered. The "Culture" subsector stands out with an evolution in the period 2017–2019 of 25.1%.

Subsector	2017		2017 2018			2019	Variation 2019 vs 2017
Technical Consulting	-	40.887,72€	-	42.257,79€	-	39.639,94€	-3,1%
Culture	-	27.219,68 €	-	27.403,62€	-	34.052,51 €	25,1%
Directory Service	-	32.542,48 €	_	32.924,77 €	_	33.610,06€	3,3%
Economic & Financial	-	36.135,48 €	-	39.683,31 €	-	38.728,05 €	7,2%
Publishing	-	54.666,06€	-	54.882,43 €	_	56.928,49€	4,1%
Market Research	-	35.376,96€	-	36.449,12€	-	35.840,15€	1,3%
Información Geográfica	-	44.789,06€	_	45.443,77 €	_	45.946,24€	2,6%
Infomediation Technology	-	46.059,94 €	-	45.875,76€	_	46.802,55 €	1,6%
Meteorological	-	55.165,90€	-	53.937,80€	_	53.539,08 €	-2,9%
Tourism	-	21.091,12€	-	22.231,97 €	_	22.977,29€	8,9%
Average salary per employee	-	41.786,92€	-	43.173,07€	-	43.274,67€	3,6%

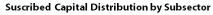


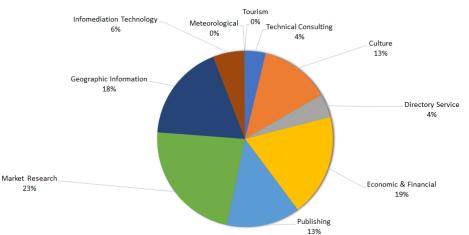
SUBSCRIBED CAPITAL

For the 700 infomediary companies identified

311.911.961€

The Sectors aggregated subscribed capital





The three most capitalized "Market subsectors are Research", "Economic Financial" and "Geographic Information".

In comparison the two with the lowest are "Tourism" and "Meteorological".

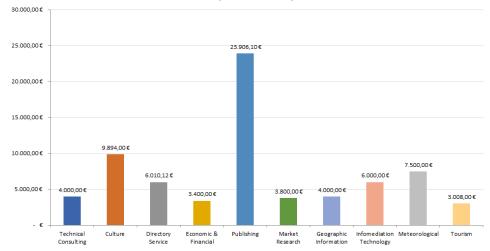
In relation to the median, the "Publishing" subsector stands with value apart а approximately 24,000€.

23%

The value average Subscribed Capital the Sector amounts to 445,588€.

Subsector	Suscribed Capital	%
Technical Consulting	11.794.948,50€	3,8%
Culture	40.188.218,65€	12,9%
Directory Service	13.484.853,81 €	4,3%
Economic & Financial	58.652.917,20€	18,8%
Publishing	42.336.511,99€	13,6%
Market Research	71.238.856,15€	22,8%
Geographic Information	55.819.901,18€	17,9%
Infomediation Technology	17.604.697,77 €	5,6%
Meteorological	745.824,00€	0,2%
Tourism	45.232,00€	0,0%
Total	311.911.961,25€	100%

Subscribed Capital Median by subsector





Evolution

After two years with double-digit growth, the trend changes with a decrease of 10.1%, and moves away from the path to obtaining the maximum reached in 2015.



Market Research, subsector with the highest capitalization

"Market Studies" prominently stands out over the rest of the subsectors with a capitalization of over seventy million euros.

Only two other sectors exceed fifty million: "Economic & Financial" and "Geographic Information.

Trend change - a decrease of 10%

Only two subsectors have grown positively in the last year: "Technical Consulting" with 54.8% and "Directory Service", with 1.8%. The greatest decrease occurred in the "Tourism" subsector (97.3%).

The evolution of the subscribed capital over the period from 2013 to 2019 has been negative, with a decrease of 29.0%.

Subsector	2013	2014	2015	2016	2017	2018	2019	2020
Technical Consulting	923.679,06 €	926.689,06€	1.301.395,06€	1.304.695,06€	1.372.744,06€	1.653.600,47 €	7.619.799,17 €	11.794.948,50€
Culture	45.269.607,84 €	45.990.822,24€	65.975.461,12€	31.567.524,12€	31.546.388,12€	32.864.153,37 €	51.122.972,63€	40.188.218,65€
Directory Service	5.969.563,51 €	6.615.725,35 €	6.112.017,35 €	6.142.117,35 €	912.121,35 €	13.070.858,35 €	13.242.548,54 €	13.484.853,81 €
Economic & Financial	41.942.836,07 €	42.935.874,07 €	48.277.707,08 €	48.878.702,08 €	50.320.034,08 €	60.115.121,15 €	61.800.978,42 €	58.652.917,20€
Publishing	96.021.805,37 €	97.063.033,57 €	97.063.739,57 €	43.649.381,37 €	43.561.086,31 €	43.578.696,94€	43.616.914,99€	42.336.511,99€
Market Research	61.292.700,24€	78.573.099,24€	78.575.287,16€	78.771.917,10€	78.290.775,48 €	78.258.322,21 €	88.241.066,39€	71.238.856,15€
Geographic Information	71.787.495,85 €	85.278.365,79€	80.955.009,36€	81.197.012,16€	54.857.640,84€	55.583.028,78€	57.364.850,66€	55.819.901,18€
Infomediation Technology	77.907.777,74 €	78.030.583,74€	81.096.583,74€	72.068.783,74€	10.774.709,99€	13.994.748,54 €	21.389.530,39€	17.604.697,77 €
Meteorological	2.212.859,00 €	2.212.859,00 €	766.859,00 €	766.859,00 €	772.859,00 €	832.039,00 €	769.254,00 €	745.824,00 €
Tourism	785.895,70€	1.418.936,70 €	1.576.324,70 €	1.676.322,70 €	1.736.322,70 €	1.736.322,70 €	1.699.150,44 €	45.232,00€
Total	404.114.220,38€	439.045.988,76€	461.700.384,14€	366.023.314,68€	274.144.681,93€	301.686.891,51€	346.867.065,63€	311.911.961,25€
Variación		8.6%	5,2%	-20,7%	-25,1%	10,0%	15,0%	-10,1%



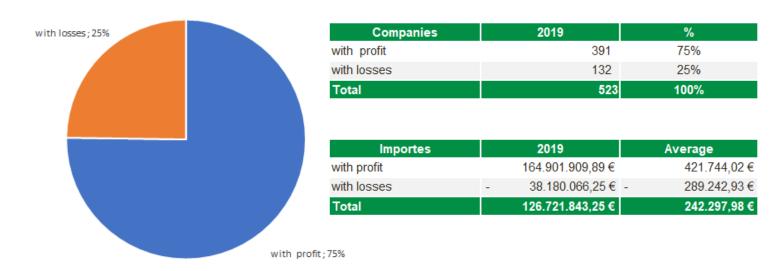
PROFIT AND LOSSES

Result analysis for the 523 companies with available information

Distribution

75% of the companies present an average profit of approximately 421,000€, with the average loss of -290.000€. The net profit generated in the Sector is close to 125 M€.

Profit and Losses Distribution



By Subsector

A profit of at least 65% has been recorded in all subsectors with "Directory Services" standing out with 84.21%.

"Infomediation Technology" and "Meteorological" subsectorss exceed 80% of the proportion of companies in profits.

The two subsectors with the lowest proportion of companies with profits are "Meteorological" and "Culture", both below 70%.

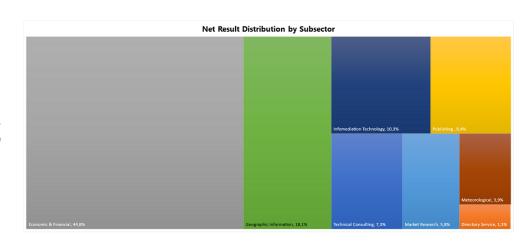
Subsector	with profit	with losses	Total	% Profit	% Losses
Technical Consulting	34	10	44	77,27%	22,73%
Culture	13	7	20	65,00%	35,00%
Directory Service	16	3	19	84,21%	15,79%
Economic & Financial	65	27	92	70,65%	29,35%
Publishing	23	10	33	69,70%	30,30%
Market Research	81	25	106	76,42%	23,58%
Geographic Information	97	35	132	73,48%	26,52%
Infomediation Technology	55	13	68	80,88%	19,12%
Meteorological	4	1	5	80,00%	20,00%
Tourism	3	1	4	75,00%	25,00%
Total general	391	132	523	74,76%	25,24%



Subsector	Profit amount		Losses amount	Net Result	%
Technical Consulting	10.515.591,11€	-	247.123,89 €	10.268.467,22 €	7,3%
Culture	390.179,77€	-	14.579.813,28€	- 14.189.633,51 €	-10,1%
Directory Service	3.402.902,48 €	-	1.506.671,91 €	1.896.230,57 €	1,3%
Economic & Financial	68.543.169,23€	-	5.356.984,62€	63.186.184,61 €	44,8%
Publishing	14.214.032,83 €	-	2.445.330,86 €	11.768.701,97 €	8,4%
Market Research	11.353.089,99 €	-	3.156.776,10 €	8.196.313,89 €	5,8%
Geographic Information	35.703.008,14€	-	10.155.574,82€	25.547.433,32 €	18,1%
Infomediation Technology	15.273.080,21 €	-	718.700,68 €	14.554.379,53 €	10,3%
Meteorological	5.497.344,77€	-	6.142,41 €	5.491.202,36 €	3,9%
Tourism	9.511,36 €	-	6.948,07€	2.563,29 €	0,0%
Total general	164.901.909,89 €	-	38.180.066,64 €	126.721.843,25 €	

"Technical Consulting" and "Culture" are the only subsectors with a negative Net Result.

Almost 80% of the Sectors Net Result is provided by the "Economic & Financial" subsector.



Evolution



Among the 459 companies with available data for the last three years, the proportion of companies with profits and those with losses has remained very stable throughout the period, with approximately 75% with profits and 25% with losses

The "Culture" subsector has maintained a negative Net Result throughout this period.

On the other hand, the "Economic & Financial" subsector has been the largest contributor to the benefit of the Sector throughout this period

Subsector	2017	2018	2019
Technical Consulting	21.535.460,39€	- 36.945.660,89€	10.268.467,22€
Culture	- 10.660.643,87 €	- 9.464.479,28 €	- 14.189.633,51€
Directory Service	21.801.084,89€	2.106.433,03 €	1.896.230,57 €
Economic & Financial	62.260.144,66€	65.830.618,58€	63.186.184,61 €
Publishing	- 4.799.695,58 €	10.677.714,45 €	11.768.701,97€
Market Research	18.848.705,71 €	16.824.602,57 €	8.196.313,89€
Geographic	9.593.866,72€	14.492.603,16€	25.547.433,32€
Infomediation	10.646.385,66€	14.771.394,52€	14.554.379,53 €
Meteorological	5.616.829,88€	4.448.292,56€	5.491.202,36€
Tourism	17.583,36€	22.213,58 €	2.563,29€
Totalgeneral	134.859.721,82€	82.763.732,28€	126.721.843,25€



COMMERCIAL RISK

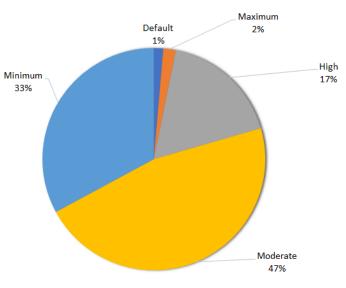
Commercial risk analysis of the 663 infomediary companies with ratings

By Level

The probability of risk estimated for a company over the last 12 months has been categorized into five levels, according to the said risk exposure, a homogeneous measurement that allows for comparisons to be made. According to this classification, **20.5%** of the Infomediary Sector companies are at high commercial risk.

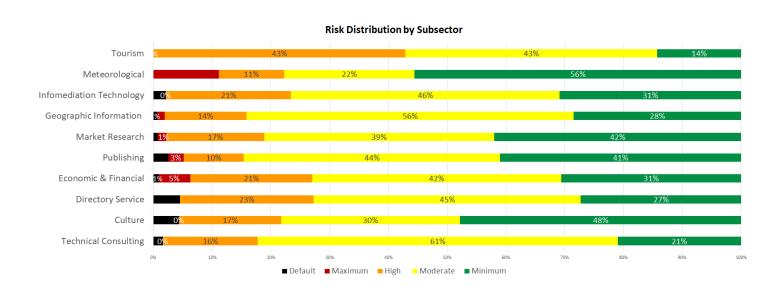
Level	Companies	%
Default	9	1,4%
Maximum	12	1,8%
High	115	17,3%
Moderate	309	46,6%
Minimum	218	32,9%
Total	663	100%

Company Distrubution by Risk Level



By Subsector

The subsector with the highest commercial risk is "Tourism" (43% high risk) while the rest of the subsectors all range between 15% and 27% (for the added values of Default, Maximum and High risk). "Directory Service" is the subsector with the highest level of Default (5%).





EVOLUTION

Analysis for the 107 companies present since the reports first edition

Sales

The sales decline for the period 2011–2019 (-6%) has been generalized, with the exception of Galicia (13%) and Cataluña (33%). The greatest decrease occurred in Asturias (-91%), followed by Castilla y León (-90%) and the Canary Islands (-76%).

The greatest decrease in absolute values in the last year has occurred in Madrid, with a drop of close to 67 million euros. This autonomous region has accumulated a decrease of -10% throughout the 2011 - 2019 period.

Sales Evolution	2011	2012	2013	2014	2015	2016	2017	2018	2019	Tendencia
Andalucia	22.600.000,00 €	20.875.733,22 €	18.306.120,16 €	17.572.519,77 €	18.757.208,98 €	19.590.524,74€	16.576.767,01 €	16.129.868,30€	16.930.445,10 €	
Aragon	431.000,00 €	397.190,00 €	317.150,09 €	270.737,26 €	230.036,32 €	299.405,94 €	309.471,65 €	205.194,96 €	297.618,52 €	
Canarias	1.301.000,00 €	1.224.934,96 €	1.087.000,31 €	1.138.990,84€	850.535,61 €	931.795,45 €	1.031.718,26€	1.290.718,55 €	314.932,25 €	
Castilla Leon	1.092.000,00€	806.902,00€	601.630,37 €	437.380,59€	353.418,46€	361.306,35 €	423.194,98 €	446.622,22€	110.605,45 €	******
Cataluña	92.652.836,00€	91.007.015,96€	89.717.819,87 €	91.607.736,07 €	100.245.301,06€	101.528.762,51 €	103.672.699,45 €	127.180.926,60€	123.305.369,15 €	
Madrid	519.290.092,00 €	498.904.603,99 €	486.942.350,85 €	523.710.574,58 €	487.871.586,36 €	492.414.121,83 €	519.817.633,50 €	532.469.575,05 €	465.574.136,02 €	
Valencia	25.407.000,00 €	21.787.382,33 €	21.865.269,09 €	21.712.930,24€	23.975.617,43 €	25.365.003,87 €	26.994.286,12 €	24.166.012,22 €	19.778.150,58 €	-
Galicia	4.701.000,00 €	4.434.352,15 €	4.468.985,25 €	5.415.056,77 €	6.436.608,94 €	6.331.654,99 €	6.394.899,94 €	6.000.094,90 €	5.300.327,62 €	
Pais Vasco	14.186.000,00 €	12.818.885,94€	9.405.656,73 €	11.341.994,20€	12.280.369,00€	11.984.376,43 €	11.657.893,50€	11.703.515,20€	8.194.973,46 €	
Asturias	1.903.000,00€	1.304.893,15 €	1.460.221,45 €	1.316.573,52€	1.240.708,63 €	1.242.262,05 €	1.319.615,38 €	1.254.360,40 €	167.243,97 €	
Total	683.563.928,00€	653.561.893,70€	634.172.204,17€	674.524.493,84€	652.241.390,79€	660.049.214,16€	688.198.179,79€	720.846.888,40€	639.973.802,12€	-
Variación		-4,4%	-3,0%	6,4%	-3,3%	1,2%	4,3%	4,7%	-11,2%	

Employees

The decline in the Infomediary Sector employment total during the 2011–2019 period has been –11%, the onlyvexception is Galicia, with a growth of 25%. The greatest decreases have occurred in Castilla y León and Aragón, both with –82%, followed by the Canary Islands with –70%.

The greatest decrease in the last year, in absolute values has occurred in Madrid, with a drop of -987 employees. This autonomous region has accumulated a decrease of -10% over the 2011 - 2019 period.

Employee Evolution	2011	2012	2013	2014	2015	2016	2017	2018	2019	Tendencia
Andalucia	216	241	230	213	223	219	140	160	151	
Aragon	9	8	4	5	4	4	3	2	2	
Canarias	44	41	32	32	14	16	19	31	13	
Castilla Leon	27	16	16	16	13	11	12	12	5	
Cataluña	1.374	1.365	1.199	1.153	1.209	1.191	1.328	1.346	1.301	
Madrid	4.929	5.233	5.486	5.302	5.590	4.658	5.588	5.429	4.442	
Valencia	283	265	267	291	259	314	327	341	265	
Galicia	87	91	100	99	134	183	124	122	109	
Pais Vasco	221	180	164	149	182	181	150	151	119	
Asturias	41	42	38	36	35	34	22	19	20	
Total	7.231	7.482	7.536	7.296	7.664	6.810	7.713	7.613	6.426	
Variación		3,5%	0,7%	-3,2%	5,0%	-11,1%	13,3%	-1,3%	-15,6%	

SUMMARY

700 Companies

The number of Infomediary companies identified as active in Spain up to the 31st December 2019.

21.998 Employees

Aggregated employees for the 588 companies with employee data for 2019.

2.543.042.052@ Sales

Aggregated sales for the 591 companies with financial data for 2019.

311.911.961@ Capital

The suscribed capital for the 764 identified as Infomediary companies as of the 31st of December 2020

126.721.843€ Result

The aggregated net profit of the 523 companies with available data

SURVEY 2021

Infomediary Sector survey conclusions

As in previous editions, we have included the results of the survey carried on a selected group of representatives from different infomediary companies, the object is to gage the opinion of the companies that form the Sector, those that analyze and process information from the Public and / or Private Sector, creating value-added products for citizens or third parties.

The year 2020 brought us advancements and new challenges in terms of digitization and artificial intelligence as a consequence of the COVID-19 crisis, the importance of progress for economic growth and that of society has been highlighted in these areas. The Sectors evolution, the challenges it faces, growth expectations, etc., are raised in the survey. The results obtained are as follows:



96% of respondents re-use information or data to create value-added products and / or services.

70% of those surveyed affirm that they re-use information or data for internal use compared to 30% that the use is exclusively external.

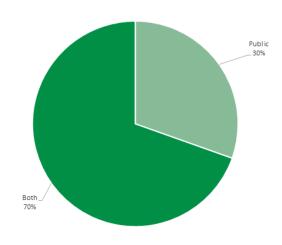




61% of companies interviewed use artificial intelligence to develop value-added products or create products that are based on artificial intelligence itself.

Information used

This year the companies interviewed have indicated that they use both public and private sources, or exclusively of public sources for the elaboration of products or services. Not one company indicated that it only uses private information (unlike last year where 4% used only this data).





All companies interviewed affirm that opening data in a structured way increases the datasets value. Infomediary companies agree that information standardization is important and necessary at all levels (Ministry's, 17 regions, 52 provinces...).

Homogenization and quality have become a standard. Any new data adds value to the information you already have and can even lead to new related products. Any initiative that allows access to regulated information as standardized as possible is positively valued.

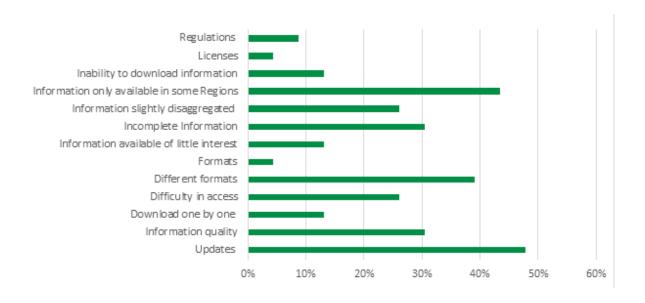
Unlike in previous years, all companies interviewed agree that an increase in open datasets and access to them is decisive for the sectors positive evolution, and more than 60% of them are strongly agree with this statement.



Principal Barriers

As in previous years, the respondents agree that the two main barriers when reusing information are: information that is not actualised and information only being available in some Autonomous regions or Municipalities.

After analyzing last year's results, and to verify our estimates, we introduced a new option that after being consulted this year has been identified by infomediary companies as the third barrier when it comes to reusing information: the lack of homogeneity in the different formats in which the data is available.





Regulations that affect business development

Data Protection

This year, more than 60% of those surveyed consider that, after three years in force, the data protection regulation has a negative impact on the development of their business, a consideration that continues to grow compared to previous years (57% in 2020 and 53% in 2019).





Access and Reuse of Public Sector Information

This year, 43% of those surveyed responded that the current Spanish regulations regarding access and re-use of public information is restrictive and negatively affects business development.

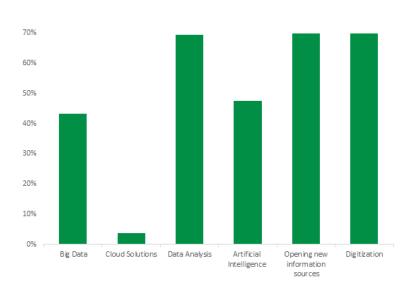
More than half (59%) of the interviewees indicated that they haven't indentified or that there are no other regulations that pose a barrier to their business growth.



100%

All of those surveyed positively value the digitization as an asset to favor the exploitation of public datasets and more than 65% consider it to be a priorty.

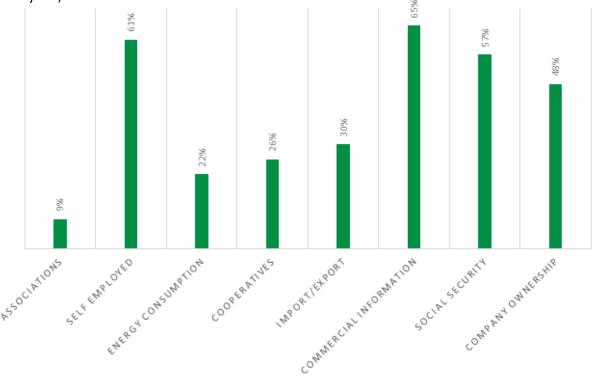
Main chanellges



The Sectors challenges main in previous reports, have been led by data analysis and the data opening. This year, adapting to the situation all, experienced bу two challenges have included: been digitization and artificial intelligence and we have not been surprised to observe that digitization has reached the same level as the other two leaders and is closely followed by artificial intelligence.

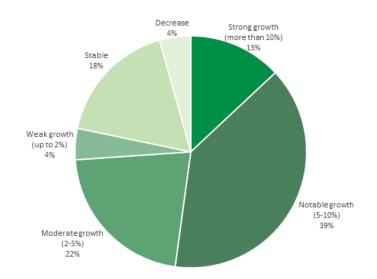
Beneficial Data

As last year, the three sets of the Public Administration data thats opening would be beneficial for business development are Commercial information with 65%, Self-Employed information with 61% and Social Security information with 57%. It must be clarified that, in addition, the interest in these datasets has increased significantly, in some cases reaching a growth of more than 35% (for example, commercial information, which last year was selected by 40%, was this year selected by 65% of those surveyed).



The Sectors evoulution

78% of those surveyed expect the Sector to grow, unlike last year, were 100% predicted the same. We believe that this change is due to the current situation. This year 18% expect the Sector o be stable and 4% a decrease.





74% of those surveyed believe that the pandemic will directly affect the evolution of the Sector this year.

In next year's report, with the accounts from 2020 presented, we will be able to assess the direct and actual effect that the COVID 19 has had and is having on the Sector.

Infomediary companies evolution

It's curious to observe that that even though 74% of those interviewed think that the pandemic will affect the Sector only 61% think it will affect their own company.

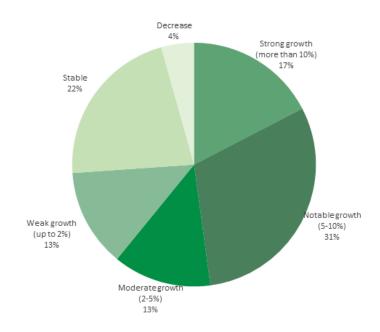




100% of those surveyed confirm that information use and treatment affects their revenue, with 69% indicating that it is greatly affected.

Growth prediction

Unlike last year, where 100% of those surveyed expected a turnover growth, this year, coinciding with the estimate for the Sector, 74% foresee a growth, 22% stable and 4% a decrease in their company's turnover.



Worse 8% Equal 54%

Internationally

When the respondents were asked to compare their own business with those of the same Sector internationally, 74% consider themselves to be in the same situation or better.

Questionnaire 2021

- 1. Does your company use and / or reuse information or data to create value-added products or services that are then sold?
- 2. Does your company use and / or reuse information or data for internal use without using it to cretae value-added products or services?
- 3. What type of information or data do you use to create the products or services?
- 4. In Asedie we are promoting the publication of datasets in a homogeneous way in the 17 Autonomous Regions. Do you think that opening data in a structured way, for example, in the these regions, increases the value of the information?
- 5. Select which, in your opinion, are the three main challenges for the Infomediary Sector.
- 6. Artificial intelligence is a reality, does your company use this technology to elaborate value-added products or create products that are based on artificial intelligence?
- 7. Evaluate the importance for the Infomediary Sector evolution and that of your own company, the following statements:
 - Technological advancement will improve the exploitation of Public Sector databases.
 - The increase in open databases and access to them is decisive for the evolution of the sector.
- 8. Rate from 1 to 5, how the Personal Data Protection Regulation is affecting your business.
- 9. Show your degree of accordance with the following sentence:
- "The current Spanish regulations regarding access and reuse of public sector data seem restrictive and affect the development of my business."
- 10. What other regulations are restrictive to your business?
- 11. Select, in your opinion which are the three most important barriers when accessing Public Sector Information.
- 12. What do you expect the growth of the Infomediary Sector turnover to be in 2021?
- 13. Do you think the pandemic will directly affect the evolution of the Sector this year?
- 14. Do you think the pandemic will affect your company?
- 15. In your opinion, ¿what do you expect your company's growth to be in 2021?
- 16. How much does the use and treatment of information affect the success of your company?
- 17. How do you see your business compared to those in your own industry in the international arena?
- 18. Select, which in your opinion are the three Public Administration datasets whose opening would be most beneficial for the development of your business.



PUBLIC SECTOR SURVEY

In Asedie we are aware of the importance of having a global vision of the information ecosystem, as well as the groups that form it. In the field of open data and information re-use the collaboration between the Public and Private Sector is an essential element. On these grounds, in Asedie, we believe that both the needs of the Private Sector and those of the Public Sector must be considered to achieve the benefits of this necessary collaboration.

For this reason, last year for the first time we included the results of a survey carried out on Public Sector representatives. Given the good reception and results that this initiative received, we once again asked the 17 representatives responsible for open data, transparency, and re-use from the autonomous regions, to participate, as last year, we have received a reply, from all 17 regions.

The target is to find out the Public Sector's the point of view, specifically that of the autonomous regions, when it comes to the opening data, the selection process of which datasets to publish, the barriers, the future goals, etc. In Asedie we believe that it is vitally important to know the difficulties that they face in order to find ways in which to promote their work.

The main conclusions obtained follow:

Artificial Intelligence in the Administrations digitization processes

Advances in Artificial Intelligence are a reality that cannot be denied by the Public Sector. Those responsible for open data in the Spanish regions agree that the implementation of this technology in the administration's digitization processes will be a procedure that will advance slowly, at a slower pace than in the Private Sector. Notwithstanding, this technology's implementation is considered as something positive that will allow the existing digitization processes to advance in the configuration of more personalized services and speed up the administrations work through the application of virtual assistants, improvements in portal usability, information extraction from unstructured data sources, predictive models use in decision-making...

Those responsible for open data in the Spanish regions agree that Artificial Intelligence will gradually occupy a prominent position in administration procedures, but in order to benefit from this technology, it is necessary to have quality data, therefore "the implementation of this technology depends directly on the raising the standard of public data".



64.7% of the Autonomous regions stated that they are not satisfied with the digitization level available to them, although they acknowledge that digitization in the public administration has advanced notably in recent years. Likewise, they have expressed that they are working on digitization plans to achieve greater automation and improve the service quality provided to citizens.



Most demanded datasets in 2020

All 17 regions responded to this question, one of them indicating the impossibility of providing this information due to it being unknown, while another community has indicated that its five most demanded datasets have been related to the quality of internet coverage.

The demand for data is undoubtedly linked to current situation, so it is not surprising that throughout 2020 the most demanded datasets have been those related to COVID-19. Shown in this survey, with 22.5% of the responses indicating the forsaid

Followed by those related to economic-financial data and employment (information on ERE (employment regulation order), ERTE (Record of Temporary Employment Regulation), hiring, etc.), 17.5% and Transparency, such as information related to salaries or inventories of senior positions, 11.25%.

The next sets most demanded in 2020 according to the responses received, are those related to Population and Tourism, with 7.5% each, followed by data related to education and the environment, with a 5% in each category.

Although the datasets categorized in these groups cannot be considered directly as data on COVID-19, we could be led to believe that their high demand could be seen as a consequence of the health and social crisis that we experienced throughout 2020.



88.24% of those surveyed have noticed the effects of COVID-19 throughout 2020, which has resulted in the digitization processes being pushed, a demand increase for new information and datasets related to the COVID-19 to be opened for re-use, and an increase in open data portal usage.

Which datasets will be opened in 2021

All 17 regions responded to this question with one stating that at present there were no plans in place. Of the responses obtained from the other 16 regions, 21.25% indicated that the datasets they planned to open in 2021 are related to Transparency, while 16.25% of the responses demonstrated the intention to open datasets related to the Top 3 Asedie.

Environmental and economic-financial datasets are also among those identified with 10% and 8.75% respectively. It is important to mention that in the dataset opening prioritization public interest has a relevant role to play, therefore at present it is worth highlighting the interest in datasets related to the COVID-19 pandemic (health, economy, work, social assistance, vaccination ...).

70.59% responded positively, stating that there are action plans in place to open or improve the datasets selected as Top 3 Asedie and also of the need to make the departments that hold this information aware of the importance of publishing the said information.





All those surveyed agreed that it would be useful for them to know good practice examples from other administrations. This knowledge allows them to get to know ideas, share knowledge and convince other internal departments about the usefulness of open data, which would therefore facilitate new data opening and the implementation of new functionalities.

100% of those surveyed stated that it is useful for them to know how the Sector uses their information through success stories, in order to be able to demonstrate it's use. Given the good reception, we will continue to publish these examples, with the aim of highlighting the usefulness of public data and the use made of it by infomediary companies.

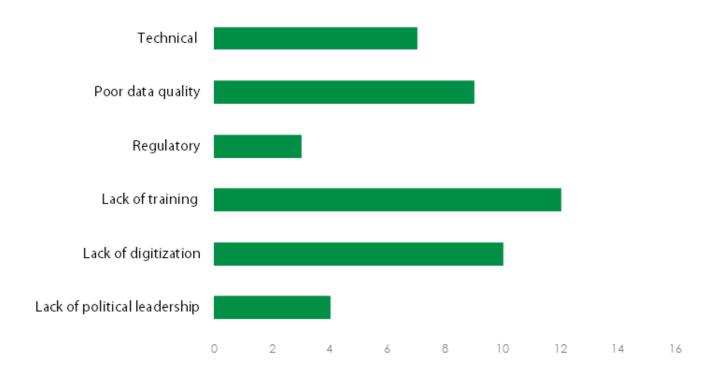


Barriers

On the road to opening datasets, the main barrier for 12 of the 17 regions is the lack of training for public employees on the benefits of open data: "it is necessary to encourage a culture of open data." The lack of an open data culture causes that sometimes "there is fear of sharing and opening data, departments see data as their property, and it is difficult for them to share it". The situation of the administration's human resources is also considered a barrier due to the impossibility of permanently allocating resources to the coordination of data opening and the lack of personnel with the necessary training to do so.

The lack of digitization is the next barrier mentioned by the 10 of the 17 regions, which have shown that sometimes data extraction cannot be carried out because it is not digitized.

For 9 regions the next barrier they face is the poor data quality, followed by technical barriers, (7 regions). The dataset complexity is in many occasions can be a front to hide behind in order to not open data.





82.35% believe that it would be useful to collaborate with the Infomediary Sector to include the tax ID number of legal entities in the datasets, although they have clarified that it would be beneficial to make this information's importance and usefulness for re-use known.

Tax ID number inclusion

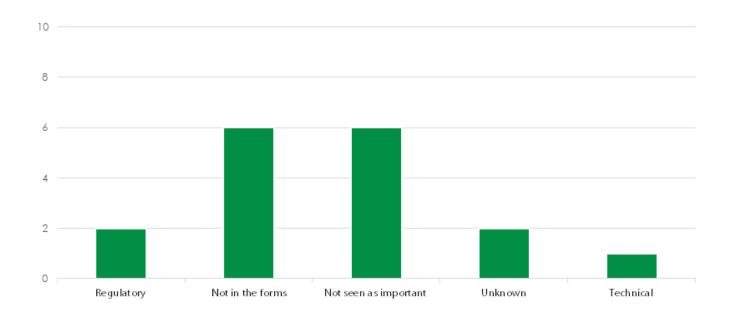
The tax ID number is a unique identifier and is priority when identifying and re-using datasets. However, the inclusion of this information is often found as difficult in the Autonomous regions.

6 of 17 regions have identified the principal barrier for not including this data is due to the fact that it is not a mandatory field in the forms used to collect information, here it should be noted that there are several regions that have been making this field mandatory to alleviate this barrier. Another barrier indicated by 6 of the 17 regions is that the tax ID number is not considered as important. Thhis unawareness on the part of those responsible and those in charge of the datasets, as well as the doubt in including this information is one of the barriers most mentioned by the respondents. Due to responses obtained, in Asedie we will continue working to disseminate the importance of including this information in the datasets.

The confusion regarding data protection regulations giving way to the tax ID number of legal entities being considered as personal data, which, despite not being true, has been identified as a barrier by 2 of 17 regions. On the other hand 2 regions have not assessed the difficulties that may arise in including this information.

Technical barriers, such as the difficulty of identifying and anonymizing this data, has been mentioned by one region as an impediment when including this information.

The responses received in this question reveal the lack of knowledge in regards to the tax ID numbers real value for the Sector and the continuing confusion concerning data protection regulations.





Impact

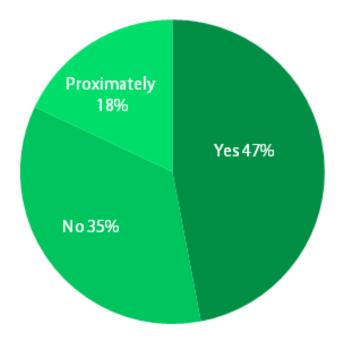
13 out of 17 regions stated that they perceive the impact caused by the data opening. Despite expressing the difficulties, they find in measuring this impact, they have stated that they perceive it both internally and externally, noting the consolidation of a network of infomediary actors that has increased the demand for open data.



Open data working commissions

Regarding the open data working commission, 4 out of 17 regions have indicated that they have created a commission of this type and 9 have expressed their intention to create one in the future. Among the functions carried out by these commissions, the following stand out:

- Identify demanded datasets,
- · Agree on prioritization in data opening,
- Resolve open data requests from citizens,
- · Coordinate the data opening and publication,
- Create APIs to facilitate re-use by the Sector.



Notification systems

8 of the 17 regions have a system in place to notify interested parties about the opening of new datasets or the updating of existing ones. Subscription to datasets, or open data portals are some of the systems mentioned.

One of the respondents has indicated that the initiative is scheduled to be launched in 2021 and 2 regions mentioned that they positively value carrying out a study to create a notification system.

Main commitment aspects acquired in the IV Open Government plan

The <u>IV Spanish Open Government Plan</u> was approved in 2020, in the survey we asked those responsible for open data in the 17 Spanish regions about the main commitment aspects made by their region within the plan's framework. After analyzing the responses, three main aspects can be extracted: Transparency, Open Data and Citizen Participation.

8 of the 17 regions have specified that one of the main commitment aspects has to do with increasing Transparency through different mechanisms such as the drafting of new laws or strategic plans, facilitating accessibility to transparency portals, implementing integrity and accountability systems, etc.

Regarding open data, 7 out of 17 regions have specified as a commitment the promotion of open data and its re-use. The development of open data strategies aimed at prioritizing data and improving interoperability, promoting digital administration, promoting re-use, and interacting with re-use agents are the main aspects mentioned.

4 out of 17 regions have mentioned the promotion of Citizen Participation, through citizen attention programs, involving society in the continuous improvement of public services, etc.

The commitments acquired in the IV Open Government Plan will be promoted and implemented until 2024 when the plan is due to be renovated. ASEDIE, in its role as an expert in the different Open Government Forum Working Groups, will work to promote the commitments acquired by the regions.



Public Sector Questionnaire

- 1. What five new databases, of interest to the infomediary Sector, does your institution intend to open in 2021?
- 2. Advances in Artificial Intelligence are a reality. How do you think this new technology will be implemented in the Administration's digitization processes?
- 3. Are you satisfied with the level of digitization in your region?
- 4. How do you assess the impact of opening different datasets?
- 5. In Asedie we have started an initiative with the representatives from the Spanish regions where we provide good practice examples carried out by the Administration at all levels. Do you think that knowing good practice examples from other Administrations is useful?
- 6. What five datasets (in your responsibility) have been the most in demand in 2020?
- 7. What are the main difficulties you encounter when opening datasets?
- 8. The circumstances arising from the Covid-19 crisis have highlighted the need for digital transformation. Have you noticed the effect of COVID-19, this year, when it comes to both the data opening and the access to it?
- 9. Are there action plans to open or improve the Top 3 Asedie 2020: the SAT Registries, commercial establishments or industrial zones that allow their reuse?
- 10. Has open data working commission been created? If so, please indicate its first three functions? And not, do you intend to create one?
- 11. Are the success stories offered by the Sector useful to demonstrate the Public Sector Information usage?
- 12. Is there a notification system in place to notify interested parties when datasets are opeded or updated?
- 13. What are the three main commitment aspects acquired by your region in the IV Open Government Plan framwork?
- 14. What is the main barrier for not including the unique tax ID number of legal entities in the datasets?
- 15. In your opinion, do you think it would be useful to collaboration with the Infomediary Sector to include the tax ID number of legal entities in the datasets?

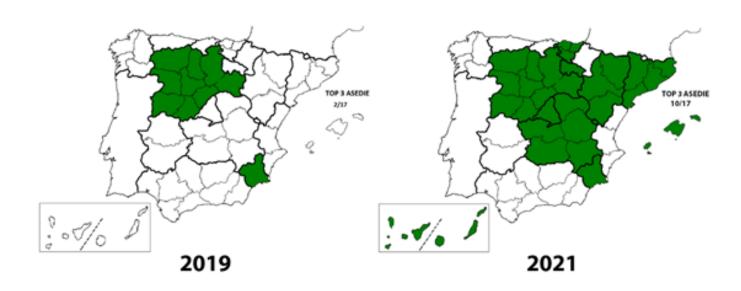
TOP 3 ASEDIE

During 2020, in Asedie we continued working on opening Public Sector information, through a group of datasets identified as priority by Infomediary companies and named "Top 3 Asedie 2019".

Due to the Spanish territorial organization, Public Sector information is at times in the hands of the State Administration, the Autonomous Regions, or the Local Entities. Because of this, it is important to point out that a datasets value increases greatly if it is opened in as many Autonomous Regions as possible. The initiative "Top 3 Asedie 2019", launched in 2019, sought the opening of three datasets (Associations, Cooperatives and Foundations) in each Autonomous Regions, focusing effort and resources in being able to obtain the global image of each dataset.

Throughout this year, we have continued work together with the 17 teams responsible for open data to monitor the evolution of the opening of these datasets and include the information necessary to increase the datasets value, such as the inclusion of the Tax ID number (a unique indicator that not only helps to improve transparency but also makes the information more correct). Currently, there are 14 regions that have opened at least two of the three datasets indicated.

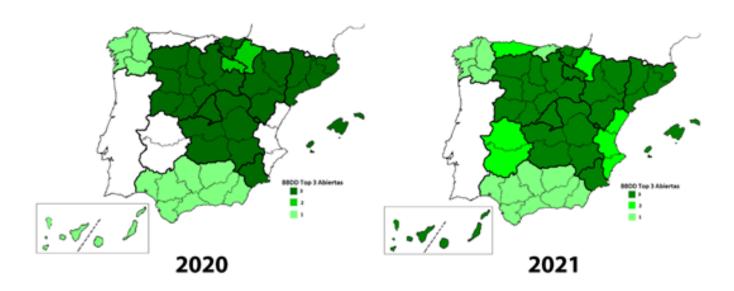
Below a comparison can be seen of the autonomous regions that have the three datasets open and of those that had the information available 2019 when the process Top 3 initiative began:



Focusing on each dataset, the progress over the last years has been:

	Open 2019	Open 2020	Open 2021
Associations	9	11	16
Cooperatives	4	10	13
Fundations	7	10	12

It is important to note that most of the Autonomous regions have two of the "Top 3 Asedie 2019" datasets open. In the following map, thanks to the work carried over this year it can be observed that the number of regions that have gone from having two of the selected sets open, to having all three has increased notably. The same can be said for the progress in the regions that did not have any of the datasets opened in 2020.



The progress made with the "Top 3 Asedie 2019" prompted us to keep moving forward. Therefore, three new databases were selected for the "Top 3 Asedie 2020": Commercial Establishments, Industrial zones, and SAT Registries, which were made public in the last report.

Throughout 2020 we collaborated with Spanish regions to open these datasets, although it must be noted that the crisis caused by the expansion of COVID-19, the strict confinement experienced by Spanish citizens, the lack of digitization and efforts being focused on publishing data related to COVID-19, made it difficult to open these datasets.

During the collaboration and monitorization of the top 3 Asedie 2020 with the different regions, we have come across different challenges and barriers, this information has guidied our efforts in finding ways to solve them:

- In the case of Commercial Establishments, through our analysis of the situation and our collaboration with the different regions we have seen that this dataset cannot be opened in all 17 regions due to the fact that in some there is no such register (as the region does not hold the information but the local entity), and in some cases they have even been eliminated by regional regulations. Due to this and the Infomediary Sectors interest of being able to access the information throughout the whole Spanish territory, we see it as necessary to replace this dataset with one that is available in all regions. The new dataset, that we have already started working with is the Energy Certificates Registry, although we will continue to request the opening of the Commercial Establishments dataset in those regions that hold this information.
- The Industrial zones dataset is open in seven of the Spanish regions, in Asedie we will continue working with the public representatives to achieve not only the datasets opening in other regions, but also on the inclusion of fields that provide added value, such as the addition of a census of companies located in each zone, in this way seeking a harmonized and homogeneous data opening in all regions and therefore increasing the data's value.
- Regarding the SAT Registries dataset, this information is available in open format in five regions. Over the next year we will continue working to promote its opening and to achieve the homogenization and inclusion of the tax ID number in the cases where it is possible.

In Asedie we will continue to work and monitor the Top 3 Asedie, with the hope to show the progress in our next report.

We appreciate the collaboration and effort made by both those responsible for the information and their teams, and we encourage them to continue working along the same lines.

RE-USE BARRIERS

One of Asedie's objectives is to seek measures that promote transparency, gaining access to and opening data.

An opinion shared by both the Public and Private Sector is that the opening of Public Sector data and its re-use has numerous economic and social benefits. For this reason, in Asedie we work to promote data opening.

With this objective in mind, we carried out a study, identifying the main barriers to reusing information in Spain, which we briefly mention below and which have been transferred to those responsible for this matter both General State Administration level and the European Comission.

• Laws and regulations:

The confusion between the different regulations when accessing information sometimes implies access restrictions or even literally prohibits its re-use. An example is the confusion generated by the data protection regulation, which is being interpreted incorrectly, being applied to in practice not only to natural persons but also to legal entities, therefore blocking access to this information, which is detrimental to business transparency.

Denial of requests due to administrative silence:

The Administration can choose not to respond to information requests, therefore preventing knowing the reason for the denial (for example, they do not hold the said information, they are not the appropriate body, the existence of a regulatory prohibition...). It is important that every request receives a response, one way or another. The non-response is perhaps the best example of the Administration's opacity on the principles of re-use and transparency.

• Generalized exclusion of all the information obtained by the Tax Administration and Social Security organisms in the performance of their functions for re-use:

These Administrations have the most complete, accurate, and reliable databases, with the greatest and best updates, that are essential to achieve the desired business transparency. The re-use of this information is being excluded by law, regardless of whether there are no limitations due to intellectual property rights, commercial confidentiality, personal data protection or any other specific regulation.

Of this list of barriers we will continue by looking into one of them indepth.

Taking advantage that the transposition of Directive (EU) 2019/1024 of the European Parliament and of the Council, of June 20, 2019, on open data and the re-use of Public Sector information (RISP Directive) to the Spanish legal system should be completed this year (IV Open Government Plan commitment), this report includes an analysis of the results obtained from the open data requests made, with the aim to raise awareness in society about one of the main re-use barriers that currently exists in Spain: the denial of Public Sector information access requests due to administrative silence.

With this objective in mind, Asedie, in December 2020, requested a total of 35 databases from 20 public General State Administration institutions: 9 ministries and 11 organisms.

In Asedie we have been able to observe, that once again, on a large number of occasions, the Administration chooses not to respond to the requests to access Public Sector information, which implies the requests denial is due to application of article 10.8 Law 18/2015: "If within the maximum term provided for resolving and notifying an express resolution has not been issued, the applicant may understand that their application has been rejected."

The replies received are as follows:

- Regarding the requests sent to nine different ministries, we received a response from 78%, but we believe that it is important to clarify these responses:
 - 1 ministry responded indicating that they will analyze the request, no update or communication has been received as of this report's publication date (three and a half months later).
 - 4 ministries responded indicating that they will transfer the information to the competent body, again no reply has been received as of this report's publication date.
 - 1 ministry responded indicating that it is not the competent body and to which body we should send the request (the process continues).
 - 1 ministry responded by indicating that they are not the competent body but did not inform to wwho the request should be sent to.
- Regarding the eleven organisms, a response was received from 27%:
 - 1 repsonse denied access for regulatory reasons,
 - 1 response indicated to where the request should be sent, which we proceeded to send to the organism indicated, who has NOT answered.
 - 1 response indicated that it was in process and after three and a half months we have not received any more news.

Therefore, out of the 35 datasets requested:

- 3 have been denied for regulatory reasons.
- 3 are in process or being analyzed, without notification for over than three and a half months.
- 29 are understood to be denied due to administrative silence.

In the case of the requests made to the eleven organisms, where only three responses have been received, we have a clear example of how the information access request denial due to administrative silence is configured as a barrier to re-use. The absence of this response prevents knowing the reasons to why access has been denied, which can be varied and sometimes remediable, such as when the requested body does not hold the information requested.

It seems important to point out that, although seven responses where received from the nine ministries that the requests were sent to, in practice these responses do not imply access to the information: the opacity to which entity holds the data and the bureaucracy generated when referring the requests to the competent entity are some of the impediments that make it difficult to re-use Public Sector information, especially if there is no follow-up by the Administration.

In Asedie we reiterate that the absence of a response is the best example the Administrations opacity. To this regard, we believe the nature of administrative silence in re-use should tend to favor the rights and interests of the administrated and make the Administration's management more transparent.

We hope that the RISP Directives transposition into the Spanish legal system will give response to the Sectors request, that has already been transferred, and that it will contribute to creating a regulatory framework that promotes transparency, data opening and re-use.

35 datasets

9 Ministerys

11 Organisms

83% denied by Administrative silence

9% awaiting reply



SUCCESS STORIES INFOMEDIARY COMPANIES

Infomediary companies provide, through information re-use, a necessary added value in strengthening the business network, it helps to generate value and wealth as well as stability for business growth and legal security in society.

With this in mind, as in other years, we have included different examples of products or services produced by infomediary companies, as a sample of what is done with Public Sector information,, how it is transformed and how, thanks to this transformation and the products or services offered, contribute to decision-making in society.

Other examples can be found in <u>asedie@asedie.es.</u>

Creation of the first official Innovative SMEs directory

Starting last year Infoempresa.com included the first Innovative Spanish Companies Directory, certified by the Ministry of Science, Innovation and Universities. The directory offers business information on all these commercial companies and is consulted by hundreds of national and international users.

Committed to being the Spanish Infomediary sectors digital native service, Infoempresa integrates direct access to an updated list of all Spanish SMEs with a valid certificate.

Currently and according to the latest analysis prepared by Infoempresa.com, Spain has more than 2,500 innovative companies. In this area there are 12% more companies registered than last year. The directory, directly connected to official sources, represents the first integration of its kind in the innovation vertical.

IBM Watson

The natural language processing capabilities of IBM Watson are used by Iberinform to improve the predictive capacity of its default risk ratings. Daily Iberinform recalculates the default risk of the 3.3 million active companies and freelancers that operate in Spain by continuously capturing public information from hundreds of sources. A very valuable source, but difficult to treat, are the audit reports that collect external auditors non-binding opinion from the annual accounts, which will be analyzed using the capabilities of artificial intelligence.

However, these are complex texts that do not follow a standardized structure and come in an image format, which makes the analysis automation extremely difficult. The only way, up to now, to assess its importance was by specialized analysts reviewing it manually.

Iberinform is already using the capabilities of artificial intelligence to automate the interpretation of the relevant information disseminated among the thousands of words contained in each audit report, which avoids any risk of bias and speeds up the process by analysts of predictive models that recalculate business default risk ratings.

Impact of COVID on your portfolio report

INFORMA has been the first company to develop a specific product for the new economic environment created by COVID-19. This product analyses the potential impact of the pandemic on a client's portfolio and it helps manage and prevent non-payments.

The product is called Impact of COVID on your portfolio, an analysis-based study focused on the different sectors any organisation's clients and suppliers belong to, their legal form, their size and other relevant Data Insight provided by INFORMA, such as their payment delay or cessation probability.

This new report includes exclusive information, such as the Resilience Index, which measures the ability of an organisation to face an exceptional situation, or Paydex, to verify if customers are fulfilling their payments promptly.

Additionally, you can request the enrichment of a file containing all the companies in a portfolio with the most relevant data available at INFORMA, so as to improve business risk management.

investiga® pro

The differential value of technology in the field of regulatory compliance

Client knowledge has proven to be a fundamental aspect not only important to minimize risks, but for many companies it has become a legal requirement, for example, in the field of Money Laundering and Terrorism Financing Prevention.

Currently due to different factors such as the rise of digitization and electronic commerce together with globalization, makes this knowledge increasingly more difficult. In addition, corporate structures are increasingly complex, being practically impossible through traditional methods, to discover who the company's the final shareholders are, to know in which countries a certain subject has ties or to know if we are dealing with persons of public responsibility. All of this poses a great challenge for those responsible for regulatory compliance today.

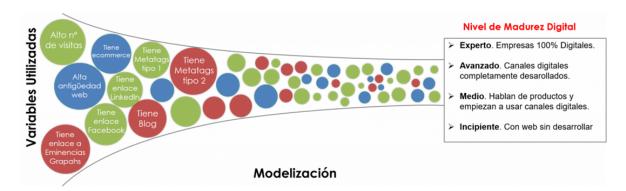
For this reason, companies need to have the latest technology that provides them with and simplifies the process of identifying and knowing the customer, through graphic tools that allow us to easily discover all the links of any company until reaching its last beneficiaries, thus easily accessing the information and documents necessary to establish the correct level of risk for each client.

The use of the most advanced technology for graph-oriented data processing, combined with the largest database of linkages on the market, makes investiga® pro online solution a current benchmark for commercial research and regulatory compliance.

Pyramid Data

Need: In order to optimize the commercialization of its products, a large company in the Utilities sector, seeks to add to its analysis a variable that synthesizes the Digital Maturity Level of companies.

Solution: The Digital Maturity variable is constructed from firmographic variables and the web content of each company, using multivariate modeling. For example, depending on their ecommerce, blog, visits, or social media activity, among others, they score more or less in the Digital Maturity variable.





<u>Scoremap</u>

Scoremap is an evaluation and 3D mapping tool that shows the risk of a company or a portfolio of companies. This tool allows a daily control of the risks and opportunities linked to commercial and financial environment.

It can be used to ensure global monitoring for both the sales, the purchasing department, customer management or credit controller as well as by the Directorate General. For the creation of this tool, we have used and carried out a processing of more than 5 million companies listed in our database.

A system of alert to optimize the management of the client portfolio:

- Information on automatic update of ScoreMap calculation and forwarding automatic sending of ScoreMap information directly to your email (with the possibility of selecting the desired information)
- Sending of e-mails to follow up on commercials and incidents.
- Immediate update of the assessment of the respective Siren.

<u>Document management solution using Al</u> <u>and Natural Language Processing</u>

A solution developed by CTI allows for the treatment of any document typology through the use of advanced technologies in the field of Artificial Intelligence and natural language processing, allowing process treatment optimization of the information contained in documents, in a way that a maximum efficiency is achieved at an operational, quality and economic level.

This solution enables the management of information found in structured, semi-structured and unstructured documents throughout their life cycle:

- Classification
- Extraction of the information contained in the documents
- Verification of Information against defined business rules
- Location of data or key marks in the document
- Signature detection
- Information processing for its treatment and contextual positioning

The solution that is instrumented as modular, covers the need to treat information contained in documents that, with the technology to date, presented limitations and above all did not allow for the information treatment through linguistic rules that optimizes content processing and therefore not only involves extraction, but is supported by natural language processing, or what is the same in the interpretation of the extracted information.

PUBLIC SECTOR GOOD PRACTICE EXAMPLES

In Asedie we believe that the Public Sector plays a vital role in the information ecosystem, in which the Informediary Sector is a part of, it plays a collaborative role with the Private Sector, complying with the principles of transparency and participation.

The opening of Public Sector data contributes to the promotion of economic development and business security. In the survey carried on those responsible for open data in the autonomous regions, we have been able to confirm that all the participants affirm that knowing about the work carried out by other administrations helps them to improve and meet their own objectives.

After the good reception in the previous edition, once again included in this report are the Public Sector good practice examples, thanks to which the good work carried out by the Administration can be displayed. On this occasion we have requested them from the Canary Islands region, the Spanish National Statistics Institute and the Region of Murcia.

We cannot fail to mention in this section the Autonomous region of Extremadura as a good practice example as it has been the only region to set an example of transparency by publishing ERTES data, in it's DOE (Official Gazette of Extremadura) throughout the Pandemic and until now, this information is of great interest to the Sector and the general public.









Canary Islands

At the beginning 2021 the Canary Islands region launched its Open Data Portal, a single access point in which more than 7,600 datasets are made available to all citizens. It is a project led by the Transparency and Citizen Participation General Directorate, dependent on the Public Administration, Justice and Security department, which has made it possible to combine all of the public information already published in the Canary Islands Statistics Institute (ISTAC) and the Canary Islands Territorial Information System (SITCAN) open data portals under one domain data.canarias.es

Of all this freely accessible public information, more than 7,500 datasets, were initially federated in datos.gob.es, making the Canary Islands, the region that feeds the most data into the national portal, around 20% of the total. In turn, as national data is then published on the European Data Portal, through the launch of <u>datos.canarias.es</u> it is possible for re-users throughout the continent to access and re-use data from the Canary Islands.

The Canary Islands Open Data Portal launch has coincided with the publication, of two of the three sets requested by ASEDIE within its TOP 3 2020. In fact, the Islands have already made the following data public: <u>Industrial land</u> census and <u>Agrarian Transformation Societies register.</u>

Likewise, the Canary Islands have complied with respect to the TOP 3 2019, having made the cooperatives, associations, and foundations data public. Regarding the cooperative dataset, it is worth noting that the <u>annual cooperatives accounts</u> have recently been published on the Canary Islands open data portal and, there is, as well, a <u>search engine</u> for this information.

Apart from the TOP 3 ASEDIE, the Canary Islands is a good practice example after publishing the <u>region budgets</u> in an open and accessible format, launching the <u>regions</u> Government <u>Organization Chart</u> application, or updating the Islands <u>Cultural Agenda</u> monthly.



<u>National Statistics</u> <u>Institute</u>

Over the last year, the <u>INE</u> has focused its efforts on making the best data available to assist decision-making in the difficult circumstances caused by COVID and in creating instruments that allow adequate monitoring of the economic recovery.

The INE also continues to execute its usual statistical plans, including the preparation of both the Agrarian Census and the 2021 Population and Housing Censuses, this is carried out optimally taking advantage of data integration from different sources, which allows for the most efficient way, in terms of economic savings and reduction of burden for citizens, for obtaining this information. In these and other projects, the digitalization of society opens new doors to official statistics production evolution and the INE is approaching this stage with new plans, therefore continuing to be a benchmark in the Spanish data ecosystem.

For this work, through which the INE is promoting the data re-use, that is a great value for both the public and private sectors and citizens alike, it was awarded the <u>Asedie Award 2020</u>.

In short, the INE has been considered as a Public Sector good practice example for carrying out an exemplary function of promoting the opening and re-use of information.



Region of Murcia

General Action Protocol

The <u>Region of Murcia</u> is firmly committed to an open data policy. Thus, the Public Governance Strategy approved in July 2020 sets the roadmap on the matter for the regional Administration in the current legislature, and contemplates several measures aimed at consolidating and advancing in this field.

It fundamentally highlights the creation of an advanced open data catalogue, already in the draft phase, and seeks interoperability and / or intra-reuse of public information through the open data portal once the datasets of interest have already been published according to the feasibility and utility criteria.

In any case, an effective open data policy requires, as a starting point a real and effective opening of the most valuable public databases by Administrations, but it is also necessary for the Private Sector to be able to take advantage of them, exploiting them and generating value-added services for which interconnection tools between the public and private sectors are necessary. In the Region of Murcia, this approach has been sought in 2021 through two actions, firstly, through a training session on the subject dedicated to the business sector, in general, and also the ICT sector, ending with a survey to gage the Sectors position on the matter, organised by Murcia's Regional Confederation Business Organization. Finally, this public-private symbiosis has crystallized in the recently signed <u>General Action Protocol</u> between ASEDIE and the Region of Murcia to promote actions regarding public information re-use.

With the signing of this Protocol, it becomes clear that it is of interest to establish mechanisms to make different datasets to which the region has access, available for the Infomediary Sector in order to promote the opening, access and re-use of information.

CONCLUSIONES

At the end of this edition of the Spanish Infomediary Sector report, we cannot fail to mention the complex situation that we are experiencing both in Spain and internationally, a situation that affects companies and citizens alike. The crisis caused by COVID-19 is having economic and social consequences that are already being noticed. Despite these difficulties, in Asedie we continue to do our part to keep the economic motor moving.

We direct our efforts towards innovation to collaborate in the advancement and proper functioning of both the Infomediary Sector and society in general. As detailed throughout this Report, the Infomediary Sector is represented by 700 companies, employing 21,998 workers and with a subscribed capital (as of December 31, 2020) of \leqslant 311,911,961 This data shows its consolidation as an increasingly relevant Sector in our economy.

We would like to make a call for collaboration between all the actors that make up the Infomediary Sector, so that together we can continue to advance. We believe that it is a joint effort to prevent these difficult circumstances from paralyzing business and economic activity.

We will continue working, as before, throughout this year to maintain our commitment to support and promote the Sector to which we belong, showing its progress in next year's edition.

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