

The communication of innovation carried out by spanish companies in 2016 and 2017 through social networks

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La comunicación de la innovación realizada por empresas españolas en 2016 y 2017 a través de las redes sociales digitales

ABSTRACT RESUMEN

This research focuses on the communication of innovation that companies carry out through the most important digital social networks in Spain. Through content analysis, we study whether companies that have received public R&D&I aid use social media to report the support achieved. The profiles of organizations are observed on seven platforms during a two-year time frame. The study shows that the presence of innovative companies in social networks is modest and that they are hardly used to complement the information and communication requirements, contemplated in the legal reference texts. Taking into account the level of penetration of digital social networks in Spain is higher than the world average and that it is an adequate means to share information of public interest, it would be of interest to include them within the communication obligations. Also, its inclusion would require reflection on the information to be published, when it should be done and what platforms to use.

Esta investigación se centra en la comunicación de la innovación que las empresas realizan a través de las redes sociales digitales (RSD) más importantes en España. Mediante el análisis de contenido se estudia si las compañías que han recibido ayudas públicas de I+D+i utilizan las redes sociales para informar del apoyo logrado. Se observan los perfiles de las organizaciones en siete plataformas durante un marco temporal de dos años. Del estudio se desprende que la presencia de las empresas innovadoras en las redes sociales es modesta y que las RSD apenas se utilizan para complementar los requisitos de información y comunicación, contemplados en los textos legales de referencia. Teniendo en cuenta el nivel de penetración de las redes sociales en España es superior a la media mundial y que se trata de un medio adecuado para compartir información de interés público, sería de interés incluirlas dentro de las obligaciones de comunicación. Asimismo, su inclusión requeriría reflexionar sobre la información que se debe publicar, cuándo debe hacerse y qué plataformas emplea.

KEYWORDS PALABRAS CLAVE

Digital social networks, Diffusion; Business communication; Innovation; R&D

Redes Sociales Digitales; Difusión; Comunicación empresarial; Innovación; I+D+i

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1. Introduction

1.1. Communication of the innovation requested by the CDTI and transparency

Spanish companies have access to different public grants for their research, development and technological innovation projects (R&D). A very important part of this funding is managed by the Center for the Development of Industrial Technology (Centro para el Desarrollo Tecnológico Industrial, CDTI), a Government-Sponsored Enterprise, run by the Ministry of Science, Innovation and Universities.

All of the companies that receive grants from the CDTI must comply with a series of obligations, which include informing the public of the support received (from the CDTI and the European Regional Development Fund [ERDF] funding) and incorporate a brief description on their website, which should be proportional to the support received and should include information about the objectives and results of the project (Vilaplana-Aparicio, MartínLlaguno y Iglesias-García, 2018). Diffusion through social media is not mandatory and it is the companies themselves who decide whether or not they want to use it to increase the impact of their communication activities.

These communication requisites are not an isolated case. All of the companies that receive R&D funding must carry out certain actions that contribute to the public's awareness of the projects. This is established in the legislation that regulates funding in Spain (Law 38/2003, Royal Decree 887/2006, Law 19/2013) and in Europe (Communication from the Commission 2014/C 198/01, Regulation No. 1303/2013; Commission implementing regulation No. 821/2014) to increase the level of transparency in the allocation of funds and the impact of the projects.

Transparency is a fundamental element for the States of the European Union. In Spain, a legal framework regulating transparency and access to information has been drafted (Law 19/2013) and progress has been made with the creation of the Transparency Portal of Spain (Portal de la Transparencia) and the National Subsidies Database (Base de Datos Nacional de Subvenciones), which contain information in relation to the subsidies.

However, Cruz-Rubio (2017), after studying compliance with the Transparency Law, concluded that large companies are

publishing incomplete and dispersed information that differs from one company to another. This coincides with the contributions of Beltrán-Orenes and Martínez-Pastor (2017), who examined the information from the Transparency Portal of Spain and concluded that private entities do not comply with the principles set by the Transparency Law.

1.2. Social media in the world and in Spain

Information and Communication Technologies play a key role in society. Internet access has marked a before and an after and companies are aware that they should have an online presence (Ruiz, 2012).

The data support it: in 2016 there were 3.419 billion people using the Internet worldwide and it has increased to reach 4.388 billion people (We Are Social, 2016; We Are Social, 2019), which means that more than half of the world's population is now online (table 1).

People have greater access to internet, and this translates into a greater use of social media. In 2016 the number of social media users was 2,307 million people and has grown to reach 3,484 billion in 2019, which means that social networks have gone from having a penetration level of 31% to 45% for the same period (table 1).

Facebook is the platform that has more users worldwide, reaching 2,271 million users in 2019, compared to 1,590 million users it had in 2016. In addition, it is ahead of other platforms such as YouTube, Instagram, Twitter or LinkedIn (We Are Social, 2016 y 2019).

In Spain, according to the latest data recorded in January 2019, there is also a significant increase, since it has gone from having 22 million users in 2016 to having 28 million in 2019. That is, during the last four years the number has increased percentage of penetration of social networks to achieve 60% (table 2).

Unlike what happens worldwide, social networks with more Spanish users since 2017 are YouTube and Facebook (table 3), followed by other social networks such as Instagram, Twitter, Google +, LinkedIn and Pinterest (We Are Social, 2016, 2017, 2018 and 2019).

	2016	2017	2018	2019
Internet users	3.419 billions	3.773 billions	4.021 billions	4.388 billions
Digital social networks users	2.307 billions	2.789 billions	3.196 billions	3.484 billions
% Penetration of digital social networks	31%	37%	42%	45%

Table 1. Users of digital social networks during the last four years. Authors' adaptation from We Are Social (2016; 2017; 2018; 2019).

	2016	2017	2018	2019
Digital social networks users	22 millions	25 millions	27 millions	28 millions
% Penetration of digital social networks in Spain	48%	54%	58%	60%

Table 2. Users of social networks in Spain during the last four years. Authors' adaptation from We Are Social (2016; 2017; 2018; 2019).

There is no doubt that "social networks are still in great shape" in Spain (IAB, 2017, p. 10).

1.3 Social media in the business world

Social media is also changing the way companies communicate, as they have the ability to personalize messages and interact with their customers. Companies, aware of the growth of activity on social media, are incorporating it into their marketing strategy due to its low cost and popularity. However, at present, the use of these networks by companies still "responds more to a token presence than a true space of participation with user communities", because, in general, both the update frequency and interaction are low (Sixto, Aguado and Riveiro, 2017, p. 65).

According to a study by *Fundación Telefónica* (2014) focused on micro-enterprises, Facebook is the best known and most widely used social network in the business environment, followed by Twitter and LinkedIn, the other two most used platforms. Nonetheless, all of the networks are not used for the same purpose. Although Facebook is the best known platform, Twitter is used in greater proportion for professional purposes and LinkedIn is the social network where the most companies are present with a solely professional account. In addition, entities with a presence on more than one social network (57%) predominate.

Such is the effect of social media on company growth, that specialists like Andreu (2015) consider that these networks will change the way in which companies relate to their custo-

mers for the following reasons:

- The *stakeholder engagement* or way in which companies communicate with their groups of interest. Now they have the possibility of interacting with a greater group of people and promoting their products worldwide.
- Connecting with customers. Social media provides opportunities to expand the conversation because it is immediate, enabling the creation of more personalized, more efficient and more agile *help-desks*.
- Social media favors the identification of risks that may have a negative impact on the reputation of the company and also enables the company to react immediately to them.

Despite the boom caused by social media, there are still many companies with a limited social networking domain. In this sense, Uribe, Rialp and Llonch (2013) believe that the creators of public policies and the agencies that promote the creation of companies and business development should develop courses and actions that help companies become more proficient in social media.

1.4. The use of social networks for the dissemination of content

The use of social media for the dissemination of content has also been studied from a scientific perspective. Guallar *et al.* (2016) investigated the role of social media in the consumption of current information and conclude that social networks are seen as an appropriate space to share news and information

	2016	2017	2018	2019
YouTube	Not available	74%	73%	89%
Facebook	44%	71%	69%	82%
Instagram	15%	37%	40%	54%
Twitter	24%	44%	39%	49%
Google +	21%	35%	32%	No longer exists
LinkedIn	14%	29%	27%	31%
Pinterest	9%	23%	22%	28%

Table 3. Active users in Spain of global social platforms during the last four years. Authors' adaptation from We Are Social (2016; 2017; 2018; 2019).

on matters of public interest.

Furthermore, Lopez-Pérez & Olvera-Lobo (2016) examined the use that research centres and public universities make of Facebook, Twitter and YouTube to disseminate their research. The authors explain that, although the Internet is beginning to be used to "converse" with citizens, this dialogue is not productive with respect to interaction or in the dissemination of scientific results, due to the low connectivity of the profiles since they represent a minimal part of the publications.

Likewise, Zamarra (2015) analyzed the presence of the leading Spanish newspapers on social networks and stated that "social media has radically disrupted the media landscape", forcing them to adapt to social networks. This change has led users to become their own "transmitters of information in real time" (p. 155).

1.5. Use of social media in other fields

However, there are other indications that demonstrate the importance of social media on public opinion. Its use has been key in political campaigns, as in the case of Trump in the USA (Rodríguez-Andrés, 2018) or the Chilean student movement (Bacallao-Pino, 2016). It has also allowed political parties "to know their supporters and their main problems or concerns and expectations, as well as their impression of the candidate" (Alonso, 2016, p. 111).

In Spain, regional parliaments have also gradually incorporated social media "as a way of promoting a more direct communication with citizens" (Rodríguez-Andrés & Álvarez-Sabalegui, 2018, p. 1001). However, "most of the profiles are still being used with the priority objective of serving as platforms for the unidirectional dissemination of information" (p. 1002).

Social networks have also been crucial in raising awareness about problems or causes and spreading social movements, like when "#ShoutYourAbortion" was created on Twitter to combat the stigma associated with the medical procedure of abortion (Ahmed, 2018).

Taking into account the influence of social media and communication obligations set by the CDTI, this article seeks to determine whether it is being used as a means to publicize R&D projects. Publication on social media is not a requirement, but given its relevance, it is essential to know if it is being used in a complementary manner.

2. Objectives

The purpose of this study is to determine which social networks are used by the companies that receive funding from the CDTI and if they are used to inform the public about the innovations developed by them. Specifically, it aims to:

describe the companies' presence on Facebook, Twitter, Instagram, YouTube, Pinterest, Google + and LinkedIn; know the date of creation of the profile, number of followers, publication activity, if social media is used to provide information on CDTI financing and, if so, the content published and whether the same message was posted throughout all of the networks; and study the differences observed between the different networks.

3. Methodology

The research focuses on the companies that received funding from the CDTI in January 2016 (CDTI, 2016). A total of 70 projects were supported during this period, carried out by 65 companies (annexed 1). For the analysis, a 24-month reference period was used (from January 2016 to December 2017), taking into account that each type of CDTI funding has a different duration: R&D projects (12 to 36 months); CDTI innovation projects (18 months); NEOTEC projects (12 to 24 months); Innovación Global projects (up to 24 months); *Estratégicos Cien* projects (36 to 48 months); and Interempresas Internacional projects (12 to 36 months). This way, the company would have obtained its first significant results or would have completed the initiative during the period studied.

The location of the company profiles on social media was determined by observing the presence of a direct link on their websites. A direct search was also performed on each social network, using the name of the company or registered trademark.

Specifically, the nine variables listed in table 4 were observed.

In addition, content analysis was used, a technique that allows the rigorous and systematic study of the nature of the messages (Krippendorff, 1990). In order to identify the publications

Variable	Result
The entity has a presence on the social network	Yes/no
Number of social networks on which the entity has a presence	No.
There is content on the social network	Yes/no
Date of creation	Year
Followers	No.
Likes	No.
Publications during the period	No.
Publications that make reference to the project	Yes/no
Interactivity of the publications related to the project	No. of likes Times shared

Table 4. Summary of variables studied. Authors' own elaboration.

linked to the funding, the appearance of the terms: *innovación*, *investigación* and *desarrollo e I+D* (innovation, research and development, R&D) was verified in Spanish and English. It was also observed whether these words were accompanied by mention of the terms CDTI or FEDER (ERDF) (origin of part of the funds).

4. Results

4.1 Presence on social networks

The companies studied had little presence on the social networks of reference in Spain: Facebook, Twitter, Instagram, YouTube, Pinterest, Google + and LinkedIn. As shown in Figure 1, 26.2% of the companies did not have a profile on any social network, only 20% had a profile on one and 9.2% were present on two. 35.4% of the companies had profiles on more than three platforms and 1.5% had profiles on all of the social networks examined.

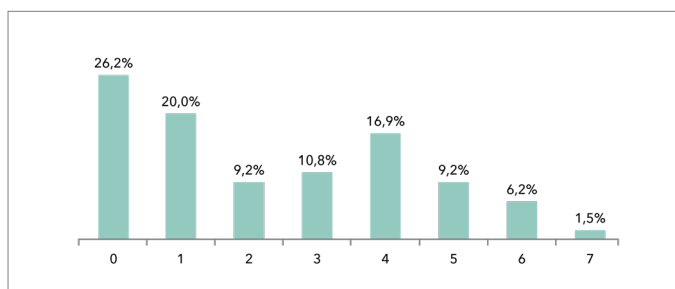


Figure 1. Presence on social networks. Authors' own elaboration.

4.2. Communication through Facebook

Of the 65 companies studied, 43.1% had their own profile on Facebook, 44.6% had no profile, 10.8% did not have their own profile, but used the corporate group's profile, and 1.5% had a profile with headquarters in another country.

The number of followers varied among the companies (Figure 2). 57.2% of the entities examined had less than 500 followers, 14.3% had between 501 and 1000 and 28.6% had more than 1,000.

In absolute terms, during the period studied, companies that published more than 60 posts predominated (50%), followed by companies that published between 0 and 20 (35.7%), between 21 and 40 (7.1%) or between 41 and 60 (7.1%).

If we take the monthly average into account, it can be observed that 82.1% of the companies published less than 20 posts per month on Facebook and only 3.6% made between 41 and

60 posts (Figure 3).

In all, 5,891 posts were reviewed and only Linkcare Health Services, S.L. published a post directly related to the project (Figure 4), with a very low level of interactivity (1 Like). The post did not contain the title of the project, but named the CDTI, displayed its logo and a link to its profile.

Although only one entity published a post directly related to the project, a total of five companies published posts related to other CDTI projects during the period studied (Blue Soste-

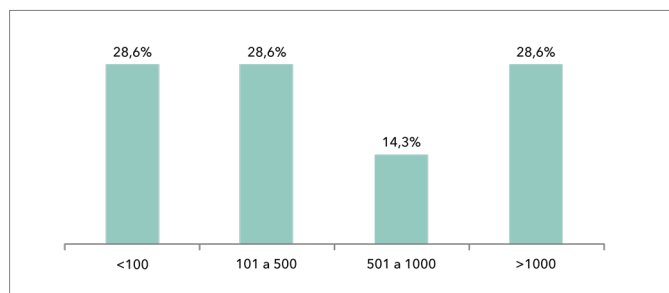


Figure 2. Number of followers on Facebook. Authors' own elaboration

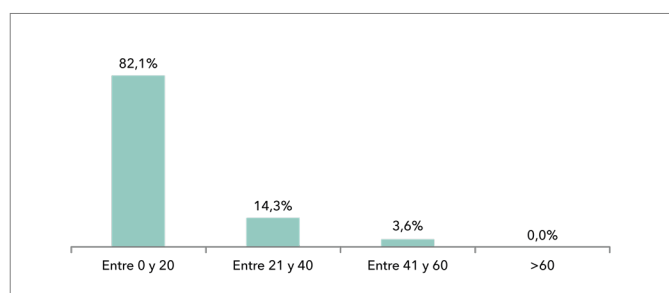


Figure 3. Monthly average of publications on Facebook during the period studied. Authors' own elaboration.



Figure 4. Facebook post related to the project from Linkcare Health Services, S.L. Source: Linkcare profile on Facebook.

nible S.L; Thales Programas de Electrónica y Comunicaciones S.A; Calaf Tecniques Industrials S.L; Angulas Aguinaga S.A; and Compañía Española de Petróleos, S.A.U.).

4.3. Communication via LinkedIn

This social network is one of the most commonly used platforms. 58.5% of the companies had profiles on LinkedIn, although only 52.6% made "updates" with content. The number of followers was slightly higher than that observed on Facebook and Twitter, since more than 44.8% of the companies exceeded 500 followers.

During the 24 months studied, 55% of the sample that published content had an activity equal to or less than 20 updates, 20% published between 21 and 40 posts, and 25% published more than 60 updates.

Verdimed, S.A. was the only company that made a publication related to the funded project in July 2017 (Figure 6) which had 12 recommendations and a comment. The post included the

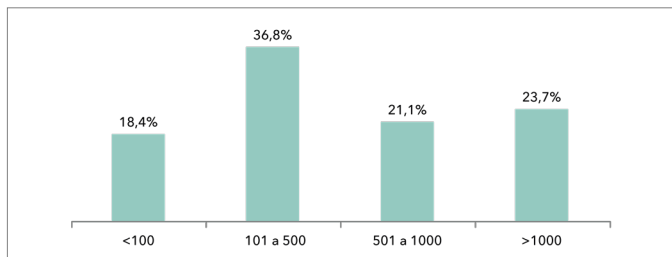


Figure 5. Number of followers on LinkedIn. Authors' own elaboration.



Figure 6. Post on LinkedIn about the Verdimed, S.A. project. Source: Verdimed, S.A, company LinkedIn profile.



Figure 7. Publication on Cepsa's LinkedIn about other CDTI projects. Source: Company's LinkedIn profile.

origin of the funds, the title of the project and the CDTI and ERDF logos.

However, there were entities that published information on their innovation processes in general, or companies such as Compañía Española de Petróleos, S.A.U., which did not post about the supported project, but did post regarding other R&D projects (Figure 7).

4.4. Communication via Twitter

43.1% of the sample had its own profile on Twitter, while 44.6% had no profile and 12.3% of the entities did not have their own profile, but used their corporate group profile (such as Grupo Siro, IVI Murcia or Vector Software Factory) or the profile of another company linked to it (Grupo Rimar with Suavinex).

In the case of Twitter, it is possible to know the date of creation of the profiles and an average age can be observed, as 86.7%

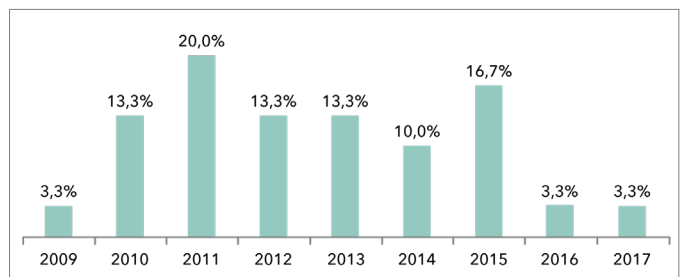


Figure 8. Date of creation of the profiles on Twitter. Authors' own elaboration.

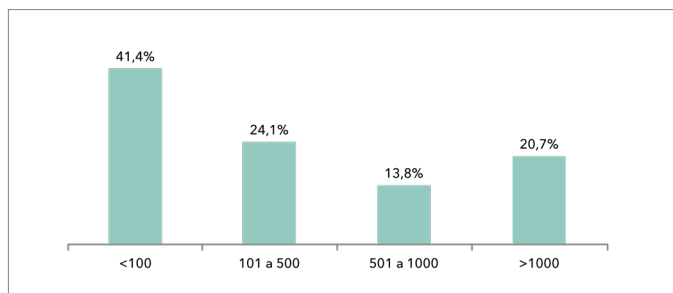


Figure 9. Number of followers on Twitter. Authors' own elaboration.

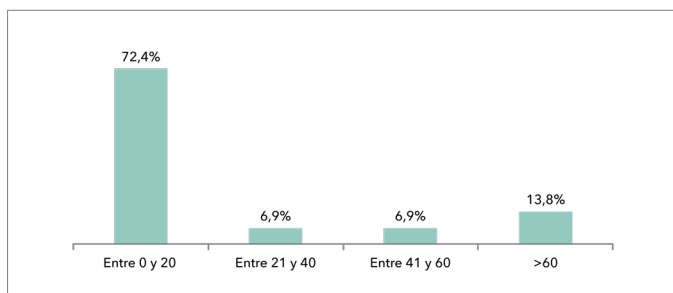


Figure 10. Average monthly publications on Twitter. Authors' own elaboration.

of the profiles were created between 2010 and 2015 (Figure 8).

With respect to the number of followers, it can be observed that on Twitter, 65.5% of the companies had less than 500 followers, while they reached 57.2% on Facebook (Figure 9).

In general, half the posting frequency was observed. 64.3% published more than 60 tweets during the 24 months studied, 32.1% made between 0 and 20 and 3.6% between 41 and 60.

If the monthly average is studied, it can be seen that 72.4% of companies published less than 20 tweets per month and only 13.8% published more than 60 per month (Figure 10).

Of the 14,680 tweets revised, no tweets related to the projects were found. In addition, the lack of publications prevents the possibility of verifying whether the same message was transmitted on the two most popular social networks, Facebook and Twitter.

If we look at the number of followers of the companies that have a presence on both social networks, we can see that the companies have more followers on Twitter than on Facebook (52.6%). However, in the case of the most active entities, with presence on both networks, the number of followers is far superior on Facebook (Blue Sustainable S.L. 6,098 followers on Twitter and 16,221 on Facebook; Lacasa, S.A. 8,640 on Twitter and 77,318 on Facebook; and Compañía Española de Petróleos, S.A.U. 14,400 on Twitter and 63,800 on Facebook).

4.5. Communication via YouTube

YouTube is another one of the most popular platforms, as the

companies' presence reached 47.7%, with 93.5% of the entities publishing content. In addition, 16.9% of the sample had no YouTube profile of its own, but used the profile of its corporate group.

YouTube allowed us to know the date of incorporation into the platform (Figure 11). However, this data was not available for 50% of the cases; however, it was possible to use the date of the first video as a reference. Considering this limitation, it was observed that 58.1% of the profiles were created over the last three years and only 19.4% are more than five years old.

The number of followers was lower than that registered on Twitter or Facebook. On YouTube, 74.2% of the entities had less than 100 followers, 6.5% were between 101 and 500 and 3.2% had more than 1000. In addition, this data was not available for 16.1% of the cases (Figure 12).

The publication frequency is low in comparison with the previously mentioned social networks. More than 87% of the companies published twenty videos or less over the 24 months

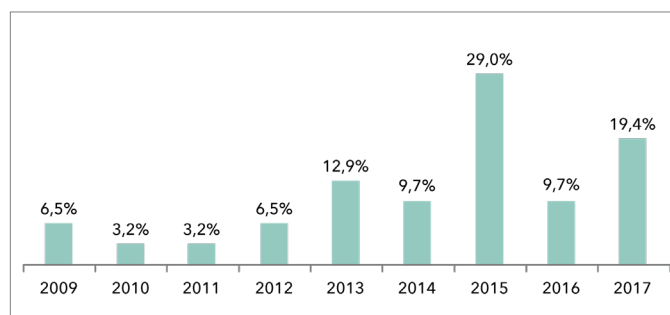


Figure 11. Date of incorporation into YouTube. Authors' own elaboration.

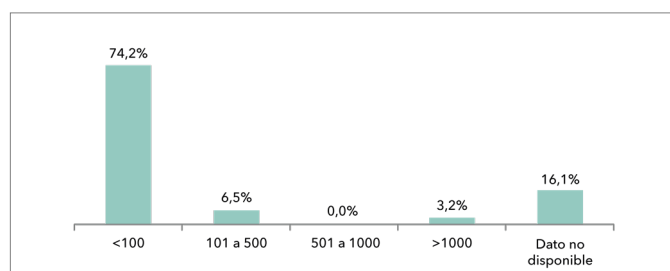


Figure 12. Number of followers on YouTube. Authors' own elaboration.

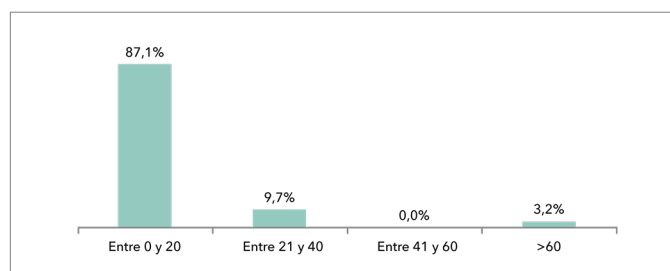


Figure 13. Videos posted on YouTube. Authors' own elaboration.

ths studied. Only 3.2% published more than 60 videos.

This network contained no posts related to the funded projects; however, there were companies, such as SPB or Cepsa, that published information about their innovations in general.

4.6. Communication via Instagram

9.3% of the companies examined had a profile on Instagram, while 81.5% had no presence, or had presence through the corporate group's profile (7.7%) or a profile in another country (1.5%). In addition, not all of the companies with profiles had content, as 16.7% had not published posts.

On the other hand, none of the companies exceeded 500 followers on this platform. 50% had less than 100 followers, the other 50% had between 101 and 500, and the company with the most followers had 362.

Looking closer at the activity, it can be seen that it was very low. Only four companies posted publications between January 2016 and December 2017 and no entity made more than 100 posts during those 24 months. Three companies published between 21 and 40 posts and only one published more than 60. In no case was this network used to notify followers of the funding received from the CDTI.

4.7. Communication via Pinterest

The percentage of entities that communicate via Pinterest was very low. Only 5 companies (7.7%) had their own profile, one entity centralized its communication through its parent company (Siro El Espinar) and another had centralized it through another company (Lacasa).

The number of followers is low on this platform. 80% of the companies had less than 100 followers and only one company, Aqua E-Solutions, S.A., exceeded 600.

Taking the total number of pins of each company into account, a significant difference was observed. Aqua E-Solutions, with more than 3,000 pins, and Angulas Aguinaga, with 979, were the companies with the greatest activity. The rest of the companies pinned less than 350 times.

A total of 4,737 pins were examined and none of the pins were related to the project supported by the CDTI.

4.8. Communication through Google +

Of the entities studied, 21.5% had a profile on Google + (this included a company with a private community), 66.2% did not have profiles, 6.2% centralized their communication through the corporate group profile and the other 6.2% had profiles from other countries. However, 28.6% of the companies with profiles did not post content (Farmalider, Industrias Meta-

lúrgicas Jem and Singular Meaning) or could not be accessed (Cepsa's private community).

With the exception of Cepsa and Bluemove Carsharing, with 297 and 126 followers respectively, the rest of the entities had less than 15 followers. It should be pointed out that there was no data available on the number of followers for Aqua E-Solutions or Hidro Rubber Ibérica.

The publishing activity on this platform was very low. 90% of the companies published less than ten posts. The only company that registered a higher number of posts was Aqua E-Solutions with 44 publications.

No entity used this social network to provide information regarding the support received by the CDTI.

4.9. Comparison between social networks

Taking into account the data collected (table 5), it can be observed that LinkedIn was the social network with the most company profiles followed by YouTube, Facebook, Twitter, Google +, Instagram and Pinterest. However, about 47% did not use these profiles to publish news.

In relation to the followers, LinkedIn (44.7%) and Facebook (42.9%) were the social networks where companies had more than 500 followers, while Pinterest and Google + were those with the least followers.

Considering the number of publications, there was a big gap between Twitter and Facebook with respect to other networks such as Google + or YouTube, where very few posts were made.

In closing, only the Facebook and LinkedIn platforms were used by the companies for the purpose of providing information related to the supported projects and, since they are separate entities, it is impossible to verify whether the same message was transmitted by the companies throughout the different social networks.

5. Discussion and Conclusions

Previous studies have shown that digital social networks are a useful space to conduct a productive conversation with the population and promote their participation in matters of public interest (Rodríguez-Andrés y Álvarez-Sabalegui, 2018). In addition, it has also been established that social networks have a great influence on the spreading of social movements (Bacallao-Pino, 2016; Ahmed, 2018). Such is their importance that both companies and public administrations are using them to improve their dialogue with the public and are incorporating them progressively into their communication plans.

However, the data provided in this research shows that the presence of innovative companies on social networks is

	Facebook	Twitter	Instagram	YouTube	Pinterest	Google +	LinkedIn
* Company's own profile	43.1%	43.1%	9.2%	47.7%	7.7%	21.5%	58%
* Profile with content	89.3%	89.3%	83.3%	93.5%	100%	71.4%	52.6%
* Followers							
< 100	28,6%	41,4%	50%	74,2%	80%	71,4%	18,4%
101 a 500	28,6%	24,1%	50%	6,5%		14,3%	36,8%
501 a 1000	14,3%	13,8%			20%		21,1%
> 1000	28,6%	20,7%		3,2%			23,7%
Data not available				16.1%		14.3%	
* Total publications over the 24-month period							
Between 0 to 20	35.7%	32.1%	20%	87.1%	20%	90%	55%
> 20 and < 40	7.1%		60%	9.7%			20%
> 40 and < 60	7.1%	3.6%				10%	
> 60	50.0%	64.3%	20%	3.2%	80%		25%
* Related posts	1	0	0	0	0	0	1

Table 5. Summary of the main variables studied by social network. Authors' own elaboration.

modest, coinciding with the contributions of Sixto, Aguado and Riveiro (2017), despite the fact that it is a good place to share news of public interest (Guallar *et al*, 2016).

The companies practically did not use social media to inform regarding the research projects supported by the CDTI. Therefore, it can be concluded that the dialogue between innovative companies and the general public continues to be very low, as is the case with the dissemination of research in universities (López and Olvera, 2016).

The level of penetration of social networks in Spain is higher than the world average and is recording significant growth (We Are Social, 2018). Therefore, their inclusion within the requirements of communication determined by the CDTI could have a greater impact on dissemination. Likewise, the concretization of the contents to be published and the platforms used would have a positive effect on the effectiveness of the communication.

In the same direction, the support of public institutions in defining and implementing the communication policy through social networks has been considered to be useful in making companies more competitive on social media (Uribe, Rialp and Llonch 2013). In this sense, it is important that the institutions that provide funding support innovative companies in the definition of their online media plan.

In Spain, YouTube, Facebook and Instagram are the social networks with the most users (We Are Social, 2018). However, no studies exist which analyze which social networks are the most suitable for the diffusion of innovation. For this reason,

future lines of research could include the study of which social networks are most suitable for publicizing the results of the research supported by public funds.

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Annex: Companies studied

	Companies
1	Angulas Aguinaga S.A
2	Aperitivos Matarile S.A.
3	Exafan, S.A.
4	Farmalider, S.A.
5	Iniciativas Alimentarias S.A.
6	IVI Murcia S.L.
7	Laboratorio Arago S.L.
8	Lacasa, S.A.
9	Linkcare Health Services S.L.
10	S.Coop. Agrícola Aragonesa del Ebro conservación y vida útil de los piensos.
11	Sat Bernaus Petit Num 1130 Cat
12	Siro El Espinar S.L.
13	Vall Companys, S.A.
14	Verdimed, S. A.
15	Fabricante de Contenedores Fadeco, S.A.
16	Filtros Industriales S.L.
17	Fomento de Construcciones y Contratas, S.A.
18	Geotecnia y Cimientos, S.A.
19	Industrias Metalúrgicas Jem S.A.
20	Ingeniería y Equipamientos S.A.
21	Sacyr Construcción S.A.
22	Talleres Mecacontrol ,S.L.
23	Vak Kimsa, S.A.
24	Aqua E-Solutions, S.A.
25	Blue Sostenible S.L.
26	Cirprotec, S.L.
27	Entelgy Consulting S.A.
28	Gamesa Electric Power Systems S.L.
29	Hotwords España S.L.
30	Lazarus Technology S.L.
31	Luz Wavelabs S.L.
32	Mier Comunicaciones, S.A.
33	Professional Answer S.L.
34	Robot, S.A.
35	SHS Consultores, S.L.
36	Singular Meaning S.L.
37	Thales Programas de Electrónica y Comunicaciones S.A.
38	ULma Manutención, S.Coop.

39	Unifit Online S.L.
40	Vector Software Factory S.L.
41	Al Farben, S.A.
42	Andaluza Tratamientos Higiene S.A.
43	Calaf Tecniques Industrials S.L.
44	Castey Global Sociedad Limitada
45	Cobert Tejas Ibérica S.L.
46	Compañía Española de Petróleos, S.A.U.
47	Euroatomizado, S.A.
48	Exclusivas Rimar, S.L.
49	Fundiciones Mecacontrol S.L.
50	Gocam Empresas Plásticas S.L.
51	Hidro Rubber Iberica Sociedad Anónima
52	Ingelia S.L.
53	IQAP Masterbatch Group S.L
54	Panel Fijaciones Sociedad Cooperativa
55	Pavimentos Asfálticos Lario S.L.
56	Plásticos Hidrosolubles, S.L.
57	Practicel S.L.
58	Productos Plásticos Performantes 3P Sociedad Anónima
59	Retineo Ingeniería S.L.
60	Soler & Palau Research S.L.
61	Suavizantes y Plasti cantes Bituminosos, S.L.
62	Tecnoquim del Vallés S.L.
63	Torreid S.A.
64	Urbiliza Renovables S.L.
65	Ursa Insulation S.A.