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ENGAGING STAKEHOLDERS THROUGH FACEBOOK. THE CASE OF GLOBAL COMPACT LEAD PARTICIPANTS

Abstract:

Facebook has deeply modified the way people communicate and interact. From a business perspective, Facebook has enormous potential as a means of communication and stakeholder engagement. It enables companies to share contents rapidly and efficiently with a large number of stakeholders worldwide. People can personalise their Facebook profile to receive updates from selected companies. Moreover, people can reply to such posts or simply manifest their approval by liking or sharing the posts. In this way, people also propagate corporate information among their own friends.

The dramatic diffusion of Facebook should encourage companies to virtually interact with a network of stakeholders 2.0, using Facebook as a stakeholder engagement tool.

The evolution to Web 2.0 goes with a general change in the social and business environment. In today's world, both policy makers and the public expect that companies work in a sustainable way and consult their stakeholders about corporate strategies, operations and performance. The discussion should concern social and ecological cares as well as economic issues. In this sense, the engagement of the Facebook community could considerable enlarge and improve the dialogue.

This paper offers a theoretical and empirical analysis to answer the following research question: do sustainability-oriented companies use Facebook as an effective means of stakeholder engagement? The paper contains an investigation based on UN Global Compact LEAD members, characterised by strong commitment and cooperation with governments, civil society, labour and the UN in order to promote sustainable practices.

To evaluate the contribution of Facebook to the dialogue on sustainability, the investigation considered the types of contents published by the LEAD companies on their Facebook pages in 30 days. According to the subject, seven categories of posts emerged from the analysis: human rights and social citizenship; labour; environment; anti-corruption; strategy, business activity and economic performance; news on products and services; other.

To evaluate the use of Facebook for stakeholder engagement 2.0, the investigation verified how many "likes", comments and "shares" each post received and how often the company replied.

The analysis showed that some LEAD members did not have a Facebook profile, which is unacceptable nowadays. Moreover, the companies with an official page rarely covered all three perspectives of sustainability (social, environmental, and economic issues). Furthermore, companies rarely replied to stakeholders' comments.

Based on the empirical evidence, most LEAD participants should modify the way they used Facebook. Therefore, the results of this research may help them improve stakeholder engagement 2.0.

Keywords:

JEL Classification: M14, D83, Q56

Introduction

Web 2.0 and social media have deeply transformed the way people collect information, communicate and interact.

From a business perspective, social media offers enormous opportunities to companies to improve communication and stakeholder engagement: companies can rapidly and efficiently share content with a large number of stakeholders worldwide, and internet users can personalise their social media profiles to receive updates from selected firms. Moreover, people can comment messages, pictures and videos the companies have published or simply express their appreciation by liking or sharing content. In doing so, people also propagate corporate information among their online friends. This gives rise to a network effect that benefits or damages a company's image, according to the comments divulged online.

The dramatic diffusion of social media should encourage a virtual interaction between firms and "stakeholders 2.0". In other words, companies should conveniently use social media, and especially social networks, to engage stakeholders.

The evolution to Web 2.0 goes with a general change in the social and business environment. In today's world, both policy makers and the public expect that companies work in a sustainable way and consult their stakeholders about corporate strategies, operations and performance. Specifically, the discussion should concern social and ecological cares, as well as economic issues. In this regard, engaging online communities could considerably enlarge and improve the dialogue on sustainability at a very low cost.

The business use of social media and the impact on corporate success have abundantly been analysed in the past. The literature emphasised the challenges and opportunities for companies related to social media (Kaplan and Haenlein, 2010), as well as the factors through which social media affects a company's financial, operational and social performance (Paniagua and Sapena, 2014). Other studies considered the link between firms' social media communication strategies and the formation of corporate reputation in the online environment (Floreddu, Cabiddu and Evaristo, 2014). Scholars also stressed how to effectively manage brand profiles on social networks (Pereira, de Fátima Salgueiro and Mateus, 2014) and how to communicate on Facebook in order to strengthen fans' loyalty to a brand (Gamboa and Gonçalves, 2014).

Similarly, the literature includes many studies about the use of the internet for disseminating sustainability information (Rikhardsson, Andersen, Jacob and Bang, 2002; Isenmann, 2004), often characterised by a country-based (Adams and Frost, 2006; Gill, Dickinson and Scharl, 2008; Bolívar, 2009; Herzig and Godemann, 2010) or sector-based approach (Dickinson, Gill, Purushothaman and Scharl, 2008; Morhardt, 2010).

The aim of this paper is to combine the aforesaid research fields, as already done in previous studies (Jones, Clarke-Hill, Comfort and Hillier, 2013; Reilly and Hynan, 2014; Cmeciu and Cmeciu, 2014), in order to provide evidence of the use of social networks for disseminating sustainability information. In particular, this paper emphasises the contribution of social networks to stakeholder engagement in sustainability-oriented companies, which should permanently manage a profitable dialogue with their stakeholders.

In light of the above, the paper is structured as set out below.

The first part develops a theoretical analysis, complemented by some statistics. The second section illustrates the concepts of Web 2.0 and social media and underlines how communication has evolved in the online environment. The third section offers statistics on social media penetration, focusing on social networks. The fourth section explains how companies use social networks to communicate with online publics and to engage stakeholders. The fifth section introduces the concept of sustainable development and highlights the advantages for companies of posting economic, social and environmental information on their social network accounts.

The second part focuses on an empirical investigation based on Global Compact LEAD participants. These latter are selected sustainability-oriented companies in relation to which the paper's sixth section discusses the use of Facebook for creating an effective dialogue with online stakeholders.

The paper's last section contains some final considerations, according to the results of the empirical analysis.

Web 2.0 and social media: A new model of communication

Web 2.0 and social media are often presented as an evolution of the World Wide Web. Web 2.0 has caused a radical shift in online communication, consisting in a different way to use the internet and supported by technological progress and diffusion. In Web 2.0, anyone can create new content and modify what has been published by other internet users, acting in a collaborative and participative way (Kaplan and Haenlein, 2010).

According to Constantinides and Fountain (2008), "Web 2.0 is a collection of open-source, interactive and user-controlled online applications expanding the experiences, knowledge and market power of the users as participants in business and social processes".

In Web 2.0, internet users are no longer passive readers of online information, but active content generators. Indeed, Web 2.0 enables internet users to create, share and comment content; moreover, these activities are usually free of charge.

Web evolution has prompted a new model of online communication, defined as many-to-many, in contrast to the previous model of one-to-many communication (Kent and Taylor, 2002; Kotler, Kartajaya and Setiwan, 2010; Baue and Murninghan, 2011; Gamboa and Gonçalves, 2014). In other words, social media dialogue has replaced broadcast media monologue (Pitt, 2012).

This change significantly influenced corporate communication. Before Web 2.0, companies used to have strong control on their communication, thanks to selected announcements and good public relations managers (Kaplan and Haenlein, 2010). Originally, companies could choose the content to divulge on the internet, especially on their official sites. According to the one-to-many model of communication, companies prepared and disseminated the information, while their stakeholders merely retrieved it. When an individual wanted to reply to the company, express opinions or obtain further information, a phone call, an e-mail or a letter to the firm was necessary. Therefore, receivers of information usually preferred remaining passive, unless they had to safeguard their personal interests. In any case, their messages rarely went public.

In contrast, the advance of Web 2.0 has permitted all internet users to interact immediately and, most of all, publicly with companies. In this sense, any internet user operates as a content generator whose questions and opinions reach not only the company, but also all other internet users connected to the latter, as a consequence of the aforementioned many-to-many model of communication.

In Web 2.0, internet users are both content consumers and producers at the same time (Laick and Dean, 2011) and they add value to the websites that allow them to do so (Pitt, 2012). They are active contributors, who help customise technology and media for their own purposes and for those of their communities (Sakraida, Spotanski and Skiba, 2010).

From a technological perspective, the diffusion of Web 2.0 depends on social media. Social media is a set of applications and tools that enable internet users to produce and exchange many kinds of content (such as texts, pictures, music and videos), collaborate and develop relationships in a virtual community (Kaplan and Haenlein, 2010; Murthy, 2013). Social media identifies a group of channels that facilitate online dialogue and interaction, because they are easily accessible to a large number of users (Brogan, 2010; Zarella, 2010). Social media comprises several applications, such as social networks, blogs and microblogs, communities, forums, content aggregators, wikis, and social bookmarking (Constantinides and Fountain, 2008; Reilly and Hynan, 2014).

Social networks, like Facebook and MySpace, are online communities that enable internet users to connect with individuals they already know, but also with people beyond their social circle (Chen, Lu, Chau and Gupta, 2014). On social network sites, internet users can activate a public (or semi-public) account and select other users (called friends) to share content with; so, they can establish virtual relationships with such people

and become aware of their connections with other users within the same platform (Boyd and Ellison, 2008).

A blog, short for web log, is a sort of online diary created and updated by one or more internet users. A blog is composed of entries, named posts, appearing in reverse chronological order and consisting in texts, audio and video content, and links. Microblogs are a sub-category of blogs imposing small size of content and brevity of messages to the users. Twitter and Tumblr are the most popular microblogs.

An online community is a cyberspace domain where people interact to achieve different purposes (Chen, Lu, Chau and Gupta, 2014), such as:

- sharing information on a certain topic they are interested or expert in (interest communities);
- providing or collecting commercial information (transaction communities);
- making role-playing games online (fantasy communities).

An internet forum is similar to a message board where individuals, registered or not, can contribute to conversations (known as topics, or threads), usually related to a specific subject or special interest.

Content aggregators are applications through which an internet user collects and customises data from different sources, such as online newspapers and blogs, to have an easier consultation of diverse content from a unique position.

A wiki is a "collaboratively created and iteratively improved set of web pages" (Wagner, 2004). A wiki is an open-editing web platform in which anyone can create, integrate, modify and delete content at any time (O'Bannon and Britt, 2011). Consequently, the most recent version of a document reflects the cumulative efforts of successive authors (Arazy and Gellatly, 2012). Wikis encourage knowledge sharing thanks to interaction and cooperation among people, also enabling distant collaboration (Wiewiora, A., Trigunarsyah B. and Murphy, 2011). Wikipedia is the best-known public wiki.

A social bookmarking service, such as Delicious, is a website that enables users to bookmark webpages they like. Bookmarks are useful to easily find the same pages in the future, make them known to other people and categorise their content by tags (i.e. words or phrases that summarise the meaning of a page). Thanks to social bookmarking, individuals can search on a certain tag to retrieve content previously identified as interesting and convenient (Benbunan-Fich and Koufaris, 2010; Bogers and van den Bosch, 2011; Gray, Parise and Iyer, 2011; Yang and Lee, 2014).

Statistics on the use of social networks

In recent years social media has reached a shocking extent of diffusion, specifically due to social networks. It is estimated that the number of social network users will probably

increase from 970 million in 2010 to 2.44 billion worldwide in 2018 (Statista, 2015a). Therefore, one third of the world population will use social networks within three years.

At present, the percentage of individuals with an active account on top social networks vary from region to region between 58% in North America and 4% in Central Asia. The global average is 29% (Kemp, 2015) (Table 1).

Table 1: Top social network use by region, 2015

	Active social media accounts, in million	Active social media accounts *vs* total population
North America	206	58%
Central America	79	37%
South America	197	48%
West Europe	197	47%
East Europe	190	45%
Middle East	41	17%
Central Asia	3	4%
South Asia	157	9%
East Asia	690	45%
South-East Asia	199	32%
Africa	103	9%
Oceania	45	17%

Source: based on "Digital social & mobile in 2015. We are social's compendium of global digital statistics", by S. Kemp, 2015.

A survey was conducted in September 2014 in order to analyse the use of five social media (Facebook, LinkedIn, Pinterest, Instagram, and Twitter) by American adults (Duggan, Ellison, Lampe, Lenhart and Madden, 2015). With reference to the three-year period 2012-2014, the survey revealed a progressive increase in the use of all the social media observed. Moreover, the survey highlighted a significant presence of all age groups on the five social media websites; in particular, 56% of online adults (i.e. adults who used the internet) aged 65 and older used Facebook.

According to the same investigation, Facebook was the most popular social media. In 2014, 71% of online adults, representing 58% of the entire adult population, were on Facebook and logged in every day. 28% of online adults used LinkedIn, a social network connecting professionals and graduate students. Pinterest and Instagram, two famous social networks for photo and video sharing, reached similar percentages (28% and 26% respectively), followed by Twitter (23%) (Table 2).

In 2014, 52% of online adults used two or more social media, compared with 42% who did so in 2013. This multi-platform presence often consisted in the use of Facebook, considered as the "home base", in combination with other social media websites (Table 3).

Table 2: Use of social media by American adults, 2012-2014

	Online American adults using social media			Social media users among the total American adult (18+) population in 2014
	2012	2013	2014	
Facebook	67%	71%	71%	58%
LinkedIn	20%	22%	28%	23%
Pinterest	15%	21%	28%	22%
Instagram	13%	17%	26%	21%
Twitter	16%	18%	23%	19%

Source: based on "Social Media Update 2014", by M. Duggan, N.B. Ellison, C. Lampe and A. Lenhart, 2015, and Madden, M. (2015), Pew Research Center.

Table 3: Social media matrix

	use Twitter	use Instagram	use Pinterest	use LinkedIn	use Facebook
% of Twitter users who …	-	58%	42%	47%	91%
% of Instagram users who …	52%	-	47%	38%	94%
% of Pinterest users who …	34%	43%	-	40%	88%
% of LinkedIn users who …	39%	35%	40%	-	86%
% of Facebook users who …	29%	34%	34%	33%	-

Note: any row of the table shows the percentage of users of each particular site who use another particular site.

Source: based on "Social Media Update 2014", by M. Duggan, N.B. Ellison, C. Lampe, A. Lenhart and Madden, M., 2015, Pew Research Center.

Many other studies stressed the popularity of Facebook. Moreover, the large use of this social network all over the world is also proved by the official data disseminated by Facebook Inc. itself in its quarterly reports. Table 4 shows the constant increase of Facebook daily active users (DAUs) on a quarterly basis from 2013 to 2015.

Table 4: Facebook daily active users (DAUs) from 2013 to 2015 – in millions

Year and quarter	DAUs in US and Canada	DAUs in Europe	DAUs in Asia-Pacific	DAUs in Rest of World	DAUs worldwide
2013 Q1	139	179	167	180	665
2013 Q2	142	182	181	195	699
2013 Q3	144	188	189	208	728
2013 Q4	147	195	200	216	757
2014 Q1	150	203	216	233	802
2014 Q2	152	206	228	244	829
2014 Q3	155	212	242	256	864
2014 Q4	157	217	253	263	890
2015 Q1	161	225	270	280	936
2015 Q2	164	228	285	292	968

Note: Europe includes Russia and Turkey and Rest of World includes Africa, Latin America, and the Middle East.

Source: based on Facebook Inc.'s Form 10-Q (Quarterly Report) for the period ending on 30 June 2015.

Facebook has high potential for content sharing and relationship development, due to its growing diffusion worldwide. A research calculated that, in February 2014, every US

Facebook user had 350 Facebook friends on average (Statista, 2015b). This high number was certainly influenced by the possibility to create relationships on Facebook with people unknown in the real world. In this regard, the above-mentioned survey on the use of social media by American adults (Duggan et al., 2015) emphasised that many Facebook friends (39%) had never met in person. Despite this fact, Facebook friends shared information online, facilitating the circulation of content on the web beyond their real social circle.

Social networking and stakeholder engagement 2.0

The success of Facebook and the other social media, due to their penetration among internet users all over the world, has sped up the evolution of corporate communication. Realising the high potential of web-based applications for the interaction with broader publics, many companies have joined social media websites to engage in a dialogue with their stakeholders. So, businesses of any size are nowadays involved in the social networking phenomenon.

The above-mentioned statistics show that being present on social networks offers a firm the possibility to timely interact with people of all ages. Moreover, an organisation which intends to differentiate messages for young people and adults can do it at very low cost, by means of separated corporate accounts on social media containing topics of interest for different groups of ages. In this regard, it is sufficient to notice that social media communication is much cheaper, quicker and more efficient than traditional communication (Kaplan and Haenlein, 2010).

As social media websites work as an amplifier of word of mouth (Patnaik, 2011) overcoming space and time barriers, both large companies and small businesses can take advantage of this. Firms use social media for many reasons (Floreddu et al., 2014; Gamboa and Gonçalves, 2014; Pereira et al., 2014; Reilly and Hynan, 2014):

- to provide information on goods, services and special offers, to increase brand awareness and to reply to current and potential consumers' questions;
- to highlight their financial performance and to raise investors' interest;
- to advertise vacant job positions;
- to educate stakeholders about social matters and environmental protection;
- to discuss local events on a global scale and to offer a reinterpretation of global facts through the lens of local culture;
- to collect stakeholders' opinions and suggestions;
- to manage stakeholders' consent and corporate reputation.

According to a Eurostat survey (Giannakouris and Smihily, 2013), about 30% of EU enterprises used one or more social media profiles in 2013: that often happened in addition to managing their own corporate website. More exactly, 28% of EU firms had an

account on at least one social network (such as Facebook, LinkedIn, and Xing), 11% used multimedia content-sharing websites (YouTube, Flickr, SlideShare, and others), 10% had a blog or microblog (for example, Twitter and Present.ly), while 6% used wiki-based knowledge sharing tools. These firms also declared to use social media in order to:

- develop the enterprise's image or market products (73%);
- obtain or respond to customers' opinions, reviews and questions (50%);
- involve customers in development or innovation of goods and services (29%);
- collaborate with business partners or other organisations (29%);
- recruit employees (30%);
- exchange views, opinions or knowledge within the enterprise (30%).

It is important to remark that the primary role of social media in today's corporate communication has also found formal recognition by the SEC as a channel of investor relations. In April 2013 the Commission explained that "companies can use social media outlets like Facebook and Twitter to announce key information in compliance with Regulation Fair Disclosure (Regulation FD) so long as investors have been alerted about which social media will be used to disseminate such information" (SEC, 2013).

In the present digitalised world, all firms should accustom themselves to interact with the public on social media websites, in order to establish online synergies. Social networks seem to be the best applications for fostering this kind of relationship (Waters, Burnett, Lamm and Lucas, 2009). According to Cmeciu and Cmeciu (2014), organisations can implement five strategies on social networks:

- the strategy of informing, through which a firm publishes information about its activities and provides useful content to the stakeholders;
- the strategy of connecting, to build a linkage between the organisation and its virtual stakeholder community;
- the strategy of engaging, to make the internet users active participants on the firm's social network profiles;
- the strategy of mobilising, through which the stakeholders are encouraged to express their appreciation, share and comment the content posted by the organisation on its social network profiles;
- the strategy of interacting, which aims to promote a bilateral communication between the firm and its stakeholders.

In simple terms, social networks offer a valid support to stakeholder engagement, because they enable organisations to build web-based relationships and divulge information that could virtually reach anyone all over the world instantaneously. An enterprise with an active presence on social networks can consequently develop a constructive dialogue with current and potential stakeholders, in order to encourage a beneficial exchange of ideas and involvement in decision-making and evaluation processes (Driessen, Kok and Hillebrand, 2013).

Specifically, stakeholder engagement refers to "a process used by an organisation to captivate relevant stakeholders for a purpose to achieve accepted outcomes" (AccountAbility, 2011). This process may also serve as "a tool for understanding the reasonable expectations and interests of stakeholders" (Global Reporting Initiative, 2013) that a firm should consider for goal establishment and performance assessment.

Effective stakeholder engagement depends on an organisation's ability to communicate in a transparent way, thus transferring a trustworthy imagine of itself and generating a collaborative response by its stakeholders (Figure 1). Therefore, successful stakeholder engagement can increase the approval for the firm's mission and activities and consolidate the consent of the publics.

Figure 1: Two-way communication and stakeholder engagement

Stakeholder engagement has traditionally been carried out by way of meetings with relevant categories of stakeholders (e.g. investors, financial analysts, employees, trade unions, suppliers, customers, and representatives of the community), participation to global, regional and local conferences, roundtables, surveys, and collection of feedback, also from the company's website (Salvioni and Bosetti, 2014a). In recent years, social networks have been added to the traditional tools of interaction between firms and stakeholders, giving birth to the "stakeholder engagement 2.0" phenomenon.

Thanks to the combination of stakeholder engagement and Web 2.0 potential, organisations of any size can establish an efficient and permanent interaction with their stakeholders. Every message, picture or video posted on social networks by a firm can raise stakeholders' comments, replies and "likes", providing important feedback to the company.

Moreover, firms can reach and involve broader communities on the internet, consisting in the network of online friends of the company's fans and followers (i.e. individuals who have typically established a digital relationship with the company by means of Facebook and Twitter). Indeed, when something posted by an enterprise on its account receives likes, is commented or is republished by fans and followers, it becomes visible to all the people connected to the latter. This propagation of information expands the possibility for the firm to build a dialogue with its publics, exploring and emphasising the main corporate success factors, strategies, operations, and results for different categories of

stakeholders. In other words, the firm should exploit the opportunities offered by Web 2.0 to discuss the significant dimensions of its activities and performance, in order to boost stakeholders' consent.

Disseminating sustainability information on social networks

In today's world, a company's success largely depends on the ability to satisfy different expectations, beyond economic growth. In this regard, in the last two decades a broader concept of responsibility stressed the need for a better balancing of financial interests, social issues and environmental protection as the pillars of long-term sustainable development.

International debate on sustainable development officially began in 1987 with the publication of the Brundtland Report, promoted by the United Nations. This document describes sustainable development as a model of growth «that meets the needs of the present without compromising the ability of future generations to meet their own needs» (World Commission on Environment and Development, 1987).

According to the principles of sustainable development, firms are held responsible for local and global impacts caused to the society by their business and for the use of natural resources in their activities. For this reason, companies are expected to explain their strategies, operations and results by disseminating transparent information for the stakeholders.

A proper combination of matters concerning economic growth, social inclusion and diversity, and respect for the environment is necessary when an enterprise establishes its goals. In the same way, external communication should provide ample demonstration of the firm's efforts to reach a satisfactory mix of financial, social and environmental performances.

In this sense, social networks are suitable channels to disseminate information about financial, social and environmental goals and results on a regular basis. As described above, companies using social networks for stakeholder engagement can also encourage feedback from fans and followers.

With regard to the content, posts can either be complete and self-contained or provide links towards more detailed reports on corporate sustainability, which are usually published on an annual basis and divulged through the company's website.

In time, firms have progressively enlarged corporate reporting, thanks to the diffusion of a different governance approach that privileges transparency, but also as a consequence of the pressure exercised by policy makers and market regulators (Eccles and Krzus, 2010; Krzus, 2011; Eccles and Serafeim, 2011). Initially, social and environmental information used to be divulged in stand-alone documents, published separately from the traditional

financial statements. Sometime later, firms began to arrange financial, social and environmental information within a unique sustainability report. More recently, sustainability reports have been replaced by integrated reports in which financial, social and environmental information are linked each other and organised in the best way to explain long-term value creation for the company and its stakeholders (Jensen and Berg, 2012; García-Sánchez, Rodríguez-Ariza and Frías-Aceituno, 2013; Salvioni and Bosetti, 2014b; Eccles and Krzus, 2015).

Such reports are usually well-structured. However, they risk to be only read by highly educated stakeholders due to the breadth and complexity of their content; moreover, just people used to surf corporate websites are often aware of their publication.

Social network websites may help firms overcome these problems, by supporting an additional dissemination of corporate information characterised by simple language, conciseness and the possibility to be noticed by many people. Companies should select specific content from their reports and post it on their social network accounts in order to draw the attention of fans and followers. This should favour an immediate spread of knowledge about a firm's activities and results, useful to involve non-expert stakeholders too. At the same time, it should motivate interested stakeholders to acquire further information from the company's website and the dedicated reports: in this sense, the firm's social network pages highlight on significant issues and can be considered as a bridge towards a more articulated set of information about the company. Therefore, social networks enhance the overall value of corporate disclosure, because they encourage the online community to access a broader and deeper system of communication divulged through the company's official website.

Empirical research

After the theoretical premise discussed previously, this section illustrates an empirical investigation carried out in order to answer the following research question: do sustainability-oriented companies use Facebook as an effective means of stakeholder engagement?

The choice of focusing the research on Facebook was justified by two factors: the high penetration of this social network worldwide and its large use by companies.

With regard to the organisations to analyse, the investigation considered a definite sample of companies, consisting of the United Nations Global Compact LEAD members. LEAD is a special programme involving an exclusive group of sustainability leaders from across all regions and sectors, which also take part to the Global Compact. LEAD members' distinguishing feature is their strong cooperation with governments, civil society, labour organisations and the UN.

As LEAD members participate to the aforesaid specific project for the dissemination of sustainable practices, they constitute an excellent sample of sustainability-oriented firms.

The investigation was carried out between 17 November 2014 and 16 February 2015; at that time the LEAD programme comprised 50 participants from twenty-five countries and twenty-two sectors.

Method

The research adopted a qualitative and descriptive approach.

The use of Facebook as a tool of stakeholder engagement to foster the dialogue on sustainability was evaluated through a content analysis (Weber, 1990; Neuendorf, 2002; Krippendorff, 2004). This analysis considered the Facebook accounts officially managed by LEAD members, which the latter had often highlighted on their corporate websites too.

The analysis focused on the information provided by LEAD participants in the "About" section of their Facebook profile: that area is intended to offer an overall presentation of the corporate mission and activities. Therefore, the investigation looked for details on sustainability in that area of each firm's profile.

Furthermore, the investigation considered the content posted by each LEAD member on its "Timeline" (i.e. the main page of the account) during the 30 days preceding the analysis, a period comparable for length to other investigations (Cmeciu and Cmeciu, 2014). According to the subject, every post was classified into one or more categories, focused on distinct aspects of sustainability: strategy, business activity, and economic performance; news on products and services; human rights and social citizenship; labour; anti-corruption; the environment. Posts on different matters were classified into a residual category (other).

To assess the use of Facebook for stakeholder engagement 2.0, the investigation verified the number of fans following each LEAD company's profile, the number of likes, comments and shares for each post, and the number of replies from the company.

Results emerging from the analysis were recorded in excel worksheets for easier data-processing.

Results and discussion

At the time of the investigation, only 37 LEAD members had an official account on Facebook[1], as reported in Table 5.

In relation to the degree of interaction between LEAD participants and the online community, the popularity of companies influenced the amount of fans: well-known organisations operating in global markets had much more fans than local firms. Intel had

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[1] An e-mail to each of the remaining 13 companies was sent to check the existence of their official profile on Facebook; however, only one company replied and confirmed the absence of the account.

the highest number of fans (about 26 million), followed by Nestlé with more than 7.3 million fan. Seven more LEAD members had 1 to 3 million fans. In contrast, some LEAD members had a much smaller community of fans: in particular, two companies did not reach 1 thousand fans. On average, each of the 37 accounts analysed had 1,360,748 fans.

Table 5: LEAD participants, November 2014

#	Company	Sector	Country	Facebook account
1	A.P. Moller - Maersk	Industrial Transportation	Denmark	Yes
2	Accenture	Support Services	USA	Yes
3	Acciona	Alternative Energy	Spain	Yes
4	ARM Holdings plc	Technology Hardware & Equipment	United Kingdom	Yes
5	AVIVA plc	Financial Services	United Kingdom	Yes
6	BASF SE	Chemicals	Germany	Yes
7	Bayer AG	Chemicals	Germany	Yes
8	Braskem S.A.	Chemicals	Brazil	Yes
9	China Development Bank	Financial Services	China	No
10	China Minmetals Corporation	Industrial Metals & Mining	China	No
11	China Ocean Shipping Group - COSCO	Industrial Transportation	China	No
12	China Petroleum and Chemical Corp.	Oil & Gas Producers	China	No
13	Daimler AG	Automobiles & Parts	Germany	No
14	Deutsche Telekom AG	Fixed Line Telecommunications	Germany	Yes
15	Empresa de Energia de Bogota	Gas, Water & Multiutilities	Colombia	No
16	Enel	Electricity	Italy	Yes
17	ENI	Oil & Gas Producers	Italy	Yes
18	Eskom	Electricity	South Africa	Yes
19	Fuji Xerox Co., Ltd.	Technology Hardware & Equipment	Japan	Yes
20	Great River Corporation	Oil Equipment, Services & Distribution	China	No
21	Infosys Ltd	Software & Computer Services	India	Yes
22	Intel Corporation	Technology Hardware & Equipment	USA	Yes
23	KPMG International	Financial Services	USA	Yes
24	Lafarge	Construction & Materials	France	Yes
25	LG Electronics, Inc.	Technology Hardware & Equipment	Republic of Korea	Yes
26	Mansour Manufacturing & Distribution	General retailers	Egypt	No
27	Nestle S.A.	Food Producers	Switzerland	Yes
28	Netafim	Technology Hardware & Equipment	Israel	Yes
29	Novartis International AG	Pharmaceuticals & Biotechnology	Switzerland	Yes
30	Novo Nordisk AS	Pharmaceuticals & Biotechnology	Denmark	Yes
31	Novozymes	Pharmaceuticals & Biotechnology	Denmark	Yes
32	Oando Plc	Oil & Gas Producers	Nigeria	Yes
33	Pirelli & C. S.p.A.	Automobiles & Parts	Italy	Yes
34	PT. Martina Berto Tbk, Martha Tilaar Group	Personal Goods	Indonesia	No
35	Rosy Blue	Personal Goods	Belgium	No
36	Safaricom Limited	Mobile Telecommunications	Kenya	Yes
37	Sakhalin Energy Investment Company Ltd.	Oil & Gas Producers	Russian Federation	No
38	SK Telecom	Mobile Telecommunications	Republic of Korea	Yes
39	Sumitomo Chemical Company, Limited	Chemicals	Japan	No
40	Symantec Corporation	Software & Computer Services	USA	Yes
41	System Capital Management	General industries	Ukraine	Yes
42	Takeda Pharmaceutical Company Limited	Pharmaceuticals & Biotechnology	Japan	No
43	Tata Steel	Industrial Metals & Mining	India	Yes
44	Teck Resources Limited	Industrial Metals & Mining	Canada	Yes
45	The Coca-Cola Company	Beverages	USA	Yes
46	The Dow Chemical Company	Chemicals	USA	Yes
47	Total	Oil & Gas Producers	France	Yes
48	Unilever	Food Producers	United Kingdom	Yes
49	Vale	Industrial Metals & Mining	Brazil	Yes
50	Yara International ASA	Chemicals	Norway	Yes

Source: based on Global Compact LEAD participants, retrieved 11 November 2014 from www.unglobalcompact.org.

However, the number of active fans was only 13,820 on average. This mean value was measured by a specific Facebook index called "people talking about us": this index

expresses the number of unique users who have operated on a company profile in the last 7 days, by commenting, sharing and liking content, replying, or mentioning the page in other posts. Therefore, only 1% of LEAD participants' Facebook fans could be considered active in a very short term.

The investigation of the content disseminated by LEAD members on Facebook considered both the "About" section and the "Timeline".

In spite of the sustainability orientation that all LEAD participants should have, only 16 companies used the "About" section to describe the integration of economic, social and environmental aspects in relation to their mission and activities. More exactly, sustainability was mentioned in general terms by 11 firms, while economic growth, social issues and environmental protection were cited – alone or combined with the others – by 3, 7 and 8 LEAD members respectively. Moreover, 4 companies remarked the awards they had won or the position they had achieved in special ranking of sustainable development.

The 37 LEAD participants with a Facebook account published 31.78 posts on average on their "Timeline" in the 30 days preceding the content analysis. At the high end, Safaricom posted 232 text messages, pictures and videos; on the low end, both Unilever and Nestlé published only 6 posts.

In the aggregate, this study analysed 1,176 posts, 77 of which drew the attention of fans to two or more topics. Therefore, a total amount of 1,253 pieces of information were classified by content into one or more categories, as shown in Table 6.

Table 6: News classified by content, and average number of likes, comments, replies, and shares

Topics	Messages, pictures, videos	Likes (mean)	Shares (mean)	Comments (mean)	Company's replies (mean)
Strategy, business activity and economic performance	44	345.86	10.70	3.20	0.20
Products and services	347	2,277.26	39.85	52.75	1.55
Human rights and social citizenship	168	122.05	13.63	16.34	0.49
Labour	51	431.65	26.22	4.92	0.45
Anti-corruption	7	620.00	11.00	6.00	0.57
Environment	110	255.62	25.45	4.52	0.13
Other	526	650.31	21.58	58.08	4.38
All posts	1,253	975.63	25.66	41.92	2.37

Note: the table refers to the 37 LEAD participants with a Facebook profile.

Except for a residual category ("Other"), every topic in Table 6 referred to an aspect of sustainability: economic development, social impact of business processes, and environmental protection.

The investigation demonstrated that LEAD companies disseminated two types of economic information. On the one hand, they provided information on strategies,

business activities and economic performance, which should define the overall imagine of the firm and help stakeholders understand the corporate identity and perspectives. On the other hand, LEAD participants divulged details, pictures and videos about their products and services, adopting a market-oriented approach.

Marketing communication was dominant on LEAD members' Facebook profiles, even if 3 companies did not post information about this topic. On the whole, 347 messages, photos and videos, representing 27.69% of all the news analysed, contained information on goods and services and raised an average of 2,277.26 likes, 39.85 shares and 52.75 comments from the fans. However, companies hardly replied to these comments: on average, only 1.55 replies followed the comments received by the posts on products and services. What's more, this topic was the one with the highest mean number of replies in the entire investigation.

With regard to strategies, business activities and economic performance, LEAD companies posted only 44 messages in total, equal to 3.51% of the news analysed. However, one company (Eskom) posted 18 out of these 44 messages to highlight its quarterly results, while 24 firms did not published information that could be classified in this category. On average, the 44 messages on strategies, business activities and economic performance obtained 345.86 likes, 10.70 shares and 3.20 comments, with only 0.20 replies from the companies.

To assess the extent of engagement on social aspects, the research considered three topics: human rights and social citizenship, labour, and anti-corruption.

The posts on human rights and social citizenship usually described the company's efforts in order to improve the living conditions and education locally and abroad, promote cultural initiatives and cooperate with NGOs. 168 messages, pictures and videos (representing 13.41% of the announces investigated) referred to this topic, which was proposed by 29 LEAD members on their Facebook profiles. On average, every post classified as human rights and social citizenship received 122.05 likes, 13.63 shares and 16.34 comments on average, but LEAD companies rarely replied (0.49).

Labour conditions, career, training and recruiting were discussed in 51 Facebook messages (4.07% of those categorised) by 18 LEAD members, while 19 participants completely ignored such matters. Labour issues usually met the fans' appreciation, totalising 431.65 likes, 26.22 shares, and 4.92 comments per message; however, such comments received only 0.45 replies on average from LEAD companies.

The research also considered anti-corruption as a matter of social interest. Indeed, preventing bribery and other illegal practices in the relationships between companies and the public administration is necessary to assure fair operations and equal treatment of all private organisations in case of call for tender and access to public financing. In this sense, anti-corruption initiatives aim to safeguard legitimate expectations of the society in relation to legality, transparency and use of public money.

Notwithstanding the importance of anti-corruption for sustainable development, only 4 LEAD members (A.P. Moeller – Maersk, Deutsche Telekom, Eni, and Oando) addressed this theme on Facebook. However, the only 7 posts on anti-corruption (equal to 0.56% of the news analysed) received 620 likes on average, in addition to 11 shares and 6 comments, to which the companies rarely replied (0.59).

Environmental protection, considered as the third pillar of sustainability, appeared in 110 posts (8.77%) published by 25 LEAD companies. Such posts presented energy-saving plants, recycling processes, and eco-friendly products and services, or emphasised the participation of the company to local or global events promoting the environmental respect. These matters usually drew the attention of the fans, as proved by the high number of likes (255.62), shares (25.45) and comments (4.52) per post; however, replies from companies were practically non-existent (0.13 on average).

Finally, 526 messages, pictures and videos, representing 41.98% of those analysed, did not refer to sustainable development. Some posts contained information on the company, such as a description and photos of its buildings and plants, details on corporate milestones and awards; some other posts provided information on industries and markets, political events, technology, science, and even music and curious aspects. On average, each of these posts collected 650.31 likes, 21.58 shares, 58.08 comments and 4.38 replies from LEAD members.

The results emerged from the empirical research suggested two types of considerations.

First of all, despite the sustainability-orientation that had motivated the selection of these companies as Global Compact LEAD participants, these organisations seemed to neglect sustainability communication on Facebook. Indeed, the investigation emphasised a broad dissemination of posts on products and services, thus suggesting a consumer-oriented use of Facebook, but limited efforts to explain what had been done to properly integrate economic, social and environmental performance.

This way of managing communication on the most popular social network, which has the potential to amplify the information disseminated online, appears scarcely consistent with the behaviour expected from LEAD members. Since LEAD participants should offer virtuous examples of sustainable business, they may exploit Facebook contacts to make broader publics aware of their sustainable practices.

The second consideration regards the use of Facebook as a tool of stakeholder engagement. A proper selection of content to divulge in order to obtain fans' feedback is certainly important: in this sense, LEAD companies should act better in order to increase stakeholders' interest in sustainability issues. LEAD participants should also strive harder to involve their Facebook fans in a worthwhile dialogue, from which acquiring significant opinions and suggestions about sustainability goals and performance. Specifically, the stakeholders' comments posted on Facebook should receive replies from the firms,

because a long-term bidirectional communication is crucial for the effectiveness of stakeholder engagement.

Conclusion

This paper analysed the impact of Web 2.0 on the evolution of corporate communication, stressing the contribution of social networks to stakeholder engagement. Social networks allow a two-way communication and online interaction between a company and its current and potential stakeholders, as stated in the existent literature. Companies can take advantage of the increasing penetration of social networks among internet users worldwide, in order to reach broader publics at very low cost and quickly. In this sense, Facebook and other social networks may be interesting channels for disseminating corporate information and collecting feedback from the stakeholders who maintain an online connection with the company.

In particular, the paper illustrated an empirical investigation on the use of Facebook for stakeholder engagement, with focus on sustainable development. In this regard, the analysis observed the activity of LEAD members on their official Facebook profiles during a period of thirty days. Despite their recognised commitment to sustainability, the analysis indicated that LEAD companies rarely used Facebook for providing information on economic, social and environmental issues. Moreover, they often neglected to reply to fans' comments, compromising the potential effectiveness of stakeholder engagement 2.0.

In the light of the results emerged from the investigation, a better use of social networks should be recommended to encourage stakeholder dialogue and participation. Stakeholder engagement should especially concern sustainable development, which is a priority in today's world.

References

AccountAbility (2011). AA1000 Stakeholder engagement standard 2011.

ADAMS, C. A. & FROST, G. R. (2006). Accessibility and functionality of the corporate web site: Implications for sustainability reporting. *Business Strategy and the Environment*, *15*(4), 275-287. DOI:10.1002/bse.531.

ARAZY, O. & GELLATLY I. R. (2012). Corporate Wikis: The Effects of Owners' Motivation and Behavior on Group Members' Engagement. *Journal of Management Information Systems*, *29*(3), 87-116.

BAUE, B. & MURNINGHAN, M. (2011). The accountability web: Weaving corporate accountability and interactive technology. *Journal of Corporate Citizenship*, 41, Spring, 27-49.

BENBUNAN-FICH, R. & KOUFARIS, M. (2010). An empirical examination of the sustainability of social bookmarking websites. *Information Systems & e-Business Management*, *8*(2), 131-148.

BOGERS, T. & VAN DEN BOSCH, A. (2011). Fusing recommendations for social bookmarking web sites. *International Journal of Electronic Commerce*, *15*(3), 31-72.

BOLÍVAR, M. R. (2009). Evaluating corporate environmental reporting on the internet: The utility and resource industries in Spain. *Business & Society*, *48*(2), 179-205.

BOYD, D. M., AND ELLISON, N. B. (2008). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, *13*(1), 210-230.

BROGAN, C. (2010). *Social media 101: Tactics and tips to develop your business online*. JohnWiley and Sons: Hoboken, NJ.

CHEN, A., LU, Y., CHAU, P. Y. K. & GUPTA, S. (2014). Classifying, measuring, and predicting users' overall active behavior on social networking sites. *Journal of Management Information Systems*, *31*(3), 213-253.

CMECIU, C., & CMECIU, D. (2014). Web 2.0 communication and stakeholder engagement strategies: How Romanian public organizations use Facebook. *Procedia – Social and Behavioral Sciences*, *143*, 879-883.

CONSTANTINIDES, E., & FOUNTAIN, J. (2008). Web 2.0: Conceptual foundations and marketing issues. *Journal of Direct, Data, and Digital Marketing Practice*, *9*(3), 231-244.

DICKINSON, S. J., GILL, D. L., PURUSHOTHAMAN, M., & SCHARL, A. (2008). A web analysis of sustainability reporting: An oil and gas perspective. *Journal of Website Promotion, 3*(3/4), 161-182. DOI:10.1080/15533610802077255.

DRIESSEN, P. H., KOK, R. A. W., & HILLEBRAND, B. (2013). Mechanisms for stakeholder integration: Bringing virtual stakeholder dialogue into organizations. *Journal of Business Research*, *66*(9), 1465-1472.

DUGGAN, M., ELLISON, N. B., LAMPE, C., LENHART, A., AND MADDEN, M. (2015). *Social Media Update 2014*. Pew Research Center, January.

ECCLES, R. G., & KRZUS, M. P. (2010). *One report. Integrated reporting for a sustainable strategy*. Hoboken, New Jersey: John Wiley & Sons.

ECCLES, R. G., & KRZUS, M. P. (2015). *The Integrated Reporting Movement: Meaning, Momentum, Motives, and Materiality*. Hoboken, New Jersey: John Wiley & Sons.

ECCLES, R. G., & SERAFEIM, G. (2011). Accelerating the adoption of integrated reporting. In F. DE LEO & M. VOLLBRACHT (Eds.), *CSR Index 2011*. Boston: InnoVatio Publishing Ltd.

FLOREDDU, P. B., CABIDDU, F., & EVARISTO, R. (2014). Inside your social media ring: How to optimize online corporate reputation. *Business Horizons*, *57*(6), 737-745.

GAMBOA, A. M., & GONÇALVES, H. M. (2014). Customer loyalty through social networks: Lessons from Zara on Facebook. *Business Horizons*, *57*(6), 709-717.

GARCÍA-SÁNCHEZ, I.-M., RODRÍGUEZ-ARIZA, L., & FRÍAS-ACEITUNO, J. V. (2013). The cultural system and integrated reporting. *International Business Review*, *22*(5), 828-838.

GIANNAKOURIS, K., & SMIHILY, M. (2013). Industry, trade and services. Eurostat, *Statistics in focus*, 28.

GILL, D. L., DICKINSON, S. J., & SCHARL, A. (2008). Communicating sustainability: A web content analysis of North American, Asian and European firms. *Journal of Communication Management*, *12*(3), 243-262. DOI:10.1108/13632540810899425.

GLOBAL REPORTING INITIATIVE (2013). Sustainability reporting guidelines. Implementation manual. GRI: Amsterdam.

GRAY, P. H., PARISE, S., & IYER, B. (2011). Innovation Impacts of Using Social Bookmarking Systems. *MIS Quarterly*, *35*(3), 629-643.

HERZIG, C., & GODEMANN, J. (2010). Internet-supported sustainability reporting: Developments in Germany. *Management Research Review*, *33*(11), 1064-1082. DOI:10.1108/01409171011085903.

ISENMANN, R. (2004). Internet-based sustainability reporting. *International Journal of Environment and Sustainable Development*, *3*(2), 145-167.

JENSEN, J. C., & BERG, N. (2012). Determinants of traditional sustainability reporting versus integrated reporting. An institutional approach. *Business Strategy and the Environment*, *21*(5), 299-316.

JONES, P., CLARKE-HILL, C., COMFORT, D., & HILLIER, D. (2013). Sustainability: UK retailers and social media. *World Review of Entrepreneurship, Management and Sustainable Development*, *9*(4), 460-474.

KAPLAN, A. M., & HAENLEIN, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, *53*(1), 59-68.

KEMP, S. (2015). *Digital, social & mobile in 2015. We are social's compendium of global digital statistics*. We are social, January.

KENT, M. L., & TAYLOR, M. (2002). Toward a dialogic theory of public relations. *Public Relations Review*, *28*(1), 21-37.

KOTLER, P., KARTAJAYA, H., & SETIWAN, I. (2010). *Marketing 3.0 – From products to customers to the human spirit*. Hoboken, NJ: John Wiley & Sons, Inc.

KRIPPENDORFF, K. (2004). *Content analysis: An introduction to its methodology*, 2nd edition. Thousand Oaks, CA: Sage.

KRZUS, M. P. (2011). Integrated reporting: If not now, when? *IRZ – Zeitschrift für international Rechnungslegung*, (6), June, 271-276.

LAICK, S., & DEAN, A. A. (2011). Using web 2.0 technology in personnel marketing to transmit corporate culture. *International Journal of Management Cases*, *13*(3), 297-303.

MORHARDT, J. E. (2010). Corporate social responsibility and sustainability reporting on the internet. *Business Strategy and the Environment*, *19*(7), 436-452.

MURTHY, D. (2013). *Twitter: Social Communication in the Twitter Age*. Cambridge: Polity.

NEUENDORF, K. A. (2002). *The content analysis guidebook*. Thousand Oaks, CA: Sage Publications.

O'BANNON, B. W., & BRITT, V. G. (2011). Creating/Developing/Using a wiki study guide: Effects on student achievement. *Journal of Research on Technology in Education*, *44*(4), 293-312.

PATNAIK, S. (2011). Going Social: Case studies of successful social media marketing. In J. LIEBOWITZ (Ed.), *Beyond knowledge management: What every leader should know*. Boca Raton, FL: CRC Press, Taylor & Francis Group.

PEREIRA, H. G., DE FÁTIMA SALGUEIRO, M., & MATEUS, I. (2014). Say yes to Facebook and get your customers involved! Relationships in a world of social networks. *Business Horizons*, *57*(6), 695-702.

PITT, L. F. (2012). Web 2.0, social media and creative consumers – Implications for public policy; introduction to the special edition. Editorial. *Journal of Public Affairs*, *12*(2), 105–108.

REILLY, A. H., & HYNAN, K. A. (2014). Corporate communication, sustainability, and social media: It's not easy (really) being green. *Business Horizons*, *57*(6), 747-758. DOI:10.1016/j.bushor.2014.07.008.

RIKHARDSSON, P., ANDERSEN, R., JACOB, A., & BANG, H. (2002). Sustainability reporting on the internet. *Greener Management International*, (40), 57-75.

SAKRAIDA, T., SPOTANSKI, A., & SKIBA, D. (2010). Web 2.0 evolves to research 2.0 post-award management. *Online Journal of Nursing Informatics (OJNI), 14*(3), 1-17.

SALVIONI, D. M., & BOSETTI, L. (2014a). Stakeholder engagement and integrated reporting: Evidence from the adoption of the IIRC Framework. *Journal of Strategic and International Studies*, *9*(3), 78-89.

SALVIONI, D. M., & BOSETTI, L. (2014b). Sustainable development and corporate communication in global markets. *Symphonya. Emerging Issues in Management*, *1*, 32-49. DOI:10.4468/2014.1.03salvioni.bosetti.

SEC (2013). SEC says social media OK for company announcements if investors are alerted. April 2, 2013, SEC Press Release. Retrieved 27 July 2015 from http://www.sec.gov/News/PressRelease/Detail/PressRelease/1365171513574#.U7wBELHD_cs.

STATISTA (2015a). Number of social network users worldwide from 2010 to 2018 (in billions). Retrieved 24 July 2015 from www.statista.com.

STATISTA (2015b). Average number of Facebook friends of users in the United States as of February 2014, by age group. Retrieved 24 July 2015 from www.statista.com.

WAGNER, C. (2004). Wiki: A Technology for Conversational Knowledge Management and Group Collaboration. *Communications of the Association for Information Systems*, *13*(1), 256-289.

WATERS, R. D., BURNETT, E., LAMM, A., & LUCAS, J. (2009). Engaging stakeholders through social networking: How nonprofit organizations are using Facebook. *Public Relations Review*, *35*(2), 102-106.

WEBER, R. P. (1990). *Basic content analysis*, 2nd edition. Newbury Park, CA: Sage Publications.

WIEWIORA, A., TRIGUNARSYAH B., & MURPHY, G. (2011). Knowledge transfer in project-based organisations: The need for a unique approach, pp. 262-274. In MANAGEMENT ASSOCIATION, INFORMATION RESOURCES (Ed.), *Organizational learning and knowledge: Concepts, methodologies, tools and applications: concepts, methodologies, tools and applications*. USA: IGI Global.

WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT (1987). *Our common future* (Brundtland Report). United Nations.

YANG, H.-C., & LEE, C.-H. (2014). Detecting tag spams for social bookmarking Websites using a text mining approach. *International Journal of Information Technology & Decision Making*, *13*(2), 387-406.

ZARELLA, D. (2010). *The social media marketing book*. O'Reilly Media: North Sebastopol, CA.