In search of legitimacy: a semiotic analysis of business model disclosure practices

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Accepted version

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Please cite as:

Di Tullio P., Valentinetti D., Nielsen C. and Rea, M.A. (2019), "In search of legitimacy: a semiotic analysis of business model disclosure practice", *Meditari Accountancy Research*, Vol. 28 No. 5, pp. 863-887. DOI: <u>http://dx.doi.org/10.1108%2FMEDAR-02-2019-0449</u>

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Meditari Accountancy Re

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Journal:	Meditari Accountancy Research
Manuscript ID	MEDAR-02-2019-0449.R2
Manuscript Type:	Research Paper
Keywords:	Business model, European Directive 2014/95, Non-financial information, Semiotic analysis, Legitimacy theory

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Structured Abstract

Purpose

This paper investigates how firms disclose the presentation and content of Business Model (BM) information in corporate reports to manage their legitimacy in response to European Directive 2014/95.

Methodology

Legitimacy theory is used to identify disclosure strategies pursued by firms in reaction to the new regulation. To understand how firms adopt these strategic responses, semiotic analysis is applied to a sample of European companies' reports through Crowther's (2012) framework, which is based on a mechanism of binary oppositions.

Findings

Half of the sample strategically choose to comply with the EU Directive regarding BM information through the use of non-accounting language, figures, and diagrams. Other firms did not disclose any substantive information but managed the impression of compliance with the regulation, while the remainder of the sample dismissed the regulation altogether.

Research limitations/implications

This study demonstrates how organisations use the disclosure of BM information in their corporate reports to control their legitimacy. The results support the idea that firms can acquire legitimacy by complying with the law or giving the impression of compliance with the regulation. This study provides evidence on the first-time adoption of the EU Directive and, therefore, future research can enlarge the sample and conduct the analysis over a broader time frame.

Practical implications

A more precise indication of the EU Directive regarding "where" firms should report BM information, "how" the description of a BM should refer to the environmental, social, governance (ESG) factors, and a set of performance measures to track the evolution of a company's BM overtime is needed.

Originality

While there has been a notable amount of research that has applied content analysis methodologies to investigate the thematic and syntactic aspects of BM disclosure in corporate reports, only a few studies have investigated BM disclosures in relation to the EU Directive. Furthermore, the application of semiotic analysis extends beyond traditional content analysis methodologies because it considers the structure of the story at many levels, thus developing a more complete textual picture of how BMs are described, allowing an analysis of the reasons behind the disclosure strategies pursued by firms.

Keywords: Business model; European Directive 2014/95; Non-financial information; Semiotic analysis; Legitimacy theory.

Article classification: Research paper

1. Introduction

The European Directive 2014/95 on non-financial and diversity information (EU Directive) introduced a new compulsory reporting requirement in the 28 EU Member States¹ for large undertakings that are public-interest entities. This regulation emphasises the role of non-financial information in increasing investors and consumers' trust and in aiding the measurement, monitoring, and management of firms' performance and their impact on society. One of the elements required by the EU Directive is "a brief description of the undertaking's business model". The Business Model (BM) connects the theory of a firm and its accounting measurements with the objective of enhancing the communicative nature of business reporting (Institute of Chartered Accountants England and Wales (ICAEW), 2010), but the introduction of this concept has also introduced new problems (Tweedie *et al.*, 2018). Recent reviews of the BM literature (e.g., Zott *et al.*, 2011; Wirtz *et al.*, 2014; Di Tullio *et al.*, 2018) show widespread and increasing interest in the topic but also indicate that its meaning and features are not described by a singular and broadly accepted definition (Jensen, 2013). How a company's BM is communicated is also an underexplored phenomenon, because of the relative novelty of BM disclosures in corporate reports (Michalak *et al.*, 2017).

This paper investigates firms' responses to the requirements of the EU Directive regarding communication of their BMs in corporate reports. Specifically, the objective is to observe whether and how firms use the presentation and content of the BM sections in both financial and non-financial corporate reports to manage their legitimacy.

Considering that corporations do whatever they can to protect their image as a legitimate business (de Villiers and van Staden, 2006) and employ a variety of strategies for this aim (Suchman, 1995), this study draws upon Oliver's (1991) evaluation of disclosure strategies to analyse firms' reaction to the EU Directive's request for BM information. Such analysis is carried out through semiotic analysis by adopting the framework developed by Crowther (2012). Specifically, semiotic analysis of BM sections in corporate reports published in 2016 and 2017 enables an understanding of how firms pursue three disclosure strategies (i.e., acquiescence, avoidance, and defiance) in response to EU Directive. While prior studies, to a large extent, have used content analysis as a methodology to investigate the thematic and syntactic aspects of corporate reports (Jones and Shoemaker, 1994), the advantages of semiotic analysis are numerous. In particular, while content analysis assumes that the frequency by which a piece of information is disclosed is important, the semiotic analysis considers the structure of the story at many levels (Breton, 2009). Moreover, semiotic analysis develops a more complete textual picture and extends results beyond their immediate appearance (Neergaard and Ulhøi, 2007). Furthermore, the content analysis "only tell what is disclosed, not why" (Dumay et al., 2015, p. 3), while the joint adoption of semiotic analysis and legitimacy theory allows for an analysis of the reasons behind firms' responses. Indeed, semiotic analysis can reveal the strategies employed to manage readers' perceptions of the information being communicated (Yusoff and Lehman, 2009).

The remainder of this paper is structured as follows. The next section presents the thematic and theoretical contributions inspiring and motivating our study. The research method adopted is described in Section 3. Section 4 reports the categorisations of the findings. Section 5 is dedicated to a discussion of the findings. The final section indicates the conclusion and the implications of the results and provides several insights for future research.

2. Background

¹ According to the EU Directive, Member States were required to bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 6 December 2016.

2.1 Business Model

The theme of BM attracted increasing attention from the 1990s, driven by the advent of new information and communication technologies and the globalization of markets (Nielsen *et al.*, 2019). The essence of the BM is that it explains how an organisation creates, delivers, and captures value (Osterwalder and Pigneur, 2010). The literature on BM has moved through a number of phases. After an initial focus on the components comprising a BM (Viscio and Pasternak, 1996; Dubosson-Torbay *et al.*, 2002), and BM taxonomies (Timmers, 1998; Weill and Vitale, 2001), the focus of research moved to the development of BMs, also called BM innovation (Mitchell and Coles, 2004; Spieth *et al.*, 2014), and the openness (Chesbrough, 2007; Saebi and Foss, 2015), sustainability (Lüdeke-Freund and Dembek, 2017; Ritala *et al.*, 2018) and performance (Nielsen *et al.*, 2018) of BMs.

The BM is frequently defined as a critical factor for competitive advantage and firm performance (Afuah and Tucci, 2003; Zott and Amit, 2008; Wirtz, 2011). The BM has been found to have the capacity to communicate the business logic of a company to a wider audience of stakeholders, such as analysts, investors, partners, society, and potential employees (Bukh, 2002; Nielsen and Lund, 2014). In light of this, several accounting organisations (i.e., ICAEW, 2010; European Finance Research Advisory Group (EFRAG) -, 2013; International Integrated Reporting Council (IIRC), 2013) have considered how a BM approach to corporate disclosure could increase the relevance and clarity of information disclosed in financial statements (Haslam et al., 2015). Additionally, Beattie and Smith (2013, p.252) noted that the BM "represents a natural top-level capstone in a business reporting hierarchy". In this context, the EU Directive requires a "brief description of the undertaking's BM", and this commitment is transposed in all the implementing decrees of Member States (CSR Europe and GRI, 2017). Nevertheless, the BM concept and its disclosure are characterised by several gaps. The first is a "cognitive gap" (Giunta et al., 2013) and refers to the lack of a commonly agreed-upon definition of BM (Sukhari and de Villiers, 2018). The second is a "technical gap", which concerns the lack of guidelines for the presentation of BM information (Giunta et al., 2013). Additionally, while demand for external communication of how value is created is increasing (Nielsen, 2014), current reporting on BM has been described as uninformative by recent academic and professional studies (Melloni et al., 2016). Finally, several frameworks of BM are provided by organisations (i.e., IIRC, Chartered Institute of Management Accountants (CIMA)) and academics (i.e., the BM Canvas) (Osterwalder and Pigneur, 2010); however, none are considered standard.

The present EU Directive does not indicate how BMs should be reported and in which way a BM should refer to ESG factors (Jeffrey *et al.*, 2017). However, in its guidelines on non-financial reporting, the EU Commission (2017) invites companies to consider a set of elements that should characterise the description of their BM as follows: their business environment; their organisation and structure; the markets in which they operate; their objectives and strategies; and the main trends and factors that may affect their future development. Companies should avoid immaterial disclosures of a promotional or aspirational nature that distract from material information. However, as argued by Bebbington *et al.* (2012, p. 90), the design of a standard does not ensure that it will be interpreted and applied consistently with the objectives of the legislator. These unresolved issues lead to the need for an analysis of how the BM concept has emerged in reporting practices and how it is presented to stakeholders.

Many academics have investigated the contributions of the EU Directive and the level of compliance with it. The main issues addressed by such studies are the quality of non-financial information in

different countries (Dumitru *et al.*, 2017; Venturelli *et al.*, 2017; Peršić and Halmi, 2018), as well as the level of compliance to the EU Directive before (Carini *et al.*, 2018; Manes-Rossi *et al.*, 2018) and after its adoption in specific countries or sectors (Szabó and Sørensen, 2015; Matuszak and Rozanska, 2017; Primec and Belak, 2018; Sierra-Garcia *et al.*, 2018). It should be noted that these works do not pay specific attention to BM since the BM is considered only one of the elements required by the EU Directive. Furthermore, these analyses are focused on specific countries (e.g., Italy, Poland, and Romania) and were conducted before the introduction of the EU Directive. Finally, the results stem from only one methodological approach, as the content analysis is the most frequently used method to verify the reports' disclosure quality and level of compliance with the EU Directive.

These previous researches call for further studies that consider the development path of non-financial disclosure beyond the 2016 fiscal year to assess the real effects of the new regulation. In this context, semiotic analysis is a useful methodology, as its previously noted advantages (Breton, 2009) could elucidate new aspects when exploring the early reporting practices of firms after the initial application of the EU Directive requirements. In particular, it is interesting to consider how semiotic analysis permits investigating the ways in which firms use the presentation and content of BM sections to manage their legitimacy in response to the new regulation.

2.2 Legitimacy theory

Legitimacy theory is one of the theoretical perspectives originating from political economy theory (PET). The political economy has a long historical tradition based on the assumption that society, politics, and economy are inseparable (Gray *et al.*, 1995; Deegan, 2002) and that their relationship is ruled by a social contract (Deegan, 2010). The social contract is constituted by "the expectations that society has with regards to how an entity shall act" (Deegan, 2010, p.133). In this sense, organisations exist only if society confers them the "state" of legitimacy (Deegan, 2002).

Legitimacy is conferred by outsiders but can be controlled by an organisation itself (O'Donovan, 2002). In particular, legitimacy is influenced by information disclosure (de Villiers and van Staden, 2006). Indeed, "information is a major element that can be employed by the organisation to manage (or manipulate) the stakeholder in order to gain their support and approval or to distract their opposition and disapproval" (Gray *et al.*, 1996, p.45).

Mandating information disclosure as a means of regulating organisational behaviour has become widespread in recent years (Doshi *et al.*, 2013). A critical branch of PET recognises that the State plays a crucial role in the process of legitimation undertaken by firms. In particular, the State can intervene in such a way that firms are successful with regard to their legitimising strategies (Archel *et al.*, 2009). According to La Torre *et al.* (2018), the EU Directive is a concrete example of policy action that intervenes in the non-financial reporting practices of large undertakings to provide them legitimacy. Thus, companies acquire legitimacy simply by complying with the law. Furthermore, even the "comply or explain" principle could be considered "a means of legitimating deviations from individual code provisions" (Seidl *et al.*, 2013, p. 796). In this perspective, corporate report "legitimises actions that are orchestrated from the position of power" through the omission or use of "carefully worded phrases" (Archel *et al.*, 2009, p.1289).

According to Beck *et al.* (2017), compliance with guidelines such as the Global Reporting Initiative (GRI) and Integrated Reporting (IR) can also provide legitimacy to firms. Indeed, it is through the development of these guidelines that society exerts its authority to redefine and explicitly express "social norms" with respect to reporting (Beck *et al.*, 2017). In particular, GRI has been actively

engaged in supporting the EU with the implementation of the new EU Directive (GRI website). However, as argued by Manes-Rossi *et al.* (2018), firms that choose to adopt the GRI 4 guidelines must be aware of the need to include additional information on their BM.

3. Research method

3.1 Research question

In accordance with the requirement of the EU Directive, the analysis is focused on written reports, which are considered more reliable since they are formal tools characterised by "higher accuracy in their preparation and they are the result of accountability systems" (Carini *et al.*, 2018, p.4). The research examines the financial and non-financial communication channels of EU firms (e.g., Integrated Report, Sustainability Report, Corporate Responsibility Report, Non-Financial Report) published in 2016 and 2017. This study conducts a comparative analysis of the presentation and content of the BM sections in corporate reports before and after the implementation of the EU Directive. The objective is to identify which disclosure strategies firms have adopted to manage their legitimacy in response to the requirements. Therefore, our study's objective is to address the following research question:

RQ: How do firms use the presentation and content of the Business Model (BM) in corporate reports to manage their legitimacy in response to the European Directive 2014/95?

As a first step, this study examines corporate reports to verify the impacts of the EU Directive on the disclosure of BMs. Particularly, our interest is in investigating which specific strategies firms have adopted to manage their legitimacy in response to EU Directive requirements regarding BM information.

3.2 Sample and data collection

We selected a random sample of 46 firms in the OSIRIS database from the first quartile of European companies with higher capitalisation in 2016. The sample size was determined by applying the Neyman optimal allocation formula, stratified by industrial sectors and geographic areas. CSR Europe and GRI (2017) have realised an overview of how Member States have implemented the EU Directive. Through this document, we first verified the actual transposition of the EU Directive in each country in the sample, including the mandate of BM description and compliance with the dimensional requirements by the selected firms. Thus, the final sample is composed of 46 firms distributed as shown in Table 1. We then collected the financial reports and non-financial reports published on the companies' corporate websites before (2016) and after (2017) implementation of the EU Directive in each country.

INSERT TABLE 1 HERE

To address the research question, each report was carefully scrutinised, and their relevant elements were recorded in a chart. In particular, we noted:

• The presence or absence of a BM section. This was done by reading the titles of the sections because a simple keyword search could not be effective (e.g., we found a section called

"Realize the value" which is actually devoted to a description of the firm's BM although the term "business model" is not used). Thus, we gained a clear picture of the BM reporting practices of the firms over time (i.e., between 2016 and 2017) in both financial and non-financial reports.

- The use of the term "business model" by firms that do not provide a BM section. In this case, a keyword search was conducted to individuate which parts of the text to extract and analyse. The objective is to understand whether firms deflect attention from the requirements towards other related issues.
 - 3.3 Methodology

3.3.1 Legitimacy perspective

The perspective of our research design is based on Oliver's (1991) work on the identification of strategic responses that organisations enact as a result of institutional pressures to conform. Oliver (1991) identified five types of strategic responses: acquiescence, compromise, avoidance, defiance, and manipulation. Each strategic response is associated with a different degree of attainable legitimacy, as they vary in active organisational resistance, from passive conformity to proactive manipulation. For the purpose of this study, we identify three different disclosure strategies based on the work of Criado-Jimenez *et al.* (2008) on compliance with mandatory environmental reporting in financial statements: acquiescence (with the tactic "comply"), avoidance (with the tactic "concealment"), and defiance (with the tactic "dismiss").

Acquiescence refers to organisations that accede to institutional pressure to disclose, as required by regulation, and could take the form of compliance. Compliance is defined as "conscious obedience to or incorporation of values, norms, or institutional requirements" (Oliver, 1991, p. 152). This tactic is employed by firms that consciously and strategically choose to comply with regulations. Acquiescence is pursued when the degree of legitimacy attainable from conformity is high. Concerning our analysis, this behaviour is exhibited by firms that introduced a section dedicated to their BM in 2017 corporate reports and by organisations that had already provided a section in 2016.

Avoidance is a strategy employed by organisations in an attempt to avoid the need for conformity (Oliver, 1991). A related tactic is concealment, which consists of managing the impression of compliance (Criado-Jimenez *et al.*, 2008). Indeed, as argued by Oliver (1991), concealment can take the form of "window dressing" (p. 154), allowing firms to avoid disclosing any substantive information so that they can give the impression of compliance with the regulation. In this case, the appearance of conformity is sufficient to attain legitimacy, since legitimacy is "a generalised perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Suchman, 1995, p. 574). This tactic was adopted by companies that introduced a BM section in their corporate reports in 2017 with the same content that was in a differently named section in 2016.

Defiance is a more active form of resistance to institutional pressure (Oliver, 1991). In the form of dismissing tactics, this strategy is realised by ignoring or dismissing the regulation. Essentially, this behaviour entails non-compliance with the rules. Companies may not want to report information considered critical for the firm's performance (Adams *et al.*, 1995) or for competitive reasons (Beck *et al.*, 2017), such as BM information. As argued by de Villiers and van Staden (2006), hesitancy to report sensitive information is consistent with legitimacy since "disclosing sensitive information can in itself become a legitimacy threat" (p. 767). This tactic is employed by firms that did not introduce

a section dedicated to BM information after implementation of the EU Directive. However, these companies attempted to manipulate perception by deflecting attention from the issue of concern to other related issues (Lindblom, 1994), particularly by strengthening adjectives in isolated statements regarding their BM or citing the EU Directive or the related law in their country in their reports.

The way in which firms use these three disclosure strategies to manage their legitimacy is evaluated through the semiotic methodology. In this context, the process of legitimation may be seen as an attempt to establish a semiotic relation between action and values (Richardson, 1987). Therefore, an organisation's existence is legitimate by the ritual use of accounting information providing a validation of the present through its connection to the past (Crowther, 2012).

3.3.2 Semiotic methodology

Semiotic methodology is defined as "a formal mode of analysis used to identify the rules that govern how signs convey meaning in a particular social system"² (Eco, 1979 in Fiol, 1989, p. 278). The sign is considered the relationship between a signifier (word) and the signified (object/concept); hence, meaning is generated and communicated through the association between the signifier and the signified in the sign system (Saussure, 1916). However, it should be noted that each sign in a corporate report is not static but is contextually dependent upon the other signs produced in that report (Crowther, 2012).

Communication in corporate reports occurs through three devices: natural language (i.e., the English language), the language of accounting, and non-linguistic devices (e.g., pictures, graphs, and colours). Accounting is considered the language of business and is a highly specialised "dialect" of natural language (Davidson *et al.*, 1974; Evans, 2010). The accounting language's syntax, grammar, and usage rules should assure an understanding of the message contained in corporate reports. However, it should be noted that the accounting language provides not merely a representation of objects and events but also a representation of the desires, intentions, and goals of the communicator (Crowther *et al.*, 2006). Conversely, reading is an activity in which meaning is an event in the readers' consciousness (Fish, 1972). Based on these assumptions, Crowther (2012) proposed a framework based on a mechanism of binary oppositions, which is considered "a fundamental operation of the human mind basic to the production of meaning" (Culler, 1975, p. 5). The understanding of binary oppositions and their inherent tensions from the perspective of different stakeholders is important for traversing the semiotic analysis of reports (i.e., for discovering meaning within a text).

Synchronicity–Diachronicity

Saussure (1916) distinguished between synchronic and diachronic linguistic arguing that a synchronic study of the text examines the relationships that exist among its elements, and a diachronic study examines the manner in which the narrative evolves (Berger, 2005). Indeed, synchronicity refers to "the timelessness of the text and provides a means for an examination of recurring themes within the text" (Crowther *et al.*, 2006, p.182; Crowther, 2012, p. 167). Diachronicity, instead, is based on references to past activities that are compared with the present and have implications for the future.

Accounting–Non-accounting

² As argued by Massaro *et al.* (2018), in this section, we often use direct citations to define the concepts used to conduct this research, to avoid mis-citation problems.

Every report has an accounting component, which contains financial information to satisfy statutory requirements, and a non-accounting component, which strives to create an image deemed desirable by the authors of the script. Generally, these two parts are presented in different manners. In particular, accounting information is displayed in a smaller font and in a single colour, while the non-accounting part of the text is displayed in various colours, font sizes, and layouts (Crowther *et al.*, 2006; Crowther, 2012).

Past–Future

The perception of time is a semiotic problem (Uspenski, 2010) as the historical perception transforms objects into historical events (Passerini, 1999). In particular, the past also exists in the present, influencing, but not determining it. In fact, an emergent event depends on the past in the sense of understanding the meaning of the past (Mead, 1964). Additionally, the future exists in a hypothetical manner, which consists of the anticipation of events (Halas, 2013). A corporate report should provide a description of the past and a view of the present and future of the organisation. Specifically, the past pole of this binary opposite should be portrayed as bad to make the future pole appear good (Crowther *et al.*, 2006; Crowther, 2012).

Financial performance–Environmental performance

There is a constant tension between financial and environmental performance, with each responding to different pressures from different stakeholders. The former strives to measure the effect of an organisation upon itself; the latter strives to measure and report the effects of an organisational activity upon the external environment (Crowther, 2012). These dimensions cannot be maximised, as good performance for a selected dimension entails sacrificing performance along the other dimension. Accordingly, firms are prone to report environmental performance separately from financial performance to segregate the readership and represent a different pole as the dominant pole when presenting the script to different parts of the audience (Crowther *et al.*, 2006). Additionally, the lack of environmental performance indicators in reports entails that the image created by the authors can not be refuted through quantitative comparative evaluation. This practice aligns with the use of a non-linguistic mechanism and statements concerning continual improvement towards a better future to strengthen a firm's image.

Myth-Ritual

The myth explains the present and the past as well as the future and continues to be experienced as a myth by readers throughout the world (Lévi-Strauss, 1955). Therefore, the myth has the power to present a single perspective, in this case, the existence of the organisation. The corporate report as myth presents authoritative communication about the organisation using the same format, language, and style over time to ensure that the image of the organisation remains immutably fixed in the present (Crowther *et al.*, 2006; Crowther, 2012). In binary opposition to the myth, there is the ritual. In the ritual, certain elements of reality are arranged in the same combination of time, space, actors, and acts. This repetition provides the idea of the impossibility of change (Leone, 2011) and maintains the social cohesiveness of the organisation through the participation of members in these rituals. In corporate reports, the ritual is used by the author, who is the decision-maker of the organisation, to signal that the firm "is moving forward to better times in the manner previously outlined" (Crowther *et al.*, 2006, p.193; Crowther, 2012, p.191).

City–Environmentalists

A key assumption of the semiotic approach to corporate reporting is the segregation of the audience into those assumed to be concerned with financial performance and those assumed to be concerned with environmental performance. Thus, the city-environmentalist binary opposition refers to shareholders/investors and societal issues, respectively (Crowther, 2012). This reference requires an analysis of both financial reports and environmental/social reports to identify different messages delivered to different parts of the audience without the necessity of reconciling contradictory messages.

Internal-External consumption

Two levels of accounting can be individuated based on the purpose of the information. The first is management accounting, which concerns the internal operations of a business and the allocation of its resources. The second is financial accounting, which is characterised by reporting on activities of the organisation to the external world. Therefore, this binary opposition considers the internal consumption pole as a representation of the organisation through its individual components and the external consumption pole as a representation of the organisation as a whole (Crowther, 2012). This representation entails the use of non-linguistic devices to portray the company for external instead of internal consumption.

The selected framework is applied in this study to verify how firms use the presentation and content of the BM in corporate reports to manage their legitimacy in response to the EU Directive. This application could also be useful to gather insights on the trustworthiness of the information provided by firms since the corporate report as a tool is not necessarily used to tell the truth (Breton, 2009).

The EU Directive allows the use of a separate report for non-financial information and does not force firms to use financial reports to communicate this type of information. The only limit is on the time of publication. The separate report should be made publicly available no later than six months after the balance sheet date. Therefore, this study considers both financial and non-financial corporate reports to consider all the possible reporting choices of firms. Specifically, we carefully scrutinise the BM sections, focusing on their presentation and content. In particular, we have devoted attention to the differences and similarities between 2016 BM sections and those from 2017. This analysis lets us to identify binary oppositions and further explore their nuanced meaning in the current context. Moreover, the examination of single statements enables us to identify the way in which companies react to EU Directive requirements on BM to manage their legitimacy.

4. Findings

During the preliminary analysis, a set of interesting evidence emerged. Firstly, there was an increase in the number of non-financial reports compared to 2016. In fact, as of 2016, 10 financial reports addressed sustainability issues, and 3 firms do not provide information on these matters. In 2017, only 4 firms embedded sustainability matters in financial reports, and all the firms in the sample disclosed non-financial information. Moreover, the adoption of the GRI guidelines was verified for 28 firms (60%). This percentage is in line with the results of KPMG (2017) which found that 63% of reports from the largest companies in terms of revenue stream adopted the GRI guidelines when preparing their non-financial information.

Furthermore, concerning "where" the BM sections are presented, surprisingly, no preference emerged between the two communication channels, with exactly the same number in both financial and non-financial reports (17).

The reaction of firms to the EU Directive could be different; therefore, results that are presented combine legitimacy theory and the semiotic analysis adopted in this paper. The main classification distinguishes three strategic responses identified through the background of legitimacy theory: 1) acquiescence; 2) avoidance; and 3) defiance. Each disclosure strategy is further analysed using the binary oppositions identified in the discussion of the methodological perspective of semiotic analysis. Hence, we consider the synchronicity-diachronicity opposition as a starting point of the semiotic analysis, which we further develop through the investigation of the remaining binary oppositions of Crowther's framework. Such oppositions are referenced in square brackets where appropriate.

4.1 Acquiescence

4.1.1 Firms providing a Business Model section both before and after the EU Directive

Several firms dedicated a section to their BM before the application of the EU Directive. Of these firms, 4 provided a section describing their BM in both communication channels.

RNB and ENEL presented the BM section in a synchronic manner, using the same figure and the same text to describe their BM in both years and reports [synchronicity]. Thus, such companies signal the temporal independence of their BM to highlight a message of stability over time. Therefore, the use of an unchanged representation of the BM can be interpreted as a myth, which is a means of signalling the importance of an organisation's existence as immutable (Crowther, 2012). Moreover, for RNB, it should be noted that the depiction of BM references long-term concepts (i.e., strategy, business plans, and vision). Additionally, while in RNB's sections there is no binary opposition of city-environmentalist and the same script is provided to shareholders and environmentalists, ENEL appears to communicate the environmental pole as "good", integrating sustainability into all aspects of its business in the "The sustainable business model" section. Indeed, the main aspects of environmental performance achieved in 2017 are disclosed in the financial report instead of in the non-financial report. In particular, ENEL earmarked a part of BM section to explain the importance of ESG sustainability indicators. This practice demonstrates a total adherence to the EU Directive requirements and environmental engagement aimed at socially responsible investors.

The remaining two firms present different situations. TAKKT preserved the same BM description in financial reports for both years [synchronicity] and included several diachronic statements in which future goals are suggested as an ongoing improvement upon the present. Additionally, the firm highlighted its global presence, thus reinforcing the myth of the organisational existence. In contrast, the sections are different from year to year in the non-financial reports. In 2016, the BM representation consists of a combination of images and text, while in 2017, the report outlines the BM through a graphical representation, followed by a brief comment in which the ritual pole emerges ("we made significant progress AGAIN in 2017"). SAP presented "horizontal" synchronicity using the same content and form for the corporate reports published in each observed year. Indeed, in 2016, SAP named the section in the two reports "Financial Business Model", indicating how it uses its revenue to address investors' claims [financial performance]. In 2017, the company entitled the sections "Our Business Model", highlighting the creation of value for customers [environmental performance]. Such a change is probably due to the EU Directive requirements, which led management to disclose more information on the BM, moving the audience from investors to customers.

Certain undertakings chose to communicate their BM in only one of the reports. Indeed, 7 published the section only in the financial report, and 5 published it in the non-financial report. In this case, in

 accordance with the semiotic methodology, the segregation between city and environmentalist audiences is verified after the implementation of the EU Directive.

In 2016, Eurazeo provided a brief description of its BM, concentrating on the creation of financial value for shareholders and portfolio companies [city]. In 2017, the BM consisted of a diagram indicating accounting values in bold and geographical expansion detailing the cities where the company operates to reinforce the organisation's boundaries [myth]. Similarly, in 2017, Bakkafrost reduced the narrative part of the section to dedicate more space to a graphical representation [non-accounting]. Additionally, the illustration was modified as follows: the resources are not divided into internal and external categories. In addition, a list of competitive advantages was added; the channels and segments were substituted with an indication of the beneficiaries of the created value, and the KPIs were eliminated. Therefore, both the accounting and financial performance poles are considered irrelevant compared to the societal issues (e.g., community investments, tax contributions).

GEA and First Sensor demonstrated perfect synchronicity between years, using the same words in their financial reports. Similarly, Nis Group and BASF used the same representation of their BM in non-financial reports. Specifically, GEA focused on the principles (i.e., IFRS) and guidelines (i.e., GRI) used to reinforce the validity of the information presented [myth]. First Sensor used the third person to illustrate its business, customer segments, core competencies, and strategy to strengthen its myth role. Nis Group uses only a graphical depiction to indicate the principal activities of the firms to communicate with the financially illiterate [non-accounting], while BASF, in a schematic manner, indicated the segments, operating divisions, values, and competitive advantages [external consumption]. Again, the analysis reveals a lack of KPIs, whereas more attention was devoted to strategic issues even before the introduction of the EU Directive.

For Unibail-Rodamco and L'Oreal, synchronicity is reflected in the use of the same content presented with a different graphical interface. Specifically, in 2017, the design and the terms used by Unibail-Rodamco recall the IIRC framework. However, for both years, accounting information was presented in a single colour (i.e., black), while the non-accounting parts utilise different colours. Additionally, in the description of environmental performance, the firm's promise of "Better places" continues to be made year after year to create "the image desired amongst the readers of the diachronically unfolding script" (Crowther, 2012, p. 185). L'Oreal concentrated only on accounting information by selecting five years for comparative purposes and using a graphical illustration to highlight the continual improvement of its financial performance. Hence, the message provided to the readers could be that ensuing year will be even better [ritual]. Finally, showing the financial results of the group, further separated into divisions, geographical areas, and business segments, the firm contributes to creating an image of the organisation as a whole for external users [external consumption].

In 2017, Mitie Group plc changed the format and the content of its BM sections. Interestingly, the report indicates the specific parts (i.e., pages) related to content suggested by the EU guidelines (i.e., the strategy, KPI, and market review).

In 2017 BNP used the same figure and content as in 2016 to describe the creation of value for clients [synchronicity], adding an explanation of the impact of the company's activities on stakeholders. In particular, a series of accounting information is listed in bold in response to the demands of investors and shareholders. In contrast, Bufab inserted non-accounting information dedicated to suppliers and customers and retained an unchanged graphical representation of the customer satisfaction process [synchronicity].

In its 2017 Integrated Report, Sanofi provided a section titled "Our five Global Business Units: a diversified and strong business model", that was only a part of the "Business Model and Strategy" section in the 2016 Integrated Report. In both years, attention is focused on the portfolio, market ranking, and accounting information [financial performance]. Moreover, in 2017, the firm attempted to strengthen the image of its BM, adding the adjectives "diversified and strong" [myth].

It is also interesting to highlight that certain firms that previously provided a BM section in one of their reports decided to introduce a similar section in the other report as well. Nis Group inserted "Business Model" section in its the financial report; this was identical to the section available in the non-financial report [synchronicity] and consisted of a graphical representation of realised activities [non-accounting]. Similarly, BASF copied the content of the section previously published in the "2016 Integrated Report". In the part of 2017 financial report dedicated to investments, the Swedish company Bufab introduced a paragraph named "Robust business model", which was streamlined to a brief description of the cost and profit model [financial performance]. In this last case, the term "Robust" highlights the link to a concept of sustainability as "the company's ability to create revenue in the long term" (Nielsen *et al.*, 2019, p.55).

There is another instance in which a firm that provided a BM section in 2016 but did not provide one after the implementation of the EU Directive. In this study, this behaviour was observed for only one firm (i.e., Salini Impregilo S.p.a.), and it is thus considered a marginal case.

4.1.2 Firms providing a Business Model section only after the EU Directive

The analysis reveals that 5 firms of the sample introduced an original BM section in 2017, realising a "conscious obedience" (Oliver, 1991, p. 152) to EU Directive requirements. In this case, we can refer to a "disclosure" of the BM in Dumay's (2016, p.178) sense, as the "revelation of information that was previously secret or unknown".

In these cases, the synchronicity pole is irrelevant, while the presentation of a new section could be considered an effect of the EU Directive. However, each firm chooses a different set of elements to characterise its BM; therefore, our analysis is concentrated on the other binary poles to find potential attempts to facilitate their desired manner of interpretation to influence meaning for the readers. Particularly, it is interesting to verify whether firms have dedicated specific attention to "environmental performance" and "environmentalist" poles by linking BM and ESG factors.

Total included a BM section in both the 2017 financial and non-financial reports. In the first report, the section describes the activities and their synergies, the value chain, and the future objectives [non-accounting]. These components are among those that characterise the BM in the literature. Several authors have argued that a firm must select which activities it performs and when it performs them (Afuah and Tucci, 2001, Zott and Amit, 2010) to make its BM work (Osterwalder and Pigneur, 2010), with a particular focus on how the activities are linked (Zott and Amit, 2010) and configured for value creation (Voelpel *et al.*, 2004). Total's activities are depicted in an image that is not replicated in the non-financial report, where the explanation is focused on the natural gas sector [environmentalist]. This finding can be interpreted as a choice to completely change the subject of the description by referring to an area of activity that is more environmentally sensitive, addressing the demands of environmentalists. Additionally, the firm signalled that it is moving forward in the manner previously outlined, stating "we are maintaining our commitment to natural gas", as a ritual step along the path to wholeness [ritual]. Finally, Total suggested that the future will be more glorious: "we will be

managing nearly 40 million tons of LNG in 2020, making us the world's second-largest operator in the sector, with a 10% market share" [future and ritual]. The German company Siltronic published a "2017 Non-financial report" that was extracted from the "2017 annual report", introducing a new section entitled "The Siltronic business model". This section describes the company's profile and the process, the resources to realise its products [non-accounting], while also considering another set of elements identified in the literature, namely the elements that allow a company to deliver value (Alt and Zimmermann, 2001; Johnson *et al.*, 2008) using key resources and competencies (Weill and Vitale, 2001; Demil and Lecocq, 2010; Christensen *et al.*, 2016). The firm emphasised its dominance in the global market ("a globally operating market and technology leader"), favouring the construction of its mythical role.

Two firms introduced a BM section only in the non-financial report, addressing the expectations of environmentalists; however, they adopted completely different behaviour. On the one hand, Esprinet Group included the section among the environmental topics, illustrating the principles and the codes adopted by the firm to highlight its commitment to achieving excellence [environmental performance]. On the other hand, Tokmanni Group introduced the "Circular economy business models" section, which did not explain its BM. Indeed, the company illustrated the features of the five types of BMs introduced by an independent public foundation and not its own BM.

Quest Holdings took the EU Directive literally, providing a "Brief description of the business model" section in its 2017 financial report in the "non-financial performance" section. In this paragraph, the firm identified its business, its sectors, and the geographical areas in which operates. The lack of accounting information or future-oriented statements and the desire to highlight expansion across the world [myth] are evident. At the same time, the environmental pole and the connection between BM and ESG factors were not mentioned.

These cases show that undertakings attempt to protect their legitimacy by complying with the new regulation. However, they often continue to use the same approach in reporting BM information without clearly connecting the BM with ESG factors.

It is also interesting to verify how the BM concept emerges and is used in the reports of firms that do not provide a BM section.

4.2. Avoidance

Three firms attempted to preclude the necessity of conformity using the concealment tactic. Specifically, they used "window dressing" (Oliver, 1991, p. 154) by not disclosing any substantive information but giving the impression of compliance with the regulation. Substantially, these three firms confirm the prediction of Dumay and Hossain (2018) that companies will simply adapt their current reporting practices to comply with the Directive and maintain a "business as usual" approach. Indeed, in the "Sustainable Strategy 2017" report, Inditex included a section "Sustainable Model", which had the same content as the section titled "Sustainable Strategy" in the previous year. However, the section focuses on sustainability issues such as human right protection and sustainable development, indicating the firm's corporate values [environmental performance]. In Natra S.A., the "Company Profile" section of the "Progress Report 2016" is transformed in "Aim and Business Model" section in the 2017 report. In this case, the section emphasises the global presence of the firm [myth], its value proposition and its consumption and industrial division trying to make up an image of the organisation as a whole for external users [external consumption]. Lastly, Artic Paper S.A. included the "Our Business Model" section in its "CSR Report 2017", duplicating the "Description of the business of the Artic Paper Group" contained in the 2016 financial report. Indeed, the section

includes an image illustrating the distribution of its sales organisations in Europe [non-accounting] and provides a list of inputs, business activities, outputs, and results. Only in the outputs section, there is a reference to environmental issues.

In all these cases, the synchronicity pole is used to comply with the EU Directive without the introduction of new contents. Indeed, information that was already included in 2016 corporate reports was "dressed" in a different manner. It has been argued that, when confronted with diverging demands, firms have simply changed the name of sections. Finally, it is interesting to note that all these firms used a non-financial report to strengthen the appearance of conformity.

4.3 Defiance

Nearly half of the sample, exactly 20 firms, did not provide a BM section in either year, adopting a more active form of resistance to institutional pressure (Oliver, 1991). Specifically, in the form of a dismissing tactic, this behaviour entails non-compliance with the rules. However, companies manipulate perception by deflecting attention from the issue of concern to other related issues through an appeal to, for example, emotive symbols (Gray *et al.*, 1995).

Indeed, many of these firms cited the EU Directive or the relative law of their country in their reports, demonstrating an awareness of the necessity to comply with it. Telenet Group Holding NV listed the issues required by the EU Directive: "The present statement outlines the Company's management of labor, environment, human rights, anti-corruption, and bribery issues; in accordance with the Belgian Law 2017/20487 on integrated non-financial reporting". Similarly, another firms emphasised "As envisaged by Art. 5 of Legislative Decree 254/16, this document is a separate report containing specific wording in order to bring it in accordance with the Non-Financial Consolidated Disclosure required by law" (La Doria S.p.a.), and "[...] we are complying with the statutory provisions as per the new CSR Directive Implementation of Directive 2014/95/EU" (DMG Mori AG). Additionally, certain undertakings highlighted that they published a non-financial report for the first time to meet the requirements of the new regulation. For example, "With this first edition of the non-financial consolidated statement the Prima Industrie Group is responding to the requirements of Legislative Decree 254/16", and "Buzzi Unicem has decided to include its first consolidated non-financial declaration (Art. 4 of Legislative Decree 254/2016) within its Sustainability Report".

Other firms used disconnected statements on BM in their reports to give the impression of compliance. Indeed, the majority of firms (75%) that did not provide a BM section use the term "Business Model" within their report. In particular, they strengthen the image of their BM [myth] using adjectives or explaining the key elements on which their BM are based, as shown in Table 2.

INSERT TABLE 2 HERE

Lastly, despite the EU Directive promoting the "comply or explain" principle (Senn, 2018), only VÚB Banka emphasised that it does not need to observe the EU Directive, because "the parent company of VÚB Banka, Intesa Sanpaolo, is processing and issuing such report for all its subsidiaries".

5. Discussion

The objective of this study is to investigate how firms use the presentation and content of BMs in corporate reports to manage their legitimacy in response to the EU Directive 2014/95. In this section, we first discuss the results of the preliminary analysis and then the findings on the disclosure strategies of firms through semiotic analysis of the BM sections in corporate reports.

The findings of the preliminary analysis reveal an increasing use of non-financial reports in 2017. These results could be interpreted in different ways. As argued by La Torre *et al.* (2018), the EU Directive is a policy that intervenes in the non-financial reporting practices of large undertakings and provides legitimacy to these firms. Thus, firms understand the benefit of this type of communication as the legitimisation of an organisation's operations (Deegan, 2002). Indeed, legitimacy theory argues for a positive relationship between sustainability performance and sustainability disclosure (Hummel and Schlick, 2016); however, "increased disclosure does not always instil trust or develop legitimacy" (Dumay *et al.*, 2019).

Additionally, the adoption of the GRI guidelines by the majority of firms was verified. As Gonzàlez *et al.* (2018) stated, Europe continues to be the primary GRI reporting adopter. However, since it is through the development of these guidelines that society exert its authority to redefine and explicitly express "social norms" with respect to reporting (Beck *et al.*, 2017), the results of our analysis can be interpreted as the firms' desire to obtain legitimacy. Furthermore, the presence and use of voluntary reporting standards and guidance have a positive influence on the quality of reports (Dumitru *et al.*, 2017) and the homogeneity of information (Carini *et al.*, 2018).

Finally, no preference emerged between the two communication channels (i.e., financial and nonfinancial reports) concerning "where" the BM sections are presented. Several papers demonstrated that a firms' choice of "where" to disclose corporate information is the result of external pressure and the firms' attempt to influence external stakeholders and the capital market (e.g., Botosan, 1997; de Villiers and van Staden, 2011).

The results of the analysis of firms' disclosure strategies are summarised in Table 3.

INSERT TABLE 3 HERE

Our analysis reveals that close to half of the companies in the sample strategically chose to comply with the regulation, observing the requirements of the EU Directive regarding the BM. Indeed, as argued by La Torre *et al.* (2018), within the dialogical dynamic between the State, companies, and society, companies can rest assured that they obtain legitimacy by merely complying with the law.

Specifically, several firms dedicate a section to describing their BM before the implementation of the EU Directive, choosing to communicate their BM in only one of the reports (i.e.,7 included a section only in the financial report; 5 included a section only in the non-financial report) or in both communication channels (4 firms). Through the semiotic analysis, we discovered that the majority of these firms present the BM section in a synchronic manner using the same figure and the same text to describe their BM in both years and reports. In these cases, synchronicity is most likely used to signal the temporal independence of their BM to give a message of stability over time. Furthermore, the unchanged representation of the BM signals the immutability of the organisation's existence. There are some exceptions, for example, the use of a figure instead of a textual description, the inclusion of an additional section on the BM, or the enrichment of the disclosed content. For example, in 2017, Mitie Group plc changed the format and the content of its BM sections. Interestingly, the company indicated the specific parts (i.e., the pages) of the report related to content suggested by the EU guidelines (i.e., the strategy, KPI, and market review). This practice can be interpreted as an example of textual connectivity, which is the connection of different sections of text in a corporate report. In this regard, connectivity is considered a key feature of communicative effectiveness based on two elements: cohesion which refers to the way surface features of the text (i.e., words and phrases) are linked to each other grammatically; and coherence which refers to the mode by which concepts introduced in the text are linked to each other in a meaningful manner. Therefore, readers can understand the manner in which the ideas are organised (Merkl-Davies and Brennan, 2017). Conversely, 5 firms of the total sample of 46 provided for the first time a BM section in 2017, and thus these cases are examples of companies that realised the "revelation of information that was previously secret or unknown" (Dumay, 2016, p.178). These cases show that undertakings attempted to protect their legitimacy by complying with the new regulation. However, they often continued to use the same approach in reporting BM information without clearly connecting the BM with ESG factors. This evidence confirms Jeffrey *et al.* (2017)'s concern regarding the risk of disconnection between BM and ESG factors and the resulting undermining of integrated reporting. However, for the majority of companies that adopted an acquiescent response, the BM section presents comparative data indicating future goals in order to highlight the continual improvement of the firm's financial performance and underline their commitment to maintaining performance levels. The dominance of information on financial performance could be interpreted as a company's decision to dismiss the demands of environmentalists to meet the demands of financial stakeholders perceived as being more powerful (Bebbington *et al.*, 2008).

Three firms adopted an avoidance strategy by simply adapting their current reporting practices to comply with the Directive and maintaining a "business as usual" approach (Dumay and Hossain, 2018). Specifically, these firms employed a concealment tactic that implies a symbolic degree of compliance to attain legitimacy. In these cases, synchronicity was used to comply with the EU Directive without the introduction of new content. Moreover, these firms avoided integrating information on future goals, concentrating on the year of the report, with only one undertaking introducing information on sustainability issues. The use of this tactic in response to the EU Directive suggests the strength of the regulation rather than its weakness (Criado-Jimenez *et al.*, 2008). Furthermore, all three firms used a non-financial report to introduce their BM section. This evidence confirms that non-financial reporting is used to respond to significant external pressures in attempting to achieve external acceptance (Beck *et al.*, 2017).

Concerning the content of the BM disclosure in both companies that used acquiescence and avoidance tactics, our results indicate that the firms disregarded the guidelines of the EU Commission regarding the use of KPIs to explain their BM. This practice appears to support the critical interpretation of the indicators as creating seriousness because they are published but does not explain the mechanism by which the firms attempt to construct knowledge management activities (Mouritsen et al., 2001). However, as argued by Jeffery et al. (2017), the EU Directive lacks a prescription of what relevant KPIs might be and how they should be measured. At the same time, the undertakings indicated the markets in which they operate, as required by the EU Commission, to affirm the myth of the organisation. BM sections were used to restate the organisational existence, privileging the creation of an image of the organisation as a whole, instead of providing a description of its internal processes. In general terms, the semiotic approach reveals consistent patterns concerning the presentation of BM sections. First, the use of non-accounting language is prevalent. This practice could be interpreted as a desire to create an image that cannot be refuted through quantitative comparative evaluation (Crowther, 2012). Second, the widespread use of graphical representation of BMs emerged. Nielsen and Lund (2014) emphasised that a problem in BM visualisation is that it becomes a generic organisational diagram illustrating the process of transforming inputs to outputs in a chain-like fashion. This process is likely a consequence of the IIRC Framework which encourages the use of a simple diagram (IIRC, 2013).

Several companies adopted a defiance strategic response and did not provide a BM section in either year. This "secrecy" could be interpreted as a desire to avoid negative media attention around unexpected events (Michalak *et al.*, 2017) or to avoid making information available to competitors

(Sukhari and de Villiers, 2018) and facilitating their imitation (Beattie and Smith, 2013). This explanation is persuasive, especially when the disclosure of the BM means divulging commercially sensitive information (Dumay et al., 2019). The reluctance to report sensitive information is consistent with legitimacy theory since "disclosing sensitive information can in itself become a legitimacy threat" (de Villiers and van Staden, 2006). Moreover, in line with the PET perspective, "firms may not be complying with the legislation since to do so would open them to challenge where it is known that they do not have the appropriate policies" (Adams et al., 1995, p. 104). Furthermore, these firms deflect attention from the requirements of the EU Directive towards other issues. Therefore, they manipulate the perception of their legitimacy. Specifically, they provide scattered use of the term Business Model within their reports, using it as an adjective and focusing on the image communicated to their stakeholders regarding their capacity to create value. These practices provide examples of BM disclosure in a fragmented manner; in other words, they evoke an image of the firms as "containers enclosing a hidden reality, which is (partly or selectively) revealed through disclosures in corporate narrative documents" (Merkl-Davies and Brennan, 2017, p.439). Despite the presence of statements linked to the BM, they are considered to be not fully compliant with the EU Directive because extracted sentences are contained in parts of the report (e.g., the "Letter from the chairman", "Strategy Risks", "Financial Risks") dedicated to the explanation of issues not related to the BM.

Finally, the EU Directive promotes the "comply or explain" principle (Senn, 2018), which can be interpreted as "providing a means of legitimating deviations from individual code provisions" (Seidl *et al.*, 2013, p.796). However, only one firm explained why did not follow the requirements of the EU Directive.

6. Conclusions and implications

The recently adopted EU Directive reinforces academic interest in BM disclosure, providing an opportunity to increase corporate accountability through non-financial reporting (La Torre *et al.*, 2018). In this context, an interesting implication of this study concerns the legitimation that firms try to attain by manipulating the presentation and content of BM information in response to the new regulation. The semiotic analysis of corporate reporting represents an interesting method to examine different strategic responses. According to Crowther (2012), languages create a reality that then becomes truth, and the managers of an organisation are in a position to shape the semiotics of corporate performance as they please. Indeed, as argued by Casonato et al. (2018), the annual reviews are nothing more than an exercise in rhetoric, which is needed because exposing the truth undermines trust. Even non-financial reports are less forthcoming on many controversial aspects of firms' operations that impact the public domain, and this reduces public trust in the quality of these reports (Sethi et al., 2016). However, since legitimacy is considered a vital resource to organisational survival (Deegan, 2002), firms continue to use strategies to manipulate external perceptions. Additionally, the policy action of the EU Directive provides legitimacy through non-financial reporting practices (La Torre et al., 2018). Considering that more than half of the sample is compliant (in reality or apparently), we argue that the EU Directive is effective at shining a light on BM information.

Regarding the presentation of BM information within non-financial statements, it would be useful to indicate more precisely "where" firms should report the required BM information. This change could reduce the practice of duplicating the information in different parts of a report and other communication channels. Additionally, the EU Directive should specify "how" to disclose the information with more precise indications of how the description of a BM should refer to ESG factors

(Jeffery *et al.*, 2017) and a set of performance measures to track the evolution of a company's BM over time (Nielsen *et al.*, 2018).

This study has certain limitations. First, the sample can be enlarged. Specific focus on different sectors and countries is also needed to compare the reporting practices in different contexts. Second, this analysis considers only the first year of EU Directive adoption. However, the effects of standards "are not always clear-cut in highly complex environments" (Trombetta et al., 2012, p.130), and strict compliance with new regulations occurs gradually over a long timeframe (Senn, 2018). Therefore, it would be interesting to verify the changes in the content of corporate reports over the years to evaluate whether firms maintain the same disclosure strategies in response to the requirements of the EU Directive on the communication of the BM in their corporate reports. In particular, companies can mainly use the "comply or explain" principle to legitimate a deviation from the EU Directive or decide to adopt a particular guideline to be compliant with the new regulation. Additionally, the use of websites and social media should be considered for strengthening the public image of companies and transforming reporting into communication, thus enhancing the engagement of stakeholders with a corporation (Lodhia, 2018). The EU Directive is a "backward and old-fashioned policy" because it requires the publication of a non-financial statement and does not allow the adoption of a more flexible form of reporting, as much as possible, via the corporate websites (La Torre et al., 2018). In this context, web-based reporting eliminates the binary city-environmentalist opposition because the information is available to anyone who is interested (Crowther, 2012). Future research should investigate if and how firms communicate their BM through corporate websites and social media platforms to establish an electronic presence and an appealing dialogue with readers.

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Table 1 – Sample breakdown by sector and geographic area

Company name	Country	Industrial Sector	
INDUSTRIA DE DISEÑO TEXTIL SA	SPAIN	_	
TELENET GROUP HOLDING NV	BELGIUM		
TAKKT AG	GERMANY		
TOKMANNI GROUP OY	FINLAND		
VIKING LINE ABP	FINLAND	Consumer discretionary	
INTRALOT S.A INTEGRATED LOTTERY SYSTEMS & SERVICES	GREECE		
AD PLASTIK D.D.	CROATIA		
RNB RETAIL AND BRANDS AB	SWEDEN		
L'OREAL SA	FRANCE		
P/F BAKKAFROST	DENMARK		
LA DORIA S.P.A.	ITALY	Consumer staples	
NATRA S.A.	SPAIN		
TOTAL S.A.	FRANCE	Г	
NIS A.D. NOVI SAD	SERBIA	Energy	
BNP PARIBAS	FRANCE		
EURAZEO	FRANCE		
VSEOBECNA UVEROVA BANKA A.S.	SLOVAKIA	Financials	
BANK OF GREENLAND - GRONLANDSBANKEN A/S	DENMARK		
SANOFI	FRANCE	TT 1/1	
ALK-ABELLO A/S	DENMARK	Health care	
SIEMENS AG	GERMANY		
GEA GROUP AG	GERMANY		
DMG MORI AG	GERMANY		
SALINI IMPREGILO S.P.A.	ITALY		
MITIE GROUP PLC	UNITED KINGDOM	-	
SEMPERIT AG HOLDING	AUSTRIA	x x y y y	
BUFAB AB	SWEDEN	Industrial	
PRIMA INDUSTRIE SPA	ITALY		
SANTA FE GROUP A/S	DENMARK		
EDDING AG	GERMANY		
HAMON & CIE (INTERNATIONAL) NV	BELGIUM		
FRIGOGLASS SA	GREECE		
SAP SE	GERMANY		
SILTRONIC AG	GERMANY	1	
ESPRINET S.P.A.	ITALY	Information technology	
FIRST SENSOR AG	GERMANY		
QUEST HOLDINGS S.A.	GREECE		

VETRYA S.P.A	ITALY	
BASF SE	GERMANY	
BUZZI UNICEM S.P.A.	ITALY	Motoriala
SOL SPA	ITALY	Materials
ARCTIC PAPER S.A.	POLAND	
UNIBAIL-RODAMCO SE	FRANCE	
UBM REALITAETENENTWICKLUNG	AUSTRIA	Real estates
AG		
ENEL SPA	ITALY	Utilities
ALBIOMA	FRANCE	

Table 2 – Statements on Business Model image

STATEMENT ON BM	COMPANIES
"Telenet sets new standards in the telecom, media and entertainment segments and builds DISRUPTIVE business models and innovative products that make a real difference in this digital age"	Telenet Group Holding NV
"our SCALABLE business model is supported by our advanced IT platform which allows us to optimize product development by minimizing customization requirements during development while at the same time providing for further product adaptation ("micro tailoring") upon distribution, making our product offering more adaptable"	Intralot S.A.
"ALK is committed to partnering with allergy specialists to succeed in establishing a SCALABLE business model for the tablets in North America"	Alk-Abello A/S
"The business model is therefore based on the quality of the product and on a constant commitment to improving environmental sustainability"	La Doria S.p.a.
"In Frigoglass, we put the customer in the centre of our business model"	Frigoglass
"The Group's business model is based on long-term partnerships with local stakeholders in the sector"	Albioma Group

the sector

Table 3 – The results of the analysis of the disclosure strategies of firms

		DISCLOSURE STRATEGIES		
		ACQUIESCENCE	AVOIDANCE	DEFIANCE
BINARY OPPOSITIONS	SYNCHRONICITY - DIACHRONICITY	Firms that provide BM sections before the introduction of EU Directive use synchronicity to signal the temporal independence of their BM in order to give a message of stability over time. The other firms include in BM sections several diachronic statements in which the future goals are suggested as an ongoing improvement upon the present.	Firms use synchronicity to be compliant with the EU Directive without the introduction of new contents. Indeed, the information that are already included in corporate reports of 2016 are "dressed" in a different manner.	
	ACCOUNTING - NON- ACCOUNTING	There is a widespread use of graphical depiction and images to explain the BM to financially illiterate while the insertion of KPI is rare. This practice could be interpreted as a desire to create an image that could not be refuted through quantitative comparative evaluation.	Companies use images and figures in BM sections to illustrate the organisation of sales and distribution in order to create an image that could not be refuted through quantitative comparative evaluation.	
	PAST - FUTURE	In the majority of case, the BM section presents comparative data indicating the future goals in order to highlight the continual improvement of its financial performance.	Companies avoid to insert future goal focusing on information on the year of the report.	
	FINANCIAL PERFORMANCE - ENVIRONMENTAL PERFORMANCE	Few firms introduce information on sustainability indicators and environmental topics in BM sections. Indeed, the majority of companies use the BM sections to show their financial results.	Only one firm introduces sustainability issues and indicates its corporate values. The other two focus the attention on the organisation issues and results.	
	MYTH - RITUAL	The use of unchanged representation of the BM signal the importance of the organisation existence as immutable. On the other hand, firms highlight their commitment in maintain actual performance levels.	BM sections are used to emphasise the global presence of firms.	Several companies provide disconnected statements on BM in their reports using adjectives to strengthen the image of their BM and to give the impression of compliance.
	CITY - ENVIRONMENTALIST	Several firms provide information on BM focusing on the creation of financial value for shareholders and investors. This could be interpreted as a choice to dismiss the demands of environmentalists to meet the demands of more powerful perceived financial stakeholders.	These firms use voluntary reports to introduce BM sections and cite the sustainability in the name of the sections in order to strenghten the appearance of conformity to EU Directive requirement.	
	INTERNAL - EXTERNAL CONSUMPTION	Many BM sections contain information about the operating divisions, competitive advantages, and business segments to create an image of the organisation as a whole.	Undertakings use BM information to makeup an image of the organisation as a whole for external users. After all, they did not change the internal operations of the business and the allocation of resources but only the way in which information are communicated.	
DISTRIBUTION OF STRATEGIC RESPONSES WITHIN CORPORATE REPORTS		Non-financial Reports4Financial reports8Both reports9Financial in 2016 Non-financial in 20171	Non-financial reports 3	
		22	3	20

Firms with a BM section in 2016 and not in 2017