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# Sustainability and Fast Fashion from the Executive Perspective – the Case of LPP S.A.

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## ABSTRACT

**Objective:** This article aims to examine what the CEO of LPP S.A. discloses about sustainability and how sustainability topics vary over time in his communication with the stakeholders.

**Methodology:** We use a machine learning-based topic modelling analysis, specifically latent Dirichlet allocation and keyword analysis, to scrutinize the sustainability disclosure in the sustainability letters to the stakeholders of one of Poland's biggest fast fashion companies, LPP S.A.

**Findings:** The findings of this study suggest that more attention should be placed on sustainability topics in the letters to the shareholders. The information disclosed is selective and mainly aimed at transmitting a positive message. It lacks a comprehensive and holistic disclosure of information concerning sustainable activities that substantially impact environmental and social matters. Comparing the variation of topics year to year, there is a clear shift from dedicating the majority of space in CEO letters to the stakeholders to social topics toward a broader discussion about the environment and responsible energy consumption in the most recent letter.

**Value Added:** The study contributes to the sustainability communication literature by identifying specific sustainability topics disclosed by the analyzed company in its direct message from the CEO to stakeholders that have been very limited and selective, thus underscoring the limited importance assigned to this topic by the CEO, thereby questioning the transparency concerning one of the most critical areas of fast fashion impacts.

**Recommendations:** To keep the stakeholders informed and maintain the transparency of actions and accountability of the disclosure, it is necessary to present the information holistically and comprehensively in the message directed by the CEO to the stakeholders.

**Key words:** fast fashion, sustainability, letters to stakeholders, communication, topic modelling, latent Dirichlet allocation

## Introduction

Sustainability strategy has become a key business and management aspect for the development and success of modern corporations (SanMiguel et al., 2021). This strategy and its outcomes should be disclosed to the stakeholders. The way they are communicated has become increasingly important. There are two principal communication approaches: two-way communication in the form of a dialogue with the stakeholders (Bryl et al., 2022) and one-way communication in the form of disclosing critical information by the organization (Nickerson & De Groot, 2005). This paper will focus on the latter, particularly a powerful, influential tool for one-way direct corporate information communication of companies, that is a formal letter to the shareholders. Consequently, this research aims to study the communication content of letters to the shareholders from the perspective of sustainability information disclosure in an example of a fashion company with the longitudinal approach.

Fashion, and in particular the fast fashion industry, has been chosen, as it has significant implications for the global economy, both positive and negative. This industry has developed dynamically; in the past two decades, global textile manufacturing and consumption have nearly doubled (Shirvanimoghaddam et al., 2020). It has increased production, consumption, and turnover of clothing items, stimulating economic activity. However, the production of textiles and apparel also had negative impacts, encompassing poor working conditions, health and safety concerns, water overconsumption and pollution,

waste generation, greenhouse gas emissions, and hazardous materials. There are widespread anxieties about the effects of fast fashion, especially regarding human rights issues in industry supply chains and those pertaining to waste and recycling.

Recognizing the importance of the topic and stakeholder expectations, companies in the sector are beginning to engage in activities aimed at real or apparent reduction of negative impacts and improving their image in the eyes of customers, investors, and other stakeholders. Consequently, they are also expected to communicate these endeavors to the stakeholders.

The central thesis of this study is that there is a need for transparency in the communication between fashion companies and the stakeholders, with a particular focus on the content of letters to the shareholders. Transparency has been conceptualized as the quantifiable degree of a fashion brand's information disclosure, clarity, and accuracy (Schnackenberg & Tomlinson, 2016), also in the context related to sustainability (Dando & Swift, 2003).

In this research, we adopt the stakeholder theory (Freeman et al., 2010) that manifests through the companies' will in communicating with those that impact and are impacted by the companies. We analyzed one particular form of communication: a letter to the stakeholders that opens the sustainability reports. Numerous academic publications in the literature explore annual letters to the shareholders (CEO letters), an essential element of a CEO's discursive narration (Courtis, 2004). They are an obligatory part of the annual report, but their informational content is arbitrary and at the discretion of their authors, i.e., those in charge of the organization. This characteristic makes them a very gratifying topic of scientific research and analysis. However, with the development of sustainability reporting (under the Directive (EU) 2022/2464, the so-called Corporate Sustainability Reporting Directive) and previous non-financial disclosure (under the Directive 2014/95/EU, the so-called Non-Financial Reporting Directive), some companies have started to publish the second letter written by the CEO in annual reports. This letter is directed to the stakeholders (hereafter CEO letter to the stakeholders), and it opens the sustainability report or disclosure (also named as Non-financial Information Report/Disclosure or CSR Report/Disclosure). Despite the

enormous growing body of sustainability reporting research and investigation of CEO letters to the stakeholders, research is still rarely conducted within the framework of existing empirical studies, which constitutes a remarkable research gap. Most prior literature has neglected the sustainability dimension of the discourse in the CEO letter to the stakeholders, concentrating solely on reports or disclosures. The lack of this type of research raises significant concerns as substantial empirical evidence indicates that the CEO letter to the stakeholders is a significant means of engaging with the stakeholders, representing a textually vibrant expression of the corporate voice. It provides insight into how the organization tackles sustainability matters (Klimczak et al., 2023). Moreover, to the best of the authors' knowledge, research of this type has never been conducted before in the fashion sector, which is particularly important in terms of its environmental impact and other sustainability issues that refer to this industry.

In this study, the research objective is to investigate the characteristics of CEO letters to the stakeholders regarding their content and communication patterns concerning sustainability issues. We indicate the main topics concerning sustainability issues and the changes in time in the communication mode. In our study, we focused on a company from the fashion sector. Using the example of the LPP S.A. company, we analyzed the disclosure of sustainability information in the letters to the stakeholders in three consecutive years. We applied a topic modelling analysis using an unsupervised Bayesian machine-learning approach called Latent Dirichlet Allocation (LDA) to determine the main topics and their distribution in sustainability disclosure. Our data relate to the publicly available sustainability disclosure of those companies.

Our findings confirm that LPP S.A. primarily highlights enhancements related to sustainability, thereby hindering the stakeholders' understanding of the implementation of their sustainability pledges in daily business operations. The CEO, when presenting information on sustainability to the stakeholders, primarily focuses on future strategies and goals, neglecting to address the company's activities that significantly influence environmental and social concerns. Furthermore, there is a noticeable shift in the CEO's letters to the stakeholders, with recent communications allocating more space to a broader discussion on

environmental issues and responsible energy consumption, as opposed to predominantly addressing social topics.

The implications of our study call for making letters to the stakeholders the centerpiece of organizations' one-way communication by focusing on sustainability issues in a more holistic way.

The results show that it is necessary to continue improving the communication of sustainability within the fast fashion industry whilst demonstrating the significant deficiency in communicating it in sustainability disclosure.

This research contributes to an overview of current sustainability practices of the example companies from a critical sector of fashion that has an important, but also significantly negative, impact on the environment.

Implications of this study may be relevant for academia and practitioners preparing sustainability disclosure and regulators developing sustainability report standards.

This article is structured as follows. After the introduction, where the background and research aim are presented, Section 2 presents a theoretical background referring mainly to the literature review of previous relevant studies and critical concepts for this research. Section 3 describes the methodology, including the sample, data collection, and research methods. Section 4 discusses the main findings of the research. Finally, Section 5 summarizes the article with some concluding observations, presents study limitations, and proposes ideas for future work.

## Literature Review

### ***Fashion Industry Impact***

The fashion industry exerts a significant economic influence, constituting a multi-billion dollar sector comprised of various companies. This has a substantial positive effect on the economy by generating numerous employment opportunities and substantial financial returns. The fashion market is

estimated to be worth \$ 1.53 trillion (Statista, 2023). This industry provides employment opportunities to millions of people, from designers and artisans to retail workers and logistic experts. Moreover, it boosts international trade and strongly influences the global supply chain. However, while only representing approximately 2% of the global gross domestic product (Statista, 2023), it is the second most polluting industry in the world, after the oil industry, being responsible for 10% of the production of global CO<sub>2</sub> emissions and 20% of global water waste (Gupta et al., 2019). Scholars highlighted this industry's environmental negative impacts, such as excessive water use and water pollution (Abbas et al., 2020), GHG emissions from processing fossil fuels (Franco, 2017), and the use of hazardous chemicals (Khurana & Ricchetti, 2016). Academics also underline its adverse societal impacts, such as poor working conditions (Haug & Busch, 2015), health and safety issues (Cesar da Silva et al., 2021), abuses of human rights that include child labor, forced low-paid labor associated with modern slavery (Peake & Kenner, 2020; Thorisdottir & Johannsdottir, 2020). The fashion industry is simultaneously responsible for several other ills, including animal cruelty and the fostering of over-consumption (Lundblad & Davies, 2016). Consequently, the fashion industry is labelled as wasteful, polluting, and socially toxic (Hála et al., 2022), and it is emphasized that it leads to mass over-production with horrible social and environmental consequences (Bick et al., 2018). The fashion industry is also blamed for recklessness and inefficient resource management while manufacturing products with extremely short life cycles. It is accused of advancing quantity and fashion over quality and durability (MacGregor et al., 2023). Global clothes consumption is projected to increase from 62 to 102 million tons from 2015 to 2030, which accounts for a 63% increase (CleanClothes, 2023). At the same time, clothing utilization constantly decreases. Less than 1% of the material used to produce clothing is recycled into new clothing, causing a loss of more than USD 100 billion worth of materials each year (MacGregor et al., 2023).

Daily fashion is increasingly referring to the concept of fast fashion. There are many definitions for the fast fashion concept (e.g., Runfola & Guerini, 2013). We adopt the one of Caro and Martínez-de-Albéniz (2015), who

describe fast fashion as a specific business model that combines three elements: (i) quick responses, (ii) frequent assortment changes, and (iii) fashionable designs at affordable prices. Fast fashion companies often prioritize efficiency in production, quick turnaround times, and frequent releases of new collections to meet consumer demand for up-to-date styles. This approach represents, at the same time, a swift to mass-production and mass-consumption model in fashion (Castro-López et al., 2021) dominated by a low cost, efficiency over effectiveness, quantity over quality, immediate financial profit regardless of the exploitation of the workforce, and environmental pollution (MacGregor et al., 2023).

The fast fashion segment grew during the late 20<sup>th</sup> century as clothing manufacturing became less expensive, resulting from more efficient supply chains, new quick-response manufacturing methods, and greater reliance on low-cost labor from the apparel manufacturing industries of Asia (Bick et al., 2018). The environmental and social consequences of fast fashion, including massive abuses, have often been underplayed or even overlooked by the scientific literature, research, and discussions surrounding environmental impact and social justice (Bick et al., 2018). Fast fashion businesses are the primary culprits causing the fashion industry to symbolize wasteful, irrational behavior, greenwashing mastering, and the lack of values or common goals (MacGregor et al., 2023). With the dominance of fast fashion, clothing production has almost doubled over the last 15 years (Freudenreich & Schaltegger, 2020).

It is precisely the fast fashion industry that, while endowed with enormous potential and responsibility related to the development of countries participating in its complex supply chains (Garcia-Torres et al., 2017), creates a high risk of generating sustainability issues related to social and environmental breaches (Krause et al., 2009).

The historical development of the industry toward fast fashion and the recent developments toward ultra-fast fashion present negative, unsustainable transition trends (Maloku, 2020). The spotlight has, therefore, fallen on the fashion industry to expose the ethical and environmental ills of this enormous industry and explore how to address them through the development of sustainable fashion (Mukendi et al., 2020).



## Fast Fashion and Sustainability

One of the most challenging issues facing modern civilizations in coping with the environmental and social consequences of current production and consumption systems is the transition to sustainability. Some view sustainability as a compliance exercise in which companies refrain from undesirable practices. In contrast, others see it as a fundamental change from a narrow focus on investor interests toward balancing the interests of multiple stakeholders (Klimczak et al., 2023).

The awareness of all those negative impacts that refer to the fashion industry, as well as environmental and social sustainability challenges, triggered many changes toward more sustainable and ethical fashion (DiVito & Bohnsack, 2017; Goldsworthy et al., 2018; Mishra et al., 2020; Moorhouse & Moorhouse, 2017). Consequently, sustainability has become increasingly important in this sector (Henninger et al., 2017). The fashion industry cannot continue operating with existing methods threatening the world's finite resources. Recent research has shown more of the concern about the impact of fast fashion that is expressed nowadays. Consumers are becoming more conscious of the ethical concerns surrounding the clothes they buy (Grazzini et al., 2021). For example, more consumers are willing to pay higher prices for clothes with high sustainability content (Centobelli et al., 2022). The latest survey has found that sustainable sourcing at scale is the fashion industry's new must-have (McKinsey et al., 2019), and fashion's commitment to environmental sustainability is becoming the top priority (McKinsey, 2022).

While analyzing the practices present in the fashion industry, it is possible to observe both unsustainable (negative) and pro-sustainability (positive) patterns in its transition journey (Dzhengiz et al., 2023). Promoting natural and recycled textiles, incorporating design principles for reuse and recycling, fostering second-hand retail and clothes repair initiatives, and embracing product-as-a-service models – especially for items with high turnover rates—have been identified as crucial measures for mitigating the fashion industry's environmental impact.

With mounting pressure on fast fashion brands to observe sustainable practices (Auke & Simaens, 2019) and the expected advent of fast fashion (Camargo et al., 2020), there is a need to explain better the activities that refer

to sustainability engagement. Consequently, sustainability in the fashion industry has been a quickly growing area of practice (Henninger et al., 2016) and academic research (Mukendi et al., 2020); however, not much has been researched regarding this sector's communication patterns and contents, especially from the executive perspective.

## The Need for Sustainability Disclosure

It is now nearly impossible to consider business and society without considering the stakeholders and their engagement (Civera et al., 2023). Corporate communication with the stakeholders is pivotal in developing stakeholder commitment (Bottenberg et al., 2017; Fijałkowska et al., 2023a, 2023b; Bryl et al., 2022) and expressing executive perspective (Hadro et al., 2022a). The stakeholder theory postulates that the core of business resides in the relationships between a firm and its stakeholders created through communication. These relationships involve a complex array of interests, expectations, claims, rights, and objectives – ranging from economic to ethical – pertaining to the groups of individuals who impact or are impacted by a company's activities (Bridoux & Stoelhorst, 2016; Freeman et al., 2010). Consumers increasingly expect companies to improve their sustainability practices and communicate sustainability messages (Lee et al., 2023). Particularly in the fashion industry, transparency is essential for attaining accountability, reducing environmental impact, and ensuring that employees' rights are respected.

Communicating about sustainability is challenging (Davies & Doherty, 2019), particularly in the fashion industry, partially due to its abstract and artistic nature and the loss of consumer trust in this sector (Henninger, 2015; Streit & Davies, 2017). Media and consumers have become increasingly aware of discrepancies between fast fashion companies' stated efforts to improve their sustainability and social responsibility and the consequences of their business practices. Many interpret such efforts as "greenwashing," disregarding the fundamental problems of producing and consuming fast fashion products (Kim & Oh, 2020).

The content of the information disclosed and its objectivity and transparency are crucial for the stakeholders. The topics presented not only carry social relevance but also greatly influence consumers' decisions, such as the preference for cruelty-free attire or the willingness to pay a premium for fashion items crafted from sustainable materials and processes. These factors can significantly impact the brand reputation of fashion companies (Hennigs et al., 2013; Miller & Mills, 2012). Purchasing behavior is increasingly prejudiced by various criteria, such as environmental impact, health effects, workers' conditions, and the treatment of animals. These factors shape a brand's reputation, emphasizing the importance of sustainability assessments.

Based on the vast literature on the topic of sustainability reporting, we can formulate ten main reasons why fashion companies should disclose information on sustainability (e.g., Hennigs et al., 2013; Miller & Mills, 2012; Daszyńska-Żygadło et al., 2022; Hadro et al., 2022b, Czinkota et al., 2014; Benn et al., 2006):

- 1. Customer Awareness and Expectations:** With increasing awareness of environmental and social issues, consumers seek sustainable and ethical products. Disclosure on sustainability allows fashion companies to align with consumer values and meet the growing demand for eco-friendly and socially responsible products.
- 2. Brand Reputation:** Transparency about sustainability initiatives enhances a fashion company's brand reputation. Consumers are more likely to support and trust brands that transparently communicate their efforts to minimize environmental impact, promote ethical practices, and contribute to social responsibility.
- 3. Market Differentiation:** Sustainability disclosure allows fashion companies to differentiate themselves. As consumers become more discerning, a commitment to sustainability can set a company apart and create a unique selling proposition in the market.
- 4. Competitive Advantage:** Sustainability disclosure can provide a competitive edge in the fashion industry. Companies that effectively communicate their sustainable practices differentiate themselves from

competitors, attracting environmentally conscious consumers and gaining a competitive advantage over competitors.

5. **Investor and Stakeholder Relations:** Investors increasingly consider sustainability when making investment decisions. Sustainability disclosure can attract socially responsible investors and foster positive relationships with stakeholders who prioritize sustainable business practices.
6. **Supply Chain Management:** Sustainability disclosure encourages fashion companies to assess and optimize their supply chain. This can lead to more sustainable sourcing practices, reduced environmental impact, and improved efficiency throughout the production and distribution processes.
7. **Long-Term Business Resilience:** Adapting to sustainable practices is essential for long-term business resilience. Climate change, resource scarcity, and social issues pose significant challenges, and companies that embrace sustainability are better positioned for long-term success.
8. **Innovation and Efficiency:** Sustainability disclosure fosters a culture of innovation. Companies prioritizing sustainability may find new, more efficient operating methods, leading to cost savings and improved resource utilization.
9. **Risk Mitigation:** Sustainability disclosure helps identify and address potential risks in the supply chain, including issues related to labor practices, resource scarcity, and environmental impact. By proactively addressing these risks, companies can enhance resilience.
10. **Regulatory Compliance:** Reporting on sustainability ensures compliance with evolving environmental standards, labor practices, and supply chain transparency regulations. Staying ahead of regulatory requirements helps fashion companies avoid legal and reputational risks.

Sustainability disclosure for fashion companies is crucial for meeting consumer expectations, enhancing brand reputation, staying competitive, complying with regulations, improving supply chain practices, attracting investors, and ensuring long-term business sustainability.

## The Letters to the Stakeholders as a Tool for Communication on Sustainability

A letter to the shareholders is a formal document that serves as a means for management to present the company's performance and future prospects (Hadro et al., 2021). It is a part of formal communications written by a business or an organization to address and update individuals or groups with a vested interest in the company's activities and performance. This letter aims to provide investors with relevant information about the company's achievements, challenges, goals, and plans. CEO letters should fulfil fundamental accountability functions (Amernic et al., 2006)

They are part of broader communication strategies employed by companies to maintain transparency, build trust, and keep the stakeholders informed about key developments. In Poland, like in other European countries, a letter to the shareholders is mandatory for annual reports. However, its content is loosely regulated and subject to minimal audit requirements. It is a key tool for corporate communication, allowing management to share insights, discuss financial performance, and convey the company's strategic direction to its shareholders. Investors, as evidenced by empirical studies (e.g., Fanelli & Grasselli, 2006), actively read these letters, and their impact extends to influencing investment decisions and stock prices (Keusch et al., 2012).

A letter to the shareholders is also a discursive narration that is a fundamental manifestation of the CEO's leadership (Fairhurst, 2007). It is a public representation of a firm's goals, actions, and results formulated and explained by the CEO. Previous literature has shown how CEOs use language to manage reputation and build organizational identity (e.g., Weick et al., 2005).

On the contrary, CEO letters to the stakeholders have started to appear together with non-financial disclosures and integrated reports. Both their inclusion in sustainability reporting and their structure are on an entirely voluntary basis. Although they also serve as the manifestation of the CEO's shared meaning and culture (Amernic, 2006), above all, they demonstrate the importance of leaders in adapting sustainable goals to corporate reality and their commitment toward a sustainable future (Klimczak et al., 2023).

Deconstructing a CEO's letter to the stakeholders leads to a better understanding of sustainability topics that are of crucial importance to a company leader on the one hand and reflect the desired perception of the company from a sustainable perspective by the stakeholders on the other. CEO letters to the stakeholders are a vital element of corporate communication on sustainability, which needs more attention from the researcher, also considering the unique environmental and social characteristics of industries like fashion. To partially cover that research gap, we post the research questions as follows:

- RQ 1: What are the main topics in CEO letters to the stakeholders of LPP S.A.?
- RQ 2: How do the share of main topics in CEO letters to the stakeholders of LPP S.A. change over time?

## Methodology

For our analysis, we chose the LPP S.A. company. LPP is a company that operates in the fast fashion industry. LPP is a Polish retail company that owns and operates several famous fashion brands, including Reserved, Cropp, House, Mohito, and Sinsay. These brands are known for offering trendy and affordable clothing, following the fast fashion business model of quickly producing and delivering the latest fashion trends to consumers.

As the first step of our research, on the corporate website, we identified LPP S.A.'s six annual disclosures on sustainability (English version): Integrated Report for 2017, Integrated Report for 2018, Integrated Report for 2019/20, Integrated Report for 2020/21, Sustainability Report for 2021/22, and Sustainability Report for 2022/23. We extracted the CEO letter from each report to the stakeholders, which we changed to plain text ready for machine reading.

To answer our research questions, we applied keywords and a topic modelling analysis. In our research, we use the Literary Exploration Machine (LEM) for keyword analysis and Multilingual Topic Modeling (MTM) for topic

modelling – tools developed within CLARIN – PL (Walkowiak & Malak, 2018), which is a Polish research consortium and a section of pan-European Common Language Resources and Technology Infrastructure (CLARIN) (<http://clarin-pl.eu/en/what-is-clarin>).

Keyword analysis is a simple tool that relies on counting a single word's appearance frequency. From LEM, for each letter, we received Excel files with a distribution of words. For further investigation, we selected words related to sustainable matters.

Topic models refer to computer algorithms utilizing the word distribution within a particular corpus to reveal latent word co-occurrence patterns (Van Atteveldt et al., 2019). A commonly employed tool for topic modelling is the unsupervised Bayesian machine-learning method known as Latent Dirichlet Allocation (LDA), introduced by Blei et al. (2003). To this day, LDA remains a cutting-edge method (Jacobi et al., 2016) and has increasingly found application in both financial and sustainability reporting studies within corporate settings (Brown et al., 2020; Bryl et al., 2022, Fijałkowska & Hadro, 2022).

The creators of the technique clarify that LDA functions as a generative probabilistic model for a particular corpus. In essence, documents are depicted as random blends of latent topics, each defined by a word distribution (Blei, 2003, p. 996). The MTM-produced results of the LDA analysis include a compilation of the 30 most prevalent keywords and their respective frequencies for each selected topic. Additionally, it provides the probability of topic relevance for each document, interpreted as the concentration of topics across the entire corpus, considering LDA as a probabilistic measure.

In addition, we used LEM to analyze the textual characteristics of the CEO letters to the stakeholders. We measured the length (number of words), tone (positive words over negative words divided by their sum) and readability (using the Gunning Fog Index (FOG)).

## Findings

Table 1 presents the textual characteristics of LPP S.A.'s CEO letters to the stakeholders. In general, letters are relatively short, with the longest from the Sustainability Report 2022–2023 (1749 words). They have a positive linguistic tone (predominance of positive words over negative ones), with the lowest value in 2020–2021 (0.02) and the highest in 2018 (0.30). The (FOG) as a readability test for English writing indicates that the LPP S.A.'s CEO uses language that is easy to understand when choosing simple words (FOG Index from 9 to 12 means that the text is understandable for high school students).

**Table 1.** Textual characteristics of LPP S.A.'s CEO letters to the stakeholders

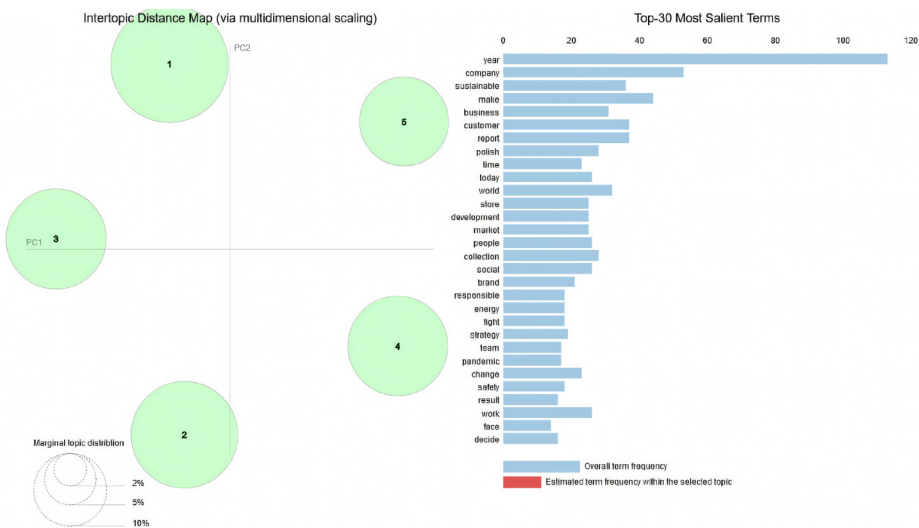
Year	No. of words	Tone	FOG
2022/2023	1749	0.08	11.70
2021/2022	1311	0.17	12.57
2020/2021	1582	0.02	11.27
2019/2020	1255	0.11	12.78
2018	1152	0.30	9.26
2017	1385	0.17	11.56

Source: own elaboration with CLARIN – PL.

Figures 1 to 8 present the results of topic modelling, and Figure 9 of key-words analysis. To answer our RQ 1, we look at the words with the highest co-occurrence frequency in five identified topics. Among 30, the most frequent words related to sustainable matters are (Figure 1): *sustainable, people, social, responsible, energy, pandemic, safety, and work*.

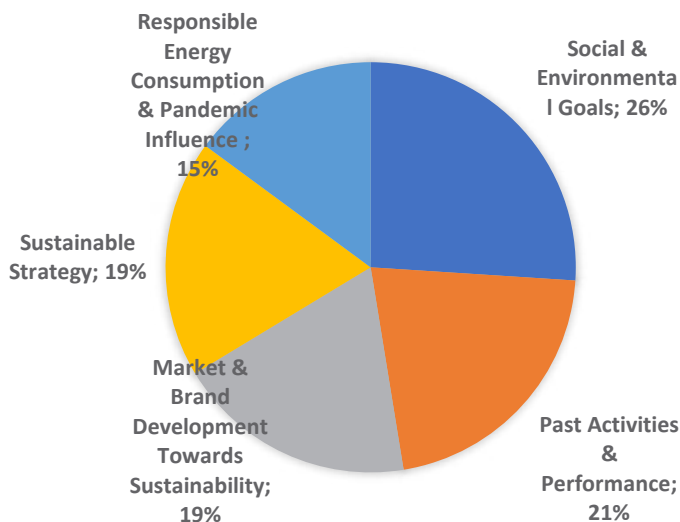


**Figure 1.** LDA topic analysis visualization with Multilingual Topic Modeling CLARIN-PL. Five Topics in NFI LPP S.A.'s CEO letters to the stakeholders and Top 30 Most Salient Terms



Source: own elaboration with CLARIN – PL.

**Figure 2.** Distribution of topics in LPP S.A.'s CEO letters to the stakeholders



Source: own elaboration with CLARIN – PL.

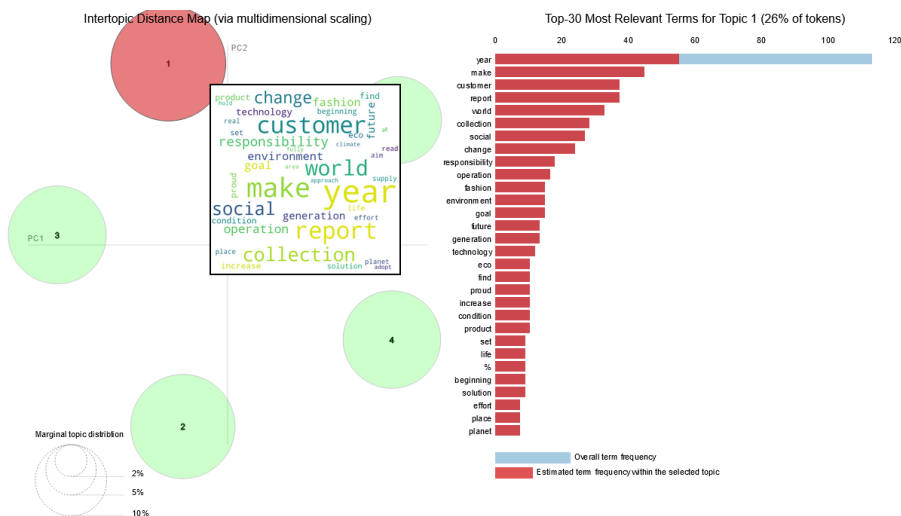
Figure 2 provides the direct answer to RQ 1. In LPP S.A.'s CEO letters to the stakeholders, there are five topics, of which four (79% of all text) talk about sustainability issues:

- Topic no. 1 Social & Environmental Goals (26%);
- Topic no. 3 Market & Brand Development Towards Sustainability (19%);
- Topic no. 4 Sustainable Strategy (19%);
- Topic no. 5 Responsible Energy Consumption & Pandemic Influence (15%).

The only topic in LPP S.A.'s CEO letters to the stakeholders dealing with non-sustainable matters is topic no. 2, Past Activities & Performance (Figure 4), constituting 21% of all text.

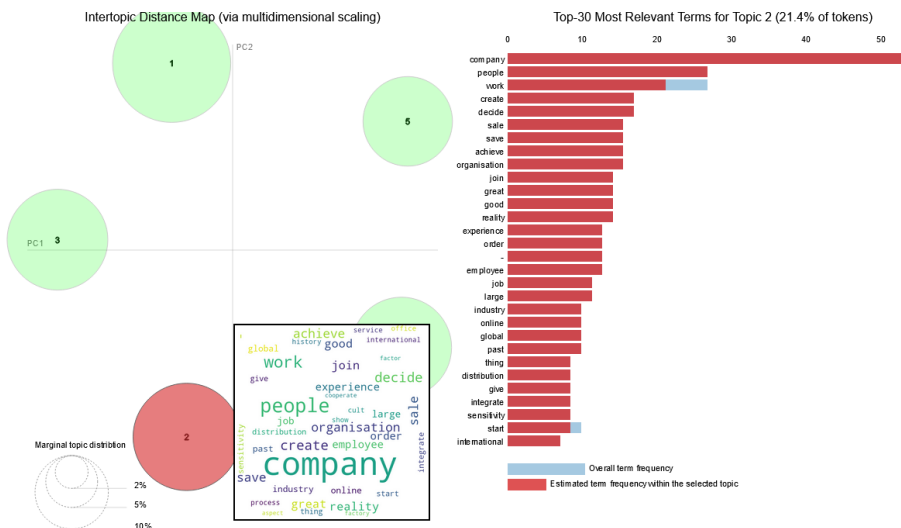
In topic no. 1 (Figure 3), among the ten most frequent words that cooccur together are: *customer, social, change, responsibility, environment, goal, future, and generation*. It shows the CEO's engagement in the broader discussion of sustainable goals for future generations. *Development, market, brand, result, production, respect, economic, and environmental* are words that represent topic no. 3 (Figure 5), which indicates that market and brand development are discussed together with economic and environmental matters. Topic no. 4 (Figure 6) is characterized by expressions such as: *sustainable, business, strategy, safety, challenge, and improve*, which demonstrates the awareness of the market expectation to implement sustainable issues into the strategy, and elucidating its challenging dimension for fashion companies like LPP S.A. *Energy, responsible, pandemic, plastic, decision, action, aware, economy, and impact* cooccur the most frequently in topic no. 5 (Figure 7), what shows the discussion about responsible energy consumption and using plastic and its impact on the environment. In that topic, information about the pandemic and its consequences to companies' condition also appears.

**Figure 3.** Words distribution for topic no. 1 Social & Environmental Goals



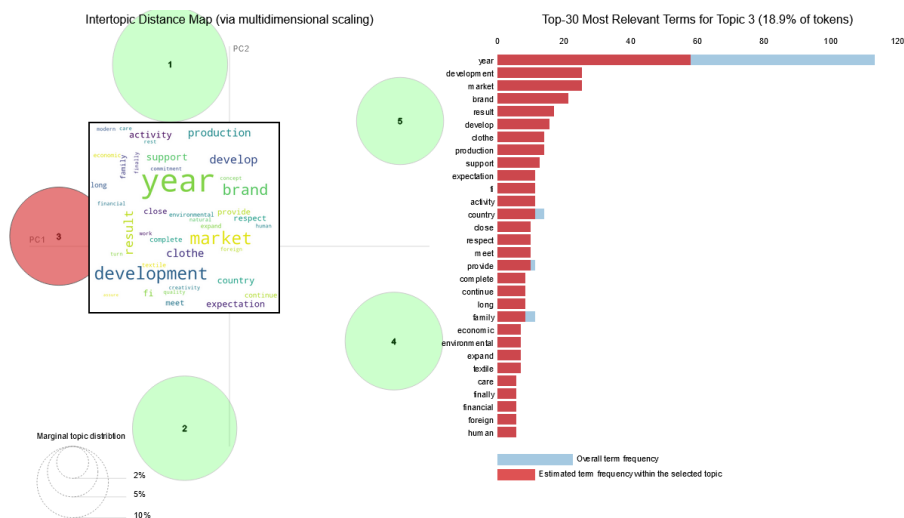
Source: own elaboration with CLARIN – PL.

**Figure 4.** Word distribution for topic no. 2 Past Activities & Performance



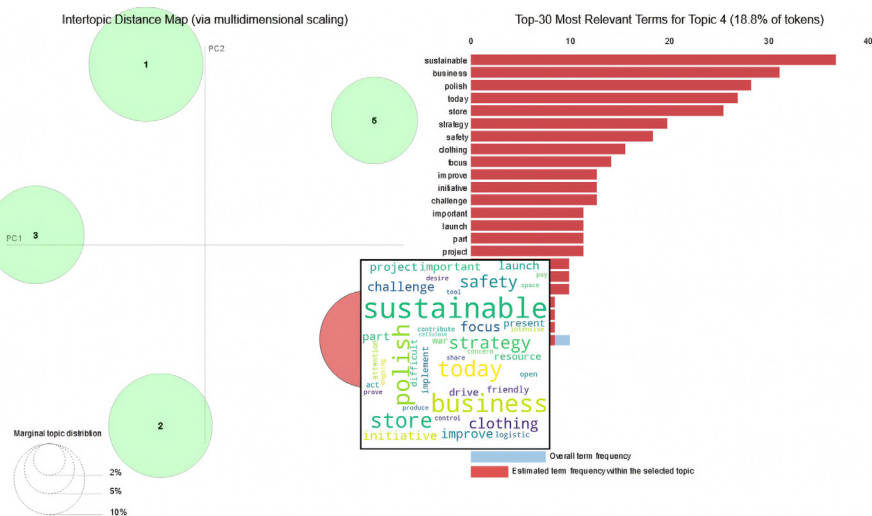
Source: own elaboration with CLARIN – PL.

**Figure 5.** Words distribution for topic no. 3 Market & Brand Development Towards Sustainability



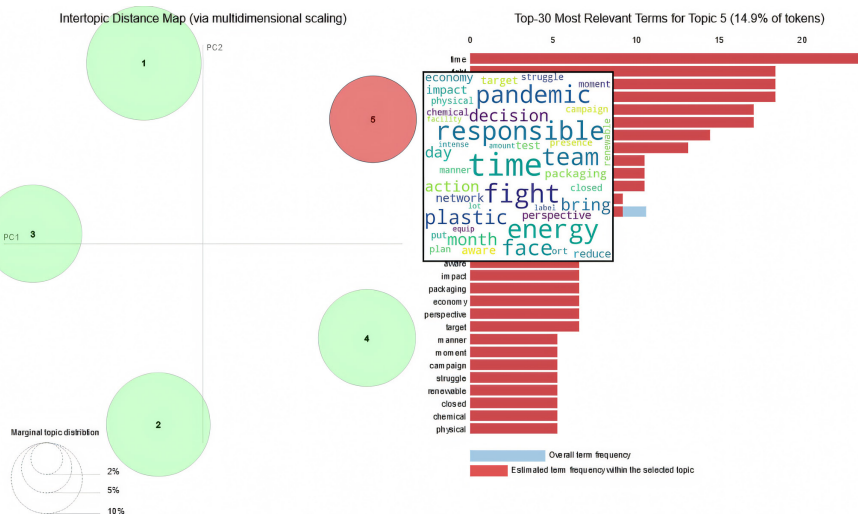
Source: own elaboration with CLARIN – PL.

**Figure 6.** Words distribution for topic no. 4 Sustainable Strategy



Source: own elaboration with CLARIN – PL.

**Figure 7.** Words distribution for topic no. 5 Responsible Energy Consumption & Pandemic Influence

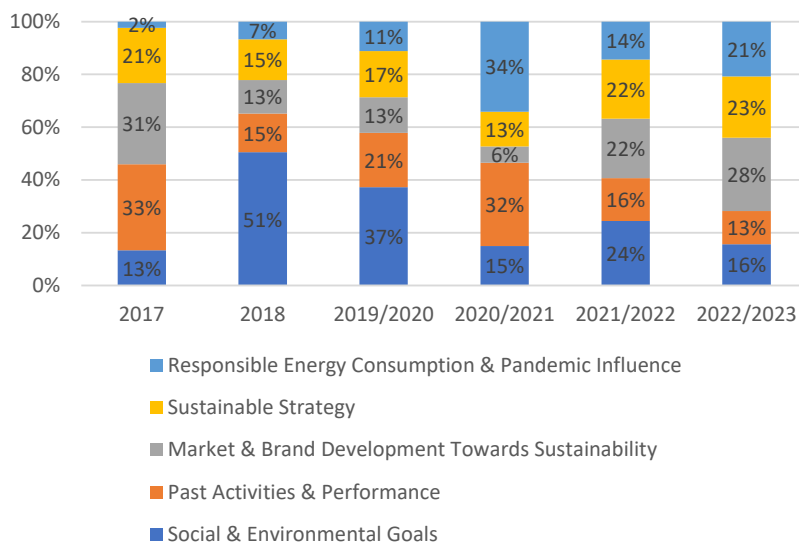


Source: own elaboration with CLARIN – PL.

Figure 8 and 9 provide the answers to RQ 2. There are changes in topics discussed by the LPP S.A.'s CEO in letters to the stakeholders. In the first letter from 2017 (Figure 8), the main topics are Past Activities & Performance (33%) and Market & Brand Development Towards Sustainability topic (31%), while there is almost no space devoted to energy consumption. In 2018, there is one dominant topic (51%) which is Social & Environmental Goals. That topic is also predominant in the letter from the report 2019/2020, but its ratio declines to 37%. Past Activities & Performance (21%) is again among the most important topics together with the discussion about energy and pandemic (11%). The same dominant topic (Past Activities & Performance) is in the 2020/2021 report, yet for the COVID-19 pandemic, the stakeholders are informed how it influenced the LPP S.A. activities (34%). The letter to the stakeholders from the year 2021/2022 concentrates on all topics connected to sustainable strategy and goals, with the almost even distribution among three topics: Social & Environmental Goals (24%), Market & Brand Development Towards Sustainability (22%), and Sustainable Strategy (22%). In the Report 2022/2023, LPP S.A.'s CEO

dedicated the most space to the Market & Brand Development Towards Sustainability topic (28%), Sustainable Strategy (23%), and Responsible Energy Consumption (21%).

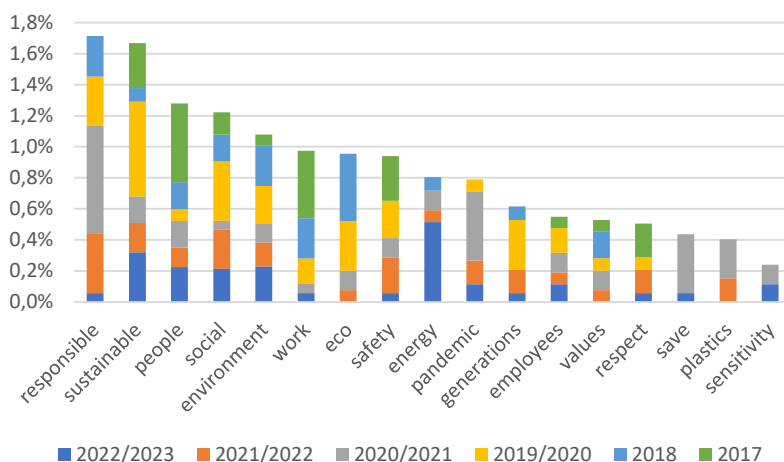
**Figure 8.** Topics distribution in LPP S.A.'s CEO letters to the stakeholders (years: 2017–2023)



Source: own elaboration.

The additional insert to the topics' change in LPP S.A.'s CEO letters to the stakeholders is present in Figure 9, where keyword analysis results are presented. The most frequent word is *responsible* (the root word), yet it does not appear in 2017 but was commonly used in 2020/2021. In the letter from 2017, keywords widely employed indicate the exploration of social matters (*people, work, social, safety*). In 2018, the word *eco* became popular together with the *environment*. Expressions as *sustainable, social, and generation* in the 2019/2020 letter again indicate the importance of social issues. *Responsible, save, pandemic, and plastic*, LPP S.A. used frequently in the 2020/2021 letter. *Sustainable, people, social, environment, and energy* show a balance between social and environmental topics are brought up in the 2022/2023 letter.

**Figure 9.** Distribution of sustainable keywords in LPP S.A.'s CEO letters to the stakeholders



Source: own elaboration with CLARIN – PL.

This study reveals that LPP S.A. discloses mainly sustainability-related improvements, thus preventing the stakeholders from knowing whether and how their sustainability commitments are implemented in day-to-day business operations. The CEO presenting sustainable information to the stakeholders mainly concentrates on the strategy and goals to achieve in the future, omitting the company activities, which have a substantial impact on environmental and social matters. We can also observe a clear shift from dedicating the majority of space in CEO letters to the stakeholders to social topics to the wider discussion about the environment and responsible energy consumption in the most recent letter.

## Conclusions

Despite several initiatives led by either corporations or civil society to promote sustainable practices in the fashion industry, this study's results confirm a notable absence of coherent and consistent disclosure of the sustainability issues in letters to stakeholders of the analyzed company. This study strengthens McVea

and Freeman's (2005) idea that firms must treat the stakeholders not simply as labels but as morally important individuals with overlapping interests and stakes who need to be informed to make rational decisions.

Our research exhibits novelty in various dimensions. Initially, we scrutinized the content of sustainability disclosure through CEOs' letters to the stakeholders of sustainability and integrated reporting within the fast fashion industry that has yet to be explored in other research. Secondly, our analysis employs advanced machine-learning tools that reflect a departure from conventional methods prevalent in numerous other studies. Consequently, we enhance traditional approaches to text analysis, yielding fresh and substantial insights into fast fashion companies' communication with the stakeholders through sustainability reports.

Our study contributes to the stakeholder theory by exploring the one-way communication of companies in the fast fashion industry on sustainability topics. This study also reveals difficulties and challenges in the communication content in the form of a single letter that should employ a multistakeholder orientation (Albu & Flyverbom, 2019; Crane & Livesey, 2017) and is expected to present complete and transparent information (Fijałkowska et al., 2023a). In the fast fashion industry, information on sustainability should be treated as crucial, and our study confirms that it is revealed to a very limited extent.

The limitation of our study lies in investigating only one fashion company. Yet, the company that we selected is a big multi-brand and multinational entity that is full of resources, which leads to the conclusion that it is an example of a company that may have a clear communication strategy, especially on sustainability. This makes it a significant research entity, which by default can be a benchmark for other, smaller and more local companies. In the authors' opinion, this type of company might be treated as a communication leader on sustainability, primarily through the CEO's letters. At the same time, it should be emphasized that the study aims not to diagnose the entire sector but to show the practices of one of the key companies in the market in the sector under study. The aim is also to indicate an original and not commonly used research methodology to carry out the survey and interpret the results, which in further research can be applied broadly to other industries, more companies, or more



extended time periods of analysis. Consequently, the universality and applicability of the methodology presented in our study and its conclusions offer practical implications for all those who are both preparers and users of sustainability information disclosure.

The methodology outlined in our study, along with its conclusions, holds universal relevance and practical implications for individuals involved in preparing and using sustainability information disclosure reports. Our research findings can provide practical insights to guide regulators and various institutions demonstrating interest in the quality of sustainability information.

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