

Sustainability disclosures in acquired firms: assessing reporting maturity

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Abstract: The integration post merges and acquisitions (M&A) presents a unique set of challenges, particularly concerning sustainability reporting. Considering that M&As involve the consolidation of diverse supply chains, strategic challenges also arise, while striving to align sustainability objectives across the newly acquired company. Therefore, this study aims to assess whether the maturity level of sustainability reports improved after the merger and acquisition of two Brazilian companies (Natura and Avon), by applying the maturity assessment framework proposed by Okongwu et al. (2013). Data was gathered from the 2020 and 2023 Sustainability Report of both companies and was treated qualitatively. The findings showed that before M&A Natura already had achieved the 3rd level of maturity (highest before third party auditing), while Avon was oscillating between the 1st and the 2nd levels. After the M&A, the Avon's report showed a highest level of maturity in comparison to pre-M&A, although opportunities for improvement were identified. Accordingly, recommendations were proposed to enhance Avon's performance. The relevance of this study relies on the exploring both, the strategic importance of sustainability reporting processes and challenges faced during M&A integration, as well as the potential of continuous improvement practices to foster corporate transparency in sustainability disclosures.

Keywords: sustainability reporting; merges and acquisitions; sustainable maturity model; supply chain.

1. Introduction

Sustainability reporting has become a cornerstone of corporate governance, providing transparency and demonstrating commitment to sustainable practices (Kayser and Zülch, 2024; Torelli et al. 2020). These reports disclose an organization's environmental, social, and governance (ESG) performance, offering stakeholders valuable insights into its sustainability initiatives and outcomes. Effective sustainability reporting enhances transparency, builds trust, and affirms an organization's legitimacy (Feng, 2021; Benvenuto et al. 2023). In an environment where consumers, investors and regulatory bodies are increasingly vigilant about corporate sustainability, high-quality ESG disclosures are crucial.

While various standards setters and frameworks such as the Global Reporting Initiative (GRI) and others under the International Sustainability Standards Board (ISSB) responsibilities (like the current Sustainability Accounting Standards Board - SASB and the IFRS S1 and S2 that are under implementation) (IFRS, 2024a; 2024b) provide frameworks for sustainability reporting. According to Torreli et al. (2021) the concept of materiality is complex, however, it is through a process of materiality analysis that organizations prioritize the material topics to be managed and disclosure by organizations in their sustainability reports (also called as non-financial reports). Then the topics/themes/matter that are material (most significant) can vary significantly across different companies depending on their specific contexts, such as industries and sectors. This variability makes it challenging to validate continuous improvement based solely on these standards (Okongwu et al., 2013), while efforts on standards harmonization are advancing, like the interoperability for disclosing GHG emissions, as an example (IFRS, 2024c). Organizations must therefore tailor their sustainability reporting to reflect their unique circumstances and priorities, which requires a nuanced and flexible approach to measurement and disclosure, while still adhering to the standards.

The strategic goals of supply chains — reducing costs, improving customer service, enhancing operational reliability and efficiency, and accelerating product delivery — are closely intertwined with sustainability efforts (Caiazza et al., 2021; Feng, 2021). By integrating sustainability into supply chain management, companies could increase their operational efficiency, reduce waste, and mitigate risks associated with environmental and social issues. However, the landscape of sustainability reporting is fraught with challenges (Correia et al., 2017) as stakeholders theories stands about 'creating wealth' for all stakeholders (Torelli et al, 2021; Freeman et al., 2018). Then, despite its importance, the quality of sustainability disclosures is often facing the difficulties to address all different stakeholders' desires related to social and environmental issues, as well achieve a broad stakeholders' engagement (Torelli et al, 2021). Considering that the processes of sustainability reporting "can satisfy stakeholders' different information needs and is a tool of corporate legitimacy" (Benvenuto et al. 2023 p.13), this gap presents a significant opportunity for organizations to refine their reporting practices, particularly during periods of significant change such as mergers and acquisitions (M&A).

The integration of supply chains post-M&A presents a unique set of challenges, particularly concerning sustainability reporting (Caiazza et al., 2021). M&As involve the consolidation of diverse supply chains (Zhang et al., 2010). Acquiring companies must navigate these challenges

while striving to align sustainability objectives across the newly formed entity. The integration phase is critical for setting the foundation of robust sustainability practices that will support transparent and effective reporting in the long term.

Therefore, this paper aims to assess whether the maturity level of sustainability reports improved after the merger and acquisition of two Brazilian companies (Natura and Avon), by applying the maturity assessment framework proposed by Okongwu et al. (2013). The relevance of this study relies on the exploring both, the strategic importance of sustainability reporting processes and challenges faced during M&A integration, as well as the potential of continuous improvement practices to foster corporate transparency in sustainability disclosures.

Natura, a Brazilian cosmetic company with over 19k employees in 68 countries, acquired the AVON company local operation in 2020. was evaluated by CBDS (that is part of the WBCSD - World Business Council for Sustainable Development) evaluated Brazilian main companies' sustainability reporting principals, in which Natura's achieved the maximum grade in several items like: balance and completeness (CBDS, 2023).

From this Introduction, this paper is divided into four sections. Section 1 presents a brief review of the challenges that M&A brings to the sustainable reporting process and to supply chain management. Section 2 presents the methodological procedures and details the framework proposed by Okongwu et al. (2013). Section 4 provide the analysis and recommendations related to the case. Finally, Section 5 presents the final considerations.

2. Theoretical foundation

The integration of sustainability into supply chain management could significantly contribute to achieving strategic goals such as reducing costs, improving customer service, enhancing operational efficiency, and accelerating product delivery (Zhang et al., 2010). In addition to the operational efficiency, by embedding sustainability practices within supply chains, companies could reduce waste, and mitigate risks associated with environmental and social issues (Kayser and Zülch, 2024). This alignment is facilitated by sustainability reports, which serves as a tool for continuous improvement (Okongwu et al., 2013), enabling organizations to monitor progress, identify areas for enhancement, and improving stakeholders engagement.

Despite its importance, the quality of sustainability disclosures often faces challenges that have been pointed out in stakeholder and legitimacy theories when targeting to meet stakeholder expectations (Freeman et al. 2018) . Researches that comments about organizations struggling to provide comprehensive and accurate sustainability information, alerts about risks of undermining the credibility on reports (Correia et al., 2017). This gap presents a complementary opportunity for companies to refine their reporting practices, ensuring that disclosures are both relevant and reliable not only within the central/big companies, but also in their value chain. In this sense, Nielsen (2023) highlights the ESRS recommendations to undertaking due diligence analysis on value chain [upstream and downstream] in order to understand impacts, risks and opportunities related to sustainability matters, contemplating the double-materiality assessment

that combines both footprint/impacts on the environment and society and how these socio-environment aspects/risks opportunities that affects (or might affect) the organizations.

Moreover, companies can use maturity models to assess their current sustainability practices and identify areas for improvement (Sari et al., 2020). This structured approach allows organizations to progress from basic compliance to advanced sustainability integration, ultimately achieving more comprehensive and transparent reporting. It is also useful when companies are passing through process of M&A, since usually the companies will have to integrate process and their level of maturity regarding sustainability practices might be significantly different.

Therefore, M&A present unique challenges and opportunities for sustainability reporting. The consolidation of diverse supply chains involves integrating different levels of sustainability maturity, varying standards, and distinct corporate cultures. Ensuring that sustainability standards are maintained or enhanced during this complex integration process is a challenge. Discrepancies in data quality and reporting frameworks between the acquiring and acquired companies can lead to gaps and inconsistencies in consolidated reports. It highlights the importance of visibility throughout the supply chain to coordinate operations efficiently and develop robust recovery plans to mitigate disruptions effectively (Tang, 2006).

Kayser and Zülch (2024) emphasize the importance of aligning sustainability objectives during M&A transactions. They explain that acquiring companies must navigate regulatory differences, unify sustainability goals, and address reporting inconsistencies to ensure robust sustainability practices post-integration. Furthermore, the urgency to integrate operations and realize synergies often diverts attention from sustainability initiatives, resulting in superficial or inadequate disclosures. In fact, there is need for collaborative planning systems that enable seamless coordination across the newly formed entity's supply chain to avoid system disruptions (Tang, 2006).

The integration of supply chains post-M&A can lead to significant performance improvements post-acquisition (Feng, 2021) and be facilitated by leveraging structural equivalence (Chae et al., 2022). This concept refers to the alignment of supplier and customer bases between merging firms, which can streamline integration and improve the consistency of sustainability practices. By ensuring report integration, companies can foster structural equivalence, reduce redundancies, enhance operational efficiencies, and maintain high sustainability standards throughout the integration process.

By adopting frameworks for systematic evaluation and refinement of reporting processes, organizations can enhance the quality and relevance of their sustainability disclosures during the post-M&A integration phase. This approach involves setting clear sustainability objectives, implementing strategies to achieve them, monitoring outcomes, and making necessary adjustments to improve performance continuously.

In this context, maturity frameworks for sustainability reporting are crucial for guiding organizations towards continuous improvement. By adopting a maturity framework,

organizations may find a way to systematically evaluate their current reporting practices, identify gaps, and implement strategies for improvement. This approach may enhance sustainability disclosures evolve in line with best practices and regulatory requirements, helping provide stakeholders meaningful and reliable information. The continuous improvement perspective advocated in the literature emphasizes the iterative nature of this process, encouraging organizations to regularly review and enhance their sustainability reporting practices.

Correia et al. (2017) offers a comprehensive overview of various maturity models and their applications in supply chain sustainability. It highlights the importance of using these models to assess readiness and guide improvements in sustainability practices. This systematic approach ensures that organizations can continually enhance their sustainability reporting, aligning with evolving stakeholder expectations and regulatory demands.

Nevertheless, the literature on maturity models applied to supply chain have different approaches to establish level of maturity, with some being overly specific and, therefore, limited in application; while others are so broad that might not provide real value in application (Correia et al., 2017). The maturity model proposed by (Okongwu et al., 2013) provides a structured approach to enhancing sustainability disclosures, as presented in Section 3.3 (Table 1). This model outlines stages from initial compliance to advanced integration, emphasizing the importance of iterative progress and continuous refinement. It was elaborated based on the qualitative analysis of 50 sustainability reports from different organizations in different industries.

In the initial stages, organizations focus on basic compliance with regulatory requirements, often producing reports that lack depth and material relevance. As companies progress through the maturity stages, they integrate sustainability more deeply into their strategic and operational processes. Advanced stages involve comprehensive and transparent reporting that aims to meet stakeholder expectations and reflects a genuine commitment to sustainable practices. In essence, maturity levels are: (1) define and report; (2) measure and manage and (3) improve and change, with (4) is being audit by an independent party.

3. Research Method

This section presents the research design, as well as the data collection and treatment.

3.1 Research design

This qualitative study employs a single-case study design, aligned with (Creswell, 2014) approach to qualitative research. (Yin, 2017) first rationale for a single-case study, which involves selecting a critical case. According to (Creswell, 2014), qualitative research is best suited for exploring complex phenomena within their contexts. Similarly, (Yin, 2017) supports the use of a single-case study when it involves a critical case that can test a significant theory or theoretical propositions. Therefore, the purpose of this single-case study is to discuss the maturity levels of the selected organizations in reporting their supply chain and overall sustainability initiatives following an acquisition.

In this paper, we chose to apply the framework proposed by (Okongwu et al., 2013) due to its range of information, from ESG aspects to supply chain aspects, while still being able to specify in an appropriate manner what the company needs to do to improve its reporting maturity. Since this approach focuses on M&A situations, this work does not intend to substitute current norms, standards and guidelines for materiality assessment and double materiality analysis (also covering value chain) for assessing material Impacts, Risks and Opportunities (Nielsen, 2023; Benvenuto et al. 2023), but to be a possible integrated tool.

The study conducts a cross-sectional evaluation, examining Avon, which was acquired by Natura in 2020, over two periods, 2020 and 2023. This approach allows for detailed observation of changes in Avon's sustainability reporting practices throughout this timeframe. By employing a cross-sectional perspective, this study offers insights into the evolution of Avon's sustainability disclosures and practices post-acquisition.

Avon was chosen for several reasons. Firstly, as a well-established brand in the beauty and personal care industry, it provides a valuable context for examining ESG practices. Additionally, the acquisition by Natura offers a unique opportunity to study the impact of M&A on sustainability reporting. Furthermore, Natura is renowned for its sustainability reports, making it ideal for understanding if and how this influenced Avon's practices. Moreover, the transition of Avon to Natura's sustainability standards over time allows for an in-depth exploration of this integration process, following the comprehensive case study methodologies outlined by (Creswell, 2014) and (Yin, 2017).

3.2 Data collection

The data collection process for this study was designed to capture comprehensive insights into the evolution of Avon's sustainability reporting practices over the three-year period following its acquisition by Natura. Consistent with (Creswell, 2014) approach to qualitative research, this process involves collecting qualitative documents from secondary data sources, specifically public documents.

The data source for this study is the Annual Report from Avon, covering the years 2020 and 2023. These reports were systematically downloaded from Avon's corporate website and provide detailed information on sustainability initiatives, supply chain management, and corporate responsibility activities.

To ensure a comprehensive analysis, the study also includes an examination of Natura's Annual Report from 2020 and 2023 for comparative purposes. This comparison aims to understand how Avon's sustainability reporting aligns with or diverges from Natura's practices after four years of integration, by the mentioned framework approach. By examining Natura's well-regarded sustainability standards, the study seeks to identify the extent of Avon's alignment with these practices and any notable deviations.

3.3 Data analysis

This section outlines the analytical framework employed, drawing on the concepts and models presented by (Okongwu et al., 2013). The primary focus of this research is to discover the maturity levels of Avon in reporting their supply chain and overall sustainability initiatives following the acquisition. To achieve this, the study employs the proposed framework for improving the maturity of firms in sustainability disclosure from (Okongwu et al., 2013).

The framework proposes a structured approach consisting of four levels (or steps) of maturity as shown in Table 1. The process areas are derived from elements of corporate sustainability and supply chain sustainability (SCS), as well as from the eight sustainability criteria presented in the SCS disclosure framework.

The framework consists of four levels (or steps) of maturity. At Level 1, top management identifies key stakeholders and their needs, defines objectives for sustainability attributes, and establishes a performance measurement system with internationally recognized standards. At Level 2, the disclosure report should demonstrate how the sustainability strategies and policies from Level 1 are integrated and implemented across the closed-loop supply chain, detailing performance management (preserving that materiality/double-materiality assessment prevail, so not aiming to conflict to mostly adopted international standards frameworks). At Level 3, organizations must report their improvement initiatives and provide evidence of changes and progress over time. Finally, Level 4 requires that the data in the reports be certified by independent third-party organizations.

The clearly defined maturity levels within the framework provide a structured pathway for benchmarking and targeted improvements, helping organizations to systematically elevate their reporting standards. Additionally, the framework facilitates comparative analysis, making it easier to identify how Avon's sustainability practices align with those of Natura post-acquisition. This comparative capability is supportive for understanding the integration process and the impact of Natura's sustainability standards on Avon's reporting practices.

Table 1. Framework for improving the maturity of firms in sustainability disclosure

	Sustainability criteria	Level 1: initial	Level 2: intermediate	Level 3: advanced	Level 4: world class
Corporate governance and management	Organization (governance)	The governing body is clearly defined	The governing body adopts a proactive approach in the development and management of sustainability initiatives	The governing body adopts a proactive approach in the development and management of sustainability initiatives	Sustainability data are certified by an independent body (external assurance) Evidence of how the defined sustainability attributes and initiatives contribute to satisfying stakeholders
	Strategy and Policies	Organization's sustainability-related strategy and policies are clearly defined	There is evidence of how sustainability strategy and policies are implemented	New sustainable technologies and initiatives are continuously integrated into corporate strategy and policies	
	Stakeholders	Stakeholders and their needs are clearly identified	Key stakeholders are engaged in decision-making	Stakeholders are involved in improvement initiatives	
	Performance measurement	Key sustainability performance indicators are clearly defined	The performance of sustainability initiatives are measure	Sustainability performance measures are updated and improved and self-audit performed	

	Sustainability criteria	Level 1: initial	Level 2: intermediate	Level 3: advanced	Level 4: world class
Corporate governance and management	Sustainability standards	Sustainability standards (ISO 14001, ISO 26000 [...]) and compliance policies are clearly mentioned	Sustainability standards are implemented and managed in at least two of the three sustainability dimensions	Sustainability standards are improved	
	Economic issues	Polices related to economic value generation and distribution are clearly defined	Generated economic value is shared with various stakeholders	Percentage of economic value shared with various stakeholders increases over time	
	Report structure	No separate chapters for key sustainability components	A separate chapter on supply chain management	A separate chapter on SCM, as well as on each of the three sustainability dimensions	
Societal development sustainability	-	The scope and schedule of community development projects (roads, water, hospitals [...]) are clearly stated	Community development projects are really executed and their impact measure	Number of community development projects increases over time and performance improvement changes are made	

	Sustainability criteria	Level 1: initial	Level 2: intermediate	Level 3: advanced	Level 4: world class
Supply chain sustainability	Supply chain design	Supply chain (SC) processes and activities are clearly defined	Sustainability initiatives are implemented in upstream or downstream linkages	A life cycle approach is adopted in implementing sustainability initiatives	
	Employees management	Policies related to personnel management (wages, work conditions, health and safety, [...]) are clearly defined	Social initiatives concerning employees are implemented and managed, and performance measured	Social measures concerning employees are improved over time	
	Supplier relationship management	Policies concerning the management of suppliers are clearly identified	Suppliers are involved in implementing and managing sustainability initiatives	Suppliers are involved in sustainability improvement measures and problem solving	
	Customer relationship management	Policies concerning the management of customers are clearly identified	Customers are associated in implementing and managing sustainability initiatives	Customers are associated in managing changes related to sustainability initiatives	
	Environment	Environmental issues and management policies are clearly defined as they apply to the life cycle SC	Environmental initiatives are implemented and performance measured	Environmental measures are improved overtime and changes made in the supply chain	

Source: (Okongwu et al., 2013)

4. Findings

Based on the maturity model proposed by (Okongwu et al., 2013), Figure 1 summarizes the analyses of Avon and Natura's Annual Reports from 2020 and 2023, assessing and comparing their maturity levels in sustainability disclosure using the proposed framework.



Figure 1. Summary of Avon and Natura's Sustainability Disclosure Maturity (2020 and 2023)
Source: The authors

Figure 1 shows that Natura's 2020 and 2023 Annual Reports demonstrate a high level of maturity in sustainability disclosure. In both years, the company achieved the 3rd level proposed by the maturity model. Regarding Avon, it was possible to note an improvement in its maturity. A more detailed analysis of each company is presented in Sections 4.1 and 4.2.

4.1 Analysis of Natura's 2020 and 2023 Annual Reports

Table 1 summarizes the results of Natura's Annual Reports from 2020 and 2023 after applying the (Okongwu et al., 2013) framework. Based on the analysis, Natura's 2020 and 2023 Annual Reports demonstrate a high level of maturity in sustainability disclosure. The detailed and structured approach observed in both years provides valuable insights into effective sustainability reporting practices. By comparing these practices with Avon's reports from the same periods, we can identify clear pathways for Avon to enhance its sustainability reporting maturity as will be shown in the next subsection.

Table 1. Analysis of Natura’s Sustainable Disclosure

	Criteria	2020	2023
Corporate governance and management	Organization (governance)	<p>Level 4- The governing body, highlighted in a corporate governance chapter, identifies the Board of Directors of Natura &Co as the principal decision-making body. The Board approves strategic planning and defines sustainability ambitions within "Compromisso com a Vida," with active participation from board members. Additionally, sustainability data are certified by an independent auditor—PWC (pages 123, 182-183).</p>	<p>Level 4-The information about corporate governance remains consistent. In addition to the previously mentioned structure where the Board of Directors of Natura &Co is the principal decision-making body, the 2023 report includes new topics like succession planning, talent acquisition and retention, and diversity initiatives. The sustainability data is now certified by KPMG (pages 27-33,195-196).</p>
	Strategy and Policies	<p>Level 3- Clear targets for performance are established under the “Visão de Sustentabilidade 2050,” setting commitments to make the company a generator of positive impact. The definition of causes considers the global challenge agenda, particularly the Sustainable Development Goals (SDGs), ensuring alignment with societal challenges. The framework outlines goals, with the first cycle ending in 2020, showing progress in the report. New sustainable technologies and initiatives are continuously integrated into corporate strategy and policies, as shown in metrics (pages 29-31, 56-57, 61-63).</p>	<p>Level 3-The targets for performance under "Visão de Sustentabilidade 2050" have evolved into "Meta do Compromisso com a Vida," with an emphasis on innovating for positive impacts. The 2023 report includes new targets related to the TCFD recommendations, providing detailed status updates. The sections explain how the strategy and policies were implemented and how performance is measured, with constant references to reports and policies that support or complement the information in the sections (pages 57-59,63-64).</p>

	Criteria	2020	2023
	Stakeholders	Level 3-The report highlights active stakeholder engagement, involving them in improvement initiatives. Natura grouped material topics into three causes: "Amazônia Viva," "Mais Beleza, Menos Lixo," and "Cada Pessoa Importa." Key stakeholders were consulted and actively participated in developing these causes (pages 165).	Level 3-The Board ensures alignment with the approved strategy with shareholders and stakeholders. The report highlights the engagement of stakeholders, involving them in improvement initiatives (pages 29-30).
	Performance measurement	Level 3-Clear performance targets under “Visão de Sustentabilidade 2050” commit to making the company a positive impact generator. The goals align with global challenges, particularly the SDGs, ensuring societal alignment. The framework outlines these goals, with the first cycle concluding in 2020. The report shows the status of achieving these ambitions, providing a clear progress picture (pages 29-31, 56-57, 61-63).	Level 3-Clear targets for performance on “Meta do Compromisso com a Vida” include progress assessments, completed requirements, and regular updates through self-audits. Clear targets related to TCFD recommendations provide detailed status updates and references. The sections explain strategy and policy implementation and performance measurement, with constant references to supporting reports and policies (pages 57-59, 63-64).
Corporate governance and management	Sustainability standards	Level 3-Sustainability standards are implemented and managed, with the report constructed based on GRI. Additionally, the sections highlight which GRIs are addressed, ensuring transparency and clarity, and the SASB Standards, as well as the guidelines from the TCFD	Level 3-While the 2020 report focused on GRI standards, the 2023 report includes a broader range of international standards such as OCPC 9, the International Integrated Reporting Framework, and the SASB Standards, as well as the guidelines from the TCFD. The report also discloses the standards, relating the content to its specific location within the report (pages 4,63-64,178-191).

	Criteria	2020	2023
	Economic issues	Level 3-follows indicating with clarity a section on remuneration, which discloses that the remuneration structure includes both fixed and variable components. According to the report, detailed information on the remuneration of the Board of Directors and Executive Officers can be found in the Reference Form, which is made available by the company (page 141).	Level 3-The structure of remuneration remains the same, detailing both fixed and variable components. The 2023 report elaborates more on short- and long-term incentives (page 25).
	Report structure	Level 3-The chapter on Supply Chain Management (SCM) titled "Fornecedores" seems comprehensive. organized in three dimensions: environmental, social, and governance. This thorough and organized approach ensures that all aspects of sustainability are addressed in detail, providing clear insights into the company's practices and initiatives across these critical areas.	Level 3-The report includes a comprehensive chapter on SCM titled "Monitorando Mercados e Fornecedores," which details the monitoring of markets and suppliers. organized in dimensions: environmental, social, and governance. This thorough and organized approach ensures that all aspects of sustainability are addressed in detail, providing clear insights into the company's practices and initiatives across these critical areas.
Societal development sustainability	-	Level 3-In the "Comunidades do entorno" chapter, the company details operations and community relationships aligned with the Amazon Program strategy. It measures investments, engagement, impact assessments, and local development programs. Metrics show an increasing number of community development projects and consistent performance improvements over time (page 115).	Level 3-The report emphasizes the company's goal of creating a positive impact by promoting diversity and inclusion. Projects are executed and measured through "Meta do Compromisso com a Vida" targets. Metrics indicate an increasing number of community development projects and consistent performance improvements over time. This commitment to continuous improvement is evident in the detailed metrics and progress outlined in the report (pages 56-59).

	Criteria	2020	2023
Supply chain sustainability	Supply chain design	Level 3-The report includes a chapter titled "Fornecedores," which details the company's commitment to evolving its supplier selection and management processes by deepening the integration of socio-environmental criteria. Every new supplier must adhere to the Global Supplier Code of Conduct of the Natura &Co group, ensuring that all suppliers meet the high standards set by the company. (pages 116-118).	Level 3-The report includes a chapter titled "Monitorando Mercados e Fornecedores," which details the monitoring of markets and suppliers. It is disclosed that suppliers must maintain transparency and integrity by adhering to the Supplier Code of Conduct, Conflict Minerals Statement, Critical Materials Policies, Privacy Statement, and Responsible Purchasing Guidelines. (page 39).
	Employees management	Level 3-Social initiatives for employees are implemented and managed, with their performance being measured regularly. Over time, these measures have shown substantial improvement, as evidenced in the "Gestão de pessoas" section (pages 142-146).	Level 3-Social initiatives for employees continue to show improvement, with the 2023 report providing updated performance measures, as demonstrated in the "Nossas Pessoas" goals (pages 57-59).
	Supplier relationship management	Level 3-The report states that the company is actively engaged in addressing climate change alongside the engagement of their suppliers. It highlights its recognition as one of the leading global companies in encouraging suppliers to adopt actions to monitor and reduce greenhouse gas emissions, according to the Carbon Disclosure Project (pages 116-118).	Level 3-The company is executing the Climate Transition Action Plan, which includes six workstreams to address the decarbonization of its business. To address this, the company is actively mapping and engaging suppliers to develop an action plan, identifying emissions, and determining key focus areas for coming years (pages 60-62).

	Criteria	2020	2023
	Customer relationship management	Level 3-The report highlights active stakeholder engagement, including final consumers, involving them in improvement initiatives. Natura grouped material topics into three primary causes: "Amazônia Viva," "Mais Beleza, Menos Lixo," and "Cada Pessoa Importa." Key stakeholders were consulted and actively participated in the development of these causes, ensuring their perspectives and insights were integral to shaping the company's sustainability initiatives (pages 165).	Level 3-Among the principles that underpin the company's strategy is the commitment to representation. The company focuses on empowering customers to understand critical issues and find ways to address them. This ensures that all stakeholders are engaged and active participants in driving sustainability initiatives forward (page 49).
	Environment	Level 3-Environmental initiatives and performance measurement continue (chapter "Meta do Compromisso com a Vida"). Additionally, there are clear targets related to the TCFD that are also implemented and measured. Over time, environmental measures are continuously improved, and changes are made in the supply chain to enhance sustainability practices (pages 57-59,63-64).	Level 3-Environmental initiatives and performance measurement continue (chapter "Meta do Compromisso com a Vida"). Additionally, there are clear targets related to the TCFD that are also implemented and measured. Over time, environmental measures are continuously improved, and changes are made in the supply chain to enhance sustainability practices (pages 57-59,63-64).

Source: The authors

4.2 Analysis of Avon's 2020 and 2023 Annual Reports

Based on the (Okongwu et al., 2013) framework, the results of Avon's Annual Reports assessment are detailed on Table 2. The evaluation highlights the progression of Avon's sustainability practices across different criteria and fits each one into the appropriate maturity level. In the categories which there was no evidence regarding clear policies and standards (Level 1), it was considered Not Applicable (N/A).

Table 2 shows that Avon's 2020 Responsible Business Report aligns primarily with Level 1 of the proposed framework, with some elements indicating progress towards Level 2. However, most elements necessary to advance to higher levels, such as detailed performance measurement, stakeholder engagement, and continuous improvement, were either insufficiently detailed or not included.

Table 2. Analysis of Avon’s Sustainable Disclosure

	Criteria	2020	2023
Corporate governance and management	Organization (governance)	Level 1-There is a Director of Corporate Responsibility & Sustainability, who collaborates with relevant teams and executives, and a Corporate Responsibility Steering Group that meets regularly. However, the report lacks clarity on whether the governing body plays a significant role in the implementation of sustainability initiatives (page 7).	Level 3-The Sustainability Steering Committee, including the Head of Sustainability and a Director, leads on sustainability strategy with support from the central Sustainability team and departmental experts (page 4).
	Strategy and Policies	Level 1-Clear strategies and policies, including an updated Supplier Code of Conduct and environmental targets. However, the report does not provide specific policies for the environmental targets, nor evidence of the implementation of the Supplier Code of Conduct (pages 27,31-41).	Level 3-Clear targets for performance on people and planet are established. The sections explain how the strategy and policies were implemented and how performance is measured. New sustainable technologies and initiatives are continuously implemented (pages 5-6).
	Stakeholders	Level 1-The key stakeholders are identified in the report - employees, representatives, customers, commercial stakeholders, trade organizations, and regulators. Additionally, they were surveyed them in 2019 to identify their needs and align the sustainability strategy. However, there is no evidence that key stakeholders are engaged in decision making (page 7).	Level 3-The key stakeholders are identified and separated into people (associates, representatives, and everyone working in the distribution centers and manufacturing sites) and planet (suppliers). Additionally, the key stakeholders are involved in decision-making through engagement programs, trainings, and feedback, and is also clear indicated their involvement in improvement initiatives (pages 8–25).

	Criteria	2020	2023
	Performance measurement	Level 2-Clearly defined environmental targets and measures the performance of sustainability initiatives. However, the report does not provide specific policies for achieving these environmental targets. (Pages 31-41).	Level 3-Clear targets for performance on people and planet are established, with sustainability measures continuously refined and enhanced through regular self-audits. The sections explain progress checks and outline the completed requirements (Pages 5-6).
Corporate governance and management	Sustainability standards	N/A	Level 2-Sustainability standards are implemented and managed in at least two of the three sustainability dimensions. The people and planet priorities are informed by internal roadmaps and external standards and regulations, including GRI. In 2023, Avon developed a roadmap to ensure regulatory and legislative compliance and improve their ESG data gathering and reporting (page 4).
	Economic issues	N/A	Level 1-The report only mentions improving rewards and offering retail franchise opportunities to commercially viable representatives who want to take that step. Additionally, it introduced an awards scheme to recognize and incentivize suppliers' social and environmental impact (pages 10-15).
	Report structure	Level 1-The report features separate chapters for key sustainability components like "Being Human-Kind" and "Being Planet-Kind." However, they lack dedicated chapters on supply chain management and the three sustainability dimensions.	Level 2-The report features separate chapters for key sustainability components like people and planet, as well as a separate chapter on supply chain management. However, it lacks a dedicated chapter for governance.

	Criteria	2020	2023
Societal development sustainability	-	Level 2-The chapter "Being Human-Kind" details community development projects focused on COVID-19, gender-based violence, diversity and inclusion, and breast cancer support and awareness. These projects are executed, and their impacts are measured. However, due to the lack of information from 2019, it is not possible to confirm that the number of community development projects has increased over time or that performance improvement changes have been made (Pages 9-29).	Level 3-The section about people details community development projects focused on supporting associates, empowering representatives, breast cancer support, and gender-based violence. These projects are executed, and their impacts are measured. The targets and performance metrics indicate that the number of community development projects increases over time and performance improvement changes are made (Pages 5-16).
Supply chain sustainability	Supply chain design	N/A	Level 3-The report includes a section titled "Understanding our supply chain," which explains how a dedicated team and strict policies help Avon achieve ambitious targets on suppliers' employment and sourcing practices. They launched a new supplier engagement program, gathering information on suppliers' ESG credentials and carbon emissions. Information and training workshops were conducted with key suppliers, and meetings were held with 17 of the main packaging and raw ingredients providers to discuss next steps (page 15).

	Criteria	2020	2023
	Employees management	<p>Level 2-Policies are clearly defined, including flexible work arrangements, safety monitoring, health and well-being support, comprehensive training programs for ethics, compliance, and role-specific skills. Social initiatives concerning employees are implemented and managed, with performance measured.</p> <p>However, due to the lack of information from 2019, it is not possible to confirm that social measures concerning employees have improved over time (Pages 23-25,28).</p>	<p>Level 3-Social initiatives concerning employees are implemented and managed, with performance measured. Social measures concerning employees have improved over time, as demonstrated by the targets and performance metrics detailed in the "People" section (Page 5).</p>
	Supplier relationship management	<p>Level 1-Policies concerning the management of suppliers are clearly identified, including an updated Supplier Code of Conduct. However, there is no evidence that suppliers are involved in implementing and managing sustainability initiatives. (Page 27).</p>	<p>Level 3-The report includes a section titled "Understanding our supply chain," which explains how a dedicated team and strict policies help Avon achieve ambitious targets on suppliers' employment and sourcing practices. Avon launched a new supplier engagement program to gather information on suppliers' ESG credentials and carbon emissions. Additionally, information and training workshops were conducted with key suppliers, and meetings were held with 17 of the main packaging and raw ingredients providers to discuss next steps and collaborate on sustainability improvements (page 15).</p>
	Customer relationship management	N/A	N/A

	Criteria	2020	2023
	Environment	Level 1-Environmental targets are clearly defined. However, the report does not provide management policies as they apply to the life cycle supply chain. (Pages 31-41)	Level 3-Environmental initiatives are implemented and measured, which includes targets and achievements. Over time, environmental measures are continuously improved, and changes are made in the supply chain to enhance sustainability practices (page 6).

Source: The authors

By 2023, there are elements indicating progress towards Level 3 in certain areas, demonstrating a significant improvement in their sustainability initiatives. However, despite this progress, several areas still require enhancement to reach higher maturity levels consistently across all criteria. For example, while the 2023 report shows advanced levels of governance and supply chain management, other areas such as economic issues and customer relationship management remain at the initial level.

4.3 Recommendations

Analysis of Avon's 2020 and 2023 Responsible Business Reports and Natura's 2020 and 2023 Annual Report reveals several opportunities for Avon to enhance its sustainability reporting practices. The following recommendations are based on the framework proposed by Okongwu et al. (2013) and aim to help bridge the gaps identified in the analysis and leverage the strengths observed in Natura's practices.

Corporate Governance and Management: To improve corporate governance and management, mainly for general readers and managers, Avon could clarify how these standards are being addressed in the report, as Natura does with GRI, SASB and TCFD in its sustainability reports. The report could include tables summarizing the measures taken to address these standards to enhance fluidity on reading, while improving clarity and transparency. Avon should establish a dedicated chapter on corporate governance, as standards recommendations after 2021, showing remuneration policies and strategies for engaging third party and supply engagement. Avon might implement third-party certification for sustainability data and assurance data as recommended. This might enhance credibility for general readers and different stakeholders.

Societal Development Sustainability: Avon could detail more the community projects pursuing help harmonized non-financing indicators measured it. This will help stakeholders understand the tangible impacts and the company's commitment to social improvement.

Supply Chain Sustainability: Avon should develop/improve comprehensive policies involving customers in sustainability initiatives, similar to Natura's engagement with suppliers, as the programs for customer participation in sustainability efforts, such as educational campaigns and feedback mechanisms. This would enhance the integration of sustainable practices and customer engagement while mitigating what Freeman et al. (2018) pointed out about (p.32) "Economic Power of Customers" when products are ones widely available from competitors. Besides this, similar to "Economic Power of Suppliers" when they are not economic dependent on the company.

5. Final Considerations

This paper assessed whether the maturity level of sustainability reports improved after the M&A of two Brazilian companies, Natura and Avon, by applying the maturity assessment framework proposed by Okongwu et al. (2013). The findings showed that before M&A Natura already had achieved the 3rd level of maturity (highest before third party auditing), while Avon was oscillating between the 1st and the 2nd levels. After the M&A, the Avon's report showed a highest level of maturity in comparison to pre-M&A, although opportunities for improvement were identified.

Although the Avon's maturity seems improved after M&A with Natura, the results showed that it is a progressive process, possibly following changing operational processes to find synergy related to the merge. Therefore, recommendations were proposed to continue improve the results in the three dimensions proposed by Okongwu et al. (2013): corporate governance and management; societal development sustainability and supply chain sustainability.

It is important to mention that the framework proposed by Okongwu et al. (2013), despite being highly cited in the literature, was proposed before the peak of publications regarding 'sustainability reporting', that occurred from 2017. In 2024, the IFRS new frameworks S1 and S2 become mandatory and effective to 2025 – 2026 in Brazil. At the same time, the European Sustainability Reporting Standards (ESRS) were also published as mandatory in 2024 and effective to 2025 – 2026 in Europe. It applies either to European organizations, and to companies that has relation with the continent (including exporters).

Therefore, the analysis of this paper is complementary to the standards and do not aim to question its importance or relevance. Otherwise, the results can help the companies to understand how could better address the imposed challenges and enhance their performance. So, the Okongwu et al. (2013) framework is used in this paper as a complementary tool to the materiality assessment.

As limitation, the results rely in secondary data. So, it is not possible to affirm the Avon's strategy was not in ongoing process before M&A, since it is not mentioned in the analyzed reports. Thus, as propositions for new studies: experts from the assessed companies should be interviewed, and a multi-case could be provided.

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