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Sustainability reports in the automotive industry: a comparative analysis of the Argentinean sector

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Abstract: Sustainability has become a competitive factor for the automotive industry, and communication scandals have raised concerns on the transparency of reported practices. The objective of this research was to study automotive companies' sustainability claims through content analysis of the reports issued by the Argentinean locations of three global companies: Renault, Toyota, and Volkswagen. Results showed interorganisational relations to standardise processes and ensure quality and sustainable products, along with local and international cooperative alliances. Energy efficiency was improved for both production and usage of the vehicles. Social impact is largely reported through training and diversity programs, both for the taskforce and the local communities. The analysis allowed to identify motivations in the line of the accountability theory, showing focus on social responsibility beyond commercial interests. Reflections of the global culture were identified in the structure of two of the reports, although no evidence was found to sustain legitimacy and impression management.

Keywords: sustainability reports; automotive; Argentina; accountability; global culture; legitimacy; impressions management.

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1 Introduction

Sustainability has recently emerged as a crucial consideration for companies across all industries and regions. Ecosystems across most productive sectors have embraced sustainable practices in response to external incentives (Coulson-Thomas, 2017) or intrinsic motivations of key decision-makers (Deci, 1973; Amato et al., 2016). This has led to a new set of rules that have altered the way businesses operate at both local and international levels.

The automotive industry stands out as a sector characterised by strong globalisation and professionalism, holding a significant position among sectors that contribute to economic activity and international trade (Gereffi et al., 2001 in Almansí, 2022). From the perspective of sustainable development, this industry has a considerable environmental impact through pollution and resource use, as well as a social impact as a major employer and contributor to community mobility (Mayyas et al., 2012).

For these reasons, the automotive sector has been among the first to implement sustainability reporting frameworks to communicate the implementation and compliance with measures aimed at corporate social responsibility (CSR) and ensuring legitimacy in institutional statements. However, there is a research gap in explaining the motivation channels and dynamics of communications strategies behind the sustainable reporting of automotive industries in the region. From the theoretical perspective, stakeholder theory is the most frequent articulated framework for these studies, and from the geographical perspective, most of the literature in Latin America is focused on Brazil (Belli et al., 2023).

To address this gap, the objective of this study was to describe and provide organisational perspective to the motivations prompting a group of Argentinean branches of global emblematic automotive companies to adopt and disclose sustainable practices. This was pursued by examining the statements that these companies include in their sustainability reports and compare their initiatives, considering theories explaining the motivation behind companies disseminating these reports, and the impact that global historical events from automotive companies had on communicational strategies.

The research questions for this study were defined as follows: what are the literature contributions to explain the reporting motivation of sustainable practices? What are the motivations to implement environmental and social initiatives in the automotive industry? What are the trends in terms of sustainable practices that are being implemented in the

industry from a global perspective? How are the most emblematic companies in the industry adapting to these global trends from a regional perspective?

To achieve this, a qualitative and descriptive methodological approach was employed, conducting a content analysis of sustainability reports from three emblematic companies with branches in the Argentine automotive industry. This analysis facilitated categorisation, coding, and comparison of the sustainable initiatives communicated by each company. Additionally, the study aimed to elucidate the underlying motivations that drive these companies to engage in and report on sustainable practices. By doing so, this research provides a comprehensive understanding of how businesses communicate their commitment to sustainability and the reasons behind them.

This study significantly contributes to the literature on sustainable businesses by describing existing research on the ongoing controversy surrounding organisational discourses. From an empirical and methodological perspective, it also provides valuable insights into sustainable business research literature in Latin America, through the analysis of secondary source documentation, particularly in defining the most representative categories of sustainable practices in this specific industry. This investigation thus offers an extensive understanding of how businesses articulate their dedication to sustainability and the underlying reasons for their actions.

The rest of the paper is structured as follows. In the next section, the theoretical framework is presented with the main contributions from the literature in terms of reporting motivations, and a sector scenario is presented with the most emblematic facts and historic events in terms of reporting standards and communication scandals for these companies at a global perspective. Then, the methodological section is developed with details on the approach, instruments and processing techniques. The results are presented in the following section to conclude with final remarks and implications.

2 Theoretical framework

2.1 Sustainable business models and reporting motivations

Although the term sustainability has been in use for some time, the Brundtland Commission is widely recognised for popularising the concept of ‘sustainable development’. Introduced into political discourse in 1987, it defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Purvis et al., 2019). Following the Brundtland Report, the institutionalisation of sustainable development continued with the ‘Rio Agreements’, initiated in 1992 with the Earth Summit in Rio, where world leaders pledged support for the principle of sustainable development.

Among literature conceptually analysing ‘sustainability’ and ‘sustainable development’, the conceptualisation of the ‘three pillars’: environmental, economic, and social (Elkington and Rowlands, 1999), has gained widespread traction. Companies have embraced sustainability purposes following the 3P model: people, profits, and planet (Mohrman and Lawler and, 2014; McLaughlin and McMillon, 2015; Slaper and Hall, 2011) in their organisational objectives.

With a different perspective, the Penta-dimensional corporate sustainability model (Portales et al., 2009) consists of five dimensions. The first dimension is global management, carried out within the company, indispensable for executing this model

while keeping the company's *raison d'être* in mind. The second dimension is competitiveness, essential for companies, contingent on the competitiveness of the country in which they are located. Moreover, achieving competitiveness naturally results in synergy with the nation, leading to mutual benefit.

The third dimension seeks to understand the links the company has with stakeholders. McVea and Freeman (2005) argue that management should consider all parties in its planning, not just those with a direct impact on the business. There should be a priority for some, and constant interaction with stakeholders is necessary to gather opinions and try to avoid potential conflicts.

The fourth is the impact dimension. Nowadays it is a fact that companies cannot be analysed solely by their profitability because, as has been developing, there are other factors that are equally relevant to know the total performance. The concept of shared value (Porter et al., 2011) has gained popularity in the business world to change the mindset and therefore shape a new way of investing, supporting, and doing business.

The last dimension is transparency and communication, essential for any organisation striving for sustainable practices. It complements the commitment to inform the world about progress and developments candidly. Portales et al. (2009) discusses the evolution of these reports and how international organisations such as the OECD (2008) and the UN, as well as national entities based on each country's legislation, have generated models and guidelines with specific standards. Both GRI and IR adopt the United Nations' Sustainable Development Goals (SDGs) as universally shared soft regulations.

However, even recent international initiatives are criticised for their inability to go beyond communication (Di Tullio et al., 2022). According to Savall and Zardet (2008), the diversity of existing reports can be counterproductive, and attempting to address them all ultimately leads to failure, i.e., total objectives are not fulfilled.

In the literature studying organisations' motivations to include sustainable policies in their discourse, several trends are present. Traditional approaches focus on predicting the associations between behaviour and communication, including legitimacy theory, impression management theory, and accountability theory.

According to Barkemeyer et al. (2014), the accountability perspective is framed within a normative or idealistic approach. It conceives sustainability reports as a means through which organisations take responsibility for their environmental and social actions. Sustainability reports are expected to offer an impartial and transparent view of the company's activities and impacts, regardless of whether it favours commercial interests. Sustainability reporting standards aim to enhance sustainability, transparency, and social value creation in practice (García-Torres et al., 2017). However, in the accountability literature, sustainability reports are often criticised for poor quality and selective information presentation, failing to provide a complete picture of the company's activities.

The legitimacy approach, as per Suchman (1995, p.574), refers to "the generalised perception or assumption that the actions of an entity are desirable, appropriate, or proper within some socially constructed system of norms, values, beliefs, and definitions." To maintain legitimacy, companies must demonstrate consistency between their social and environmental actions and society's expectations. Despite literature suggesting that implementing sustainable models positively impacts organisations' economic performance, under legitimacy theory, companies use sustainability information disclosure to improve the public perception of their sustainable policy performance, expecting a negative association between disclosure level and performance.

From the perspective of impression management, sustainability reports are used to manage companies' relationships with society and shape the public's perception of the company (Neu et al., 1998). Companies can present their activities and performance positively through reports, influencing the public perception of the company.

Beyond studying organisations' motivations to disseminate sustainable initiatives, some studies describe, with a more critical view, organisational communicative behaviour regarding the implementation of sustainable policies towards external stakeholders. Concepts such as greenwashing are studied for concerns about organisational hypocrisy in sustainable declarations. Laufer's (2003) frequently cited text provides a description of the greenwashing concept, encapsulating certain organisations' creative management of their reputation with the public, financial community, and regulators, to hide deviations, shift blame, obscure the nature of the problem, and ensure integrity to appear in a leadership position.

In this vein, Castelló and Lozano (2011) presented various postulates developed around the study of organisational communication forms during times of change. They described that rhetorical analysis prioritises the role of language as a structuring element of social action but distinguishes itself by focusing on the use of text or other forms of communication to influence an audience. On the contrary, discourse analysis examines texts without assuming how the recipients of its message will be influenced. Alvesson (1993) argued that rhetoric is a critical cultural and symbolic resource for companies to develop and convey their knowledge.

Therefore, it is essential to assess another concept arising from more critical literature, namely, the concept of organisational hypocrisy (Cho et al., 2015). It refers to the lack of internal consistency organisations show when adopting strategies in the face of various stakeholders with conflicting interests (Maes-Anastasi et al., 2022), raising concerns about their institutional integrity.

2.2 Sustainability in the automotive industry

Due to its significant economic, social, and environmental impact, the automotive industry stands out as one of the key sectors globally. On a global scale, it represented 3.65% of the GDP in 2017 (OICA, 2017 in Mendez et al., 2021). Despite a production decline in 2020 due to the COVID-19 pandemic, it swiftly rebounded, marking one of the industrial sectors' fastest recoveries. The automotive production model aligns with the global value chain (Russo-Spena et al., 2018), implying the involvement of numerous parts from different countries worldwide, necessitating international trade relationships to facilitate exchanges (Gereffi et al., 2001 in Almansi, 2022).

Despite the numerous benefits the automotive industry provides at a global and local level, it significantly contributes to environmental impact, hastening degradation. The ecological effect of automobiles is evident throughout their entire lifecycle. The life cycle assessment (LCA) explains that the industry pollutes from raw material extraction until the disposal or recycling of the finished product. Although there are still some weaknesses in the reliability and comparability of the data supporting these method, most of the companies in the industry report these results (Molnár et al., 2024). Notably, the sector's most substantial environmental damage occurs during its usage phase (Lukin et al., 2022; Bono et al., 2002).

Recognising the current environmental harm, societal concern about the impact of various economic activities on the environment, including industrial activities, has grown in recent years. There is an increasing need for companies to commit to implementing progressively sustainable practices (Buruzs and Torna, 2018 in Lukin et al., 2022; Martinez Lascano, 2015; OICA, 2023).

Regarding the participation of automakers in groups like the United Nations Global Pact, they undergo constant assessments to gauge their adherence to the SDGs for 2030. A 2020 evaluation by Lukin et al. on the SDG compliance of the five largest automotive companies of that year (Honda, Toyota, Mercedes-Benz, Hyundai, and BMW) demonstrated that sustainable actions aligned with these objectives are imperative for international market competitiveness. Honda leads in implementing sustainable policies, fulfilling all 17 SDGs, while BMW ranks last with only 12 SDGs achieved.

However, as was discussed in the previous section, the communication of sustainable practices also brings ethical dilemmas, and the automotive industry has suffered several image scandals related to greenwashing (Mikler, 1998; Dixon, 2020). All these known events have shown that automotive companies not always behave according to their reporting facts (Szász et al., 2021). In part, this might respond to the fact that this industry is representative of modern types and is related to lots of geopolitical conflicts, including environmental issues.

This arises two different viewpoints, the most generalised being that the automotive sector being a major industry, the impact that it makes in the environment in terms of pollution is significant. This viewpoint provides argument to the development of regulations issued by governments, under a 'policy-pull' regime (Wolff et al., 2020). However, the other viewpoint recognises the efforts these companies are doing to balance this effect, more in the line of a 'business-push' regime, as mentioned in the previous paragraph.

It is probably true that until the mid-1990s there was not much evidence of sustainable initiatives in the industry (Lovins et al., 2005). The beginning of the 1990s seems appropriate, firstly, since the 1992 Rio Earth Summit already mentioned took place as a fundamental milestone in the environmental sustainability debate from which sustainable development initiatives have emerged, and the World Trade Organisation (WTO) established its Committee on Trade and Environment (CTE) in 1995. The result has been agreements with companies such as the Global Compact, announced in 1999, which brings companies together with UN agencies, unions and civil society to support nine principles in the areas of human rights, labour and the environment. Another such agreement is the Global Reporting Initiative (Valente et al., 2021), initiated in 1997 by CERES and now an official collaborating centre of UNEP working in cooperation with the United Nations Global Compact.

Secondly, in terms of business attitudes towards the environment and social expectations in general, CSR emerged as something that has reached the business world as an ideological shift that began in the 1990s (Florini, 2003). Third, outspoken critics of international capitalism, in relation to the environment, suggest that there is a growing trend with a fundamental shift in the way companies do business around the world as they move forward, incorporating environmental sustainability concerns into their operations. Like General Motors, which supported the imposition of a 50% tax on gasoline for environmental reasons (Suzuki and Dressel, 2002).

Therefore, another important consideration is the level of attention these companies have from the media and the population in general, and how certain crises or public

events show a reflection in their institutional discourses. With regards to specific recent events related to greenwashing, the case of Volkswagen and the Diesel scandal (Aurang et al., 2018) resulted as an iconic although forgiven by the market example. In the year 2015, the ‘Think Blue’ campaign by VW intended it to be seen as the most sustainable brand by the year 2018. However, after some technical inspections, it was proved that the company miscommunicated its initiatives by making use of misleading texts, ‘deceptive manipulation’ in their reports to fulfil stakeholders’ expectations.

Other companies: Audi, Porsche, Renault, Mercedes-Benz, and BMW, were also investigated after the VW scandal for similar reasons (Batista et al., 2020) and the reactions and strategies were informed in their reports (Boiral et al., 2022). All these events generated more tightened regulations and promoted more sustainable trajectories (Glavas et al., 2023). In some cases, the accusations made to automotive industries are related to the misleading discourses that even shape marketing strategies. For instance, Toyota has been largely accused of over promoting the Prius car gas-electric hybrid model to draw attention from pick-up trucks and SUVs that show worse fuel efficiency records (Vos, 2009).

To summarise the articulation between the research questions and the literature contributions, the next table presents the main references for each of the questions mentioned before (see Table 1).

Table 1 References table

<i>Research question</i>	<i>Author</i>
What are the literature contributions to explain the reporting motivation of sustainable practices?	Coulson-Thomas (2017), Deci (1973), Amato et al. (2016), Purvis et al. (2019), Elkington and Rowlands (1999), Mohrman and Lawler (2014), McLaughlin and McMillon (2015), Slaper and Hall (2011), McVea and Freeman (2005), Portales et al. (2009), Di Tullio et al. (2022), Savall and Zardet (2008), Barkemeyer et al. (2014), García-Torres et al. (2017), Suchman (1995), Neu et al. (1998), Laufer (2003), Castelló and Lozano (2011), Alvesson (1993), Cho et al. (2015) and Florini (2003)
What are the motivations to implement environmental and social initiatives in the automotive industry?	Mayyas et al. (2012), Lukin et al. (2022), Bono et al. (2002), Martinez Lascano (2015), OICA (2023), Mikler (1998), Dixon (2020), Lovins et al. (2005), Aurand et al. (2018), Batista et al. (2020) and Vos (2009)
What are the trends in terms of sustainable practices that are being implemented in the industry from a global perspective?	Suzuki and Dressel (2002), Boiral et al. (2022), Glavas et al. (2023), Fan et al. (2013), Volkswagen (2022), Toyota (2021) and Renault (2020)
How are the most emblematic companies in the industry adapting to these global trends from a regional perspective?	Volkswagen (2022), Toyota (2021) and Renault (2020)

Source: Own elaboration

As can be seen in the previous table, the research questions posed in the current study find support and correlation with the theoretical framework, showing that the research conducted is relevant, aiming to add value through the analysis of a particular industry, confined to a specific geographical area.

3 Methodology

The methodology employed in this research followed a qualitative paradigm, under a descriptive and exploratory approach with a non-experimental design. Data were collected from secondary sources, encompassing statements from Argentine automotive companies, including their institutional websites and sustainability reports. This approach was selected in line with the aim of this study to evaluate the initiatives claimed by automotive companies in light of their global antecedents and to compare such policies among the most emblematic companies.

In line with Medina-Bermúdez (2001), the qualitative paradigm involves a dynamic interchange between theory, concepts, and data, with continuous feedback and modifications to theory and concepts based on obtained data. It seeks to comprehend human behaviour from a subjective perspective due to the instruments used, collecting real data that acknowledge a dynamic reality and are oriented towards exploration.

Simultaneously, the research adopted a descriptive approach. Hernández-Sampieri et al. (2006, p.102) state that “descriptive studies aim to specify the properties, characteristics, and profiles of individuals, groups, communities, processes, objects, or any other phenomenon subjected to analysis”, achieved through the measurement and evaluation of various aspects, dimensions, or components of the study object (Hernández-Sampieri et al., 2006).

Building upon the selected companies deemed emblematic in the studied industry, (the companies Volkswagen, Toyota, and Renault) a content analysis was conducted to identify the linkage of sustainable statements with the main topics following the model used by Borges et al. (2022). Subsequently, initiatives were categorised according to that same model that was adapted to the automotive industry. The initiatives were indexed in every category and their quantities were compared.

The selection of companies from the automotive industry for report analysis was based on their significance in the sector and the availability of such reports. The companies that were studied show a great significance for the country not only in terms of internal production but also in terms of exports, being Toyota the most exported brand (more than 40%) followed by Volkswagen (14%) (ADEFA, 2021). As per the timeframe of the analysis, for the company Volkswagen Argentina, the most recent report published at the moment of the study was for the year 2022, in the case of Renault Argentina it was 2019–2020, and for Toyota it was for the term 2020–2021, and those were the reports used for the study.

The content analysis followed the guidelines proposed by Elo and Kyngäs (2008). These authors emphasise that a detailed description of the entire content analysis process enhances result credibility. If there is limited prior knowledge on the analysed topic, if that knowledge is fragmented, or if categories emerge from the analysis itself, an inductive approach is recommended. Conversely, if researchers are guided by a structure or conceptual framework, a deductive approach can be employed (Elo and Kyngäs, 2008).

Table 2 Categories of analysis for coding initiatives in reports

<i>Dimensions</i>	<i>Categories</i>	<i>Content of initiatives related to categories</i>
Environmental	Renewable energy	Cleaner fuels, wind, solar, geothermal, and alternative energies
Environmental	Energy efficiency	Process optimisation, loss reduction, emissions reduction, automation, efficiency, reuse of oily waste flows, exchange of experiences and best practices, reuse of waste gases, and product improvement
Environmental	Efficiency of natural resources	Research for resource optimisation, sulphur content reduction, anti-waste culture, water resource management, fuel development, reuse, reduction, and recycling
Environmental	Environment	Nature, forest recovery and conservation, emissions reduction, waste generation reduction, environmental education, animal protection projects, proper waste disposal, waste reuse, recycling, water savings, social and environmental investment, cleaning efforts, and soil treatment
Environmental	Cultural and natural heritage	Archaeological rescue, biodiversity conservation, reforestation, and cultural strengthening
Environmental	Waste	Improvements in transportation, transfers, storage, distribution security, logistics, distribution and service investments, facility expansion and modernisation, social and operational risk mitigation, public, and community investment
Economic	Local and international cooperation	Cooperation, partnership, alliances, and pacts
Economic	Logistics modernisation	Improvements in transportation, transfers, storage, distribution security, logistics, distribution and service investments, facility expansion and modernisation, social and operational risk mitigation, public, and community infrastructure investment
Economic	Productive innovation	Optimisation and digitisation of processes, IT investments, emissions reduction projects, productivity improvement, automation, new technologies, facility expansion and modernisation, facility safety, and reliability
Economic	Relationship with supplier	Improvement plans for suppliers' information, education, forums, projects, events, and workshops
Economic	Research and development	Prototypes, technology, research, and innovation
Economic	International trade activities	Opening new markets, changes in imports, and exports
Economic	Relationship with dealers and customers	Extension and training for channels and end customers to promote sustainable consumption

Source: Own elaboration adapted from Borges et al. (2022)

Table 2 Categories of analysis for coding initiatives in reports (continued)

<i>Dimensions</i>	<i>Categories</i>	<i>Content of initiatives related to categories</i>
Social	Inclusive industry (external)	Job offers, diversity and inclusion, local labour, prevention of slave labour, professional training projects, jobs for vulnerable groups, treatments for malformations, and business development
Social	Social	Social, community projects, grants, donations, investment in education and health, quality of life, promotion of cooperation in transportation, incentive programs for good practices, human rights, social works, public services, access to water, and sanitation
Social	Diversity, inclusion and security (internal)	Facility security, inclusion, theft prevention, accident prevention, diversity, and inclusion actions
Social	Communication in reports	Compliance with the publication of annual or biennial sustainable reports according to international standards and dissemination of sustainable initiatives

Source: Own elaboration adapted from Borges et al. (2022)

For the application of content analysis of sustainability reports and their accounting narratives, the methodology approach was also followed according to Beattie et al. (2004). A limitation of using a small number of case studies is that it may not allow for generalisation to a population (Eisenhardt, 1989). However, this was not the intent of the research study. The focus was on identifying reported initiatives and structuring them for comparison among companies.

In the preparation phase, defining a unit of analysis is crucial, which could be a word or a theme (Elo and Kyngäs, 2008). In this research, the unit of analysis was “sustainable practices reported in sustainability reports of Argentine companies.” Initially, the research team read sustainability reports to familiarise themselves with the documents and the information contained in them.

Subsequently, in the coding phase, dimensions were identified to group sustainable practices, and these were assimilated into categories for the subsequent abstraction phase (Stubbs and Cocklin, 2008). Codes were derived from data based on real words or terms included in the reports, and concepts were then summarised into analysis categories (Strauss and Corbin, 1998). When no new information emerged, and no new codes were created, saturation was assumed to be reached.

The practices were recorded under an inductive analysis, identifying 278 initiatives reported by companies in their sustainability reports. Each practice was classified among 17 categories reflected with keywords that best represented their content, and then divided by triple bottom dimensions (Slaper and Hall, 2011). When an initiative was associated with more than one category based on its scope, the criterion was to assign it to the most representative category. The definition used by the authors for each category is presented in Table 2.

4 Local scenario and analysis of the reports

Beyond being a vital sector for the Argentine economy, the automotive industry plays a crucial role in the country's foreign trade. In 2021, Toyota emerged as the leading exporter, constituting 44% of the total exports, with the Toyota Hilux being the most exported model, manufactured in the Zárate plant (Ortega, 2023). Other companies such as Ford, Mercedes-Benz, Volkswagen, Peugeot, Fiat, General Motors, and Nissan export between 70% and 50% of their production.

As was mentioned before, the reports that were analysed belonged to the companies Volkswagen, Toyota, and Renault. For the company Volkswagen Argentina, the most recent report published at the moment of the study was for the year 2022, in the case of Renault Argentina it was 2019–2020, and for Toyota it was for the term 2020–2021.

Table 3 Comparative table of reported sustainable initiatives

<i>Dimension</i>	<i>Reported sustainable initiatives</i>	<i>Volkswagen Group Argentina</i>	<i>Toyota Group Argentina</i>	<i>Renault Group Argentina</i>
Environmental	Renewable energy	3	3	0
Environmental	Energy efficiency	4	5	4
Environmental	Cultural and natural heritage	5	5	0
Environmental	Environment	7	9	5
Environmental	Efficiency of natural resources	1	2	6
Environmental	Waste	1	7	8
Economic	Local and international cooperation	10	17	11
Economic	Logistics modernisation	1	2	7
Economic	Relationship with supplier	2	5	6
Economic	Relationship with dealers and customers	1	12	4
Economic	Productive innovation	8	6	11
Economic	Research and development	0	2	0
Economic	International trade activities	3	4	0
Social	Inclusive industry (external)	2	7	10
Social	Diversity, inclusion and security (internal)	6	5	5
Social	Communication in reports	2	1	1
Social	Social	15	19	18

Source: Own elaboration

The general examination of the reports showed more quantitative information for the case of Renault (26 indicators), then Toyota (13 indicators) and Volkswagen (11 indicators). With regards to the accountability theory (Barkemeyer et al., 2014; García-Torres et al., 2017), information about compliance of the different sustainability standards were searched through the reports and it was found that the three companies report under GRI standards. In terms of certification of sustainable practices, the three companies follow and were certified under ISO 14001, and ISO 50001 for Volkswagen and Toyota.

Reflections of the legitimacy theory for motivation (Suchman, 1995) cannot be sustained since according to the mentioned statistics of the sector, Toyota is the company leader in Argentina in domestic sales and exports, and still issued the more detailed report. The results might suggest a strong influence of the global corporate culture and communicational strategy. In the case of Renault, a higher proportion of text is dedicated to detail initiatives with social impact, both inwards the company and toward local communities. This also seems a reflection of the global culture of the company (Russo-Spena et al., 2018).

Also, from the point of view of impression management (Neu et al., 1998), there is no clear evidence related to responses in the narratives to the communicational milestones mentioned in the theoretical framework.

Based on the content analyses performed with the coding scheme mentioned above, a comparative table is presented, illustrating the number of sustainable initiatives reported by each of the three surveyed companies.

Table 3 depicts the quantity of the initiatives identified and recorded according to the data processing techniques mentioned in the methodology section. In this table, Toyota's clear leadership position can be verified. It is worth highlighting the efforts made in its integration forward the market (relationship with dealerships and customers) where Toyota presents 11 more initiatives than Volkswagen and 8 more than Renault, and the level of local and internal cooperation. The performance informed in these categories reflect the learning responses from the recall crisis (Fan et al., 2013) and the continuous search for standardisation of process made to ensure quality in all the countries.

It is also interesting to mention the Renault's leading position in inclusion initiatives, which might seem a reflection of the geographical culture of the headquarters of this company (Russo-Spena et al., 2018), as well as its leading position in productive innovation.

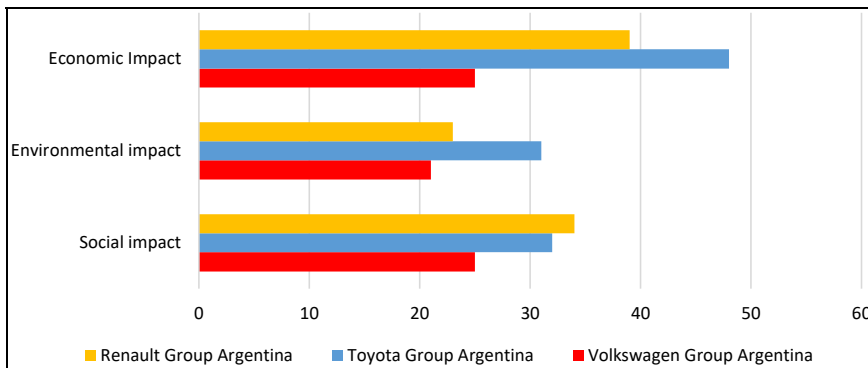
For a better visual appreciation of the initiatives in a comparative manner, Figures 1 and 2 present the results divided into environmental, economic, and social axes, following the triple bottom dimensions (Slaper and Hall, 2011).

The preceding table provides an overview of Toyota's leadership in terms of economic and environmental impact. Within these dimensions, the most frequent initiatives for the three companies revolved around the implementation of renewable energies such as lithium and solar light in facilities [Volkswagen, (2022), p.40], alternative fuels, and solar panels [Toyota, (2021), p.43, p.65]. Regarding energy efficiency, reports included the replacement for more efficient engines [Volkswagen, (2022), p.40], substitution of consumables with natural gas use, assembly of specialised collaborator groups [Toyota, (2021), p.59], and redesign of plant working hours [Renault, (2020), pp.95–97].

In terms of agreements and alliances, all three companies reported numerous local and regional partnerships, as well as their involvement in and commitment to the United Nations Global Compact reporting system. Continuing with the environmental dimension, initiatives categorised under the environment refer to specific actions by companies with an outward commitment beyond the organisation. For instance, Volkswagen (2022, p.20) developed the way to zero program, committing to the electrification of vehicles, decarbonisation of chains, green energies, and battery recycling. Toyota (2021, p.13) leads in this category in terms of the number of initiatives, reinforcing the sale of hybrid vehicles, among other measures aimed at quality standards

certification. Renault (2020, p.84) emphasises engineering improvements in its report to promote reusable usage.

Figure 1 Comparative analysis of initiatives by dimensions (see online version for colours)



Source: Own elaboration

Regarding the efficiency of material resources, Renault leads this category (2020, pp.88–90) and reports, for example, implemented measurement and control processes for water by manufacturing area, and they have their water treatment for some functions. Toyota reports that its groundwater conditioning plant aims to reduce water consumption in processes and purify wastewater for reuse or proper return to the environment (2022, p.61). Volkswagen (2022, p.41) designs processes in the industrial centre so that materials are used and reused efficiently and sustainably. An example is the digitisation of documents, leveraging Industry 4.0 technologies.

The last category of the environmental dimension addresses initiatives related to waste. In this regard, Renault leads by reporting many efforts in the treatment and reduction of effluents (2020, pp.104–108), reduction of solid waste, among other specifics. Volkswagen reports that, in the Pacheco and Córdoba plants, they separate and recycle materials such as wood, cardboard, paper, nylon, plastics (including single-use ones), plastic caps, batteries, high calorific value waste, and more. Additionally, they donate 5,080 kilograms of waste to the Garrahan Foundation, such as paper, caps, CDs, DVDs, and X-ray plates (2022, p.41). Toyota (2021, pp.62–65) informs actions in waste separation, effluent and chemical component treatments, composting, and circular economy.

Continuing with the categories of the economic dimension, Toyota also leads due to its standardisation efforts across the value chain, with programs for productive innovation and idea generation. Moreover, all suppliers, distributors, and dealers must have proven backgrounds, develop practices that ensure compliance with laws and regulations applicable to their business activities, and pay special attention to the environmental impact of their operations concerning the consumption, use, and handling of their products [Toyota, (2021), p.39].

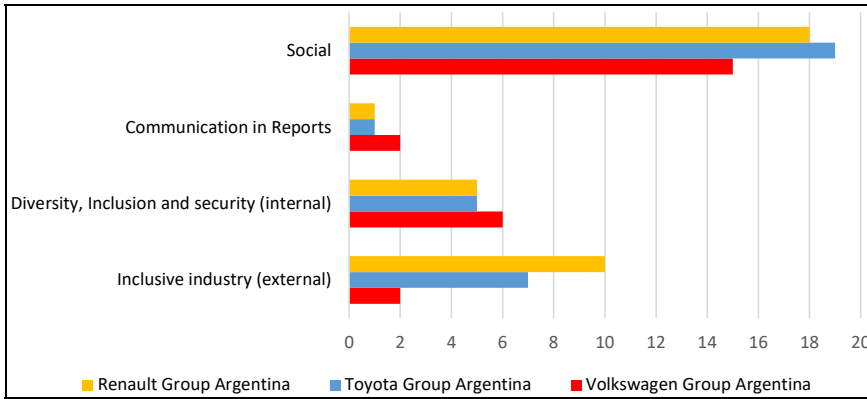
Volkswagen (2022, p.28) bases relations with suppliers on the performance, society, and transparency values. Their productive innovation focuses on both the design of electric vehicles and the improvement of factories and logistics centres. Renault (2020, pp.72–74) reports strong initiatives regarding innovation in the logistics of imported

parts. It also mentions that in relations with suppliers and distributors, emphasis is placed on compliance with global compact and CSR standards.

Regarding social impact, Renault is the company that leads in the number of reported initiatives, with a total of 34 initiatives that include training programs, digital inclusion, and gender diversity projects carried out in the area of the inclusive industry to which the company pays specific attention. This is confirmed in the category called ‘social’, which leads in the number of initiatives among the 17 selected categories. However, the difference with competitors is not very high: Toyota implemented a total of 32 practices, while Volkswagen implemented 25.

Figure 2 presents the breakdown of this impact dimension.

Figure 2 Comparative of initiatives with social impact (see online version for colours)



Source: Own elaboration

Renault’s efforts in designing and implementing programs that train and provide access to protected communities and classes, providing them with the necessary skills to integrate into the industry in which they operate, make it the leading company in social impact. Programs such as ‘Universo 65’, an inclusive digital game [Renault, (2020), p.14], or initiatives in education, including the School of Talents, technical institute, and professional internships (p.118, p.158, p.161), contribute significantly to the development of talent. Internally, gender diversity programs and other initiatives, as well as health plans for employees, are in place (pp.123–126). Finally, community initiatives include partnerships with foundations and organisations managing young talent (p.160).

Toyota (2021, p.72) reports corporate benefits, including additional life and medical insurance, various training opportunities, maternity and paternity support, flexibility, safety learning centres, internships, and job opportunities for local communities, among others. On the other hand, Volkswagen (2022, p.58) shares information about corporate volunteer programs, bicycle donations, partnerships with food banks, and participation and sponsorship of sporting events. Regarding diversity and inclusion, regional exchanges, Women’s Month activities, and training initiatives are highlighted.

As a corollary of the results demonstrated thus far, it is possible to determine that Argentine companies in the automotive industry have increased the number of actions aimed at improving their sustainability impact, beyond the inherent characteristics of each company – its culture, idiosyncrasies, strategic decisions, and access to resources. Regardless of the specific approaches each organisation takes in addressing this issue,

there is a clear trend towards enhancing sustainability as a crucial factor in decision-making, which must also be reflected in the reports issued by corporations. All of the above demonstrates a clear intention to improve the relationship between companies in the sector and their various stakeholders, with a strong focus on sustainability.

5 Conclusions

This paper presented how the automotive industry stands out as a crucial player in economic activity and international trade. However, this sector also proves to leave notable impacts on the environment and society. In this context, companies seek to adopt sustainable practices to meet the associated environmental and social challenges, and their sustainability reports reflect their commitment to CSR. The objective of this study was to analyse the statements that are included in the sustainability reports of each company and compare the initiatives and projects they implemented, considering the motivational theories behind companies' publication of reports and the influence of their corporate cultures.

Based on the qualitative analysis conducted on the selected companies within the automotive sector in the Argentine market, it can be concluded that the research questions and the proposed objective have been achieved. From the results of the content analysis, carried out through a descriptive approach, a noticeable difference is shown in the contribution that companies make to the dimensions of sustainability. The framework used to categorise the initiatives was divided in the economic, environmental and social dimensions: comparatively, Toyota leads in the economic and environmental dimensions, while Renault leads in the social dimension.

The above is probably due to a combination of different factors. On the one hand, each of the three global companies that were analysed has a corporate and geographical cultural component, along with a history of communicational events that shapes their vision, values, and idiosyncrasy, with a strong precedent of the global strategy. Ultimately, the analysed companies are part of multinational conglomerates, which requires them to adhere to and align with global directives and standards, regardless of the specific characteristics of the local market.

Given the current state of globalisation and the interconnections between suppliers, customers, and stakeholders that exceed traditional geographic boundaries, global trends will inevitably impact the industry, irrespective of the market in question, its development, and its commitment to critical success factors in terms of sustainability. These factors, combined with the local paradigms and regulations of the Argentine market, shape the way in which they understand, and address challenges related to sustainability.

Regarding the economic dimension, the category where Toyota implements the highest number of practices is local and international cooperation. This is because it is the company that shows mayor efforts in achieving agreements and strategic alliances, allowing it to implement sustainable practices and comply with local and international government guidelines. However, Volkswagen and Renault also have a high number of collaborations. The notable difference is reflected in the category of relations with dealers and customers, allowing it to have a leadership position. It is also the only company that

reports implementing actions of innovation in the field of research and development, although its involvement is minimal with only two practices.

In the environmental field, Toyota stands out for having a homogeneous distribution of initiatives in various categories. On the contrary, its competitors incorporate a high number of practices in certain categories and neglect others that are also relevant. For example, Renault, in the categories of efficiency of natural resources and waste, adopts a higher number of practices than Toyota, however, in cultural and natural heritage, it does not report any initiative. In conclusion, the category in this field where the three companies show the most commitment is the environmental one, with programs aimed at reducing emissions, environmental education, and water savings.

The social impact, although addressed by all companies, stands out strongly in the case of Renault, which leads with initiatives that include training programs, digital inclusion, and gender diversity projects carried out around the inclusive industry to which the company pays specific attention.

The combined results showed that companies in the automotive sector are committed to sustainability by presenting many local and international cooperation agreements that allow them to work together with the private and public sectors to be at the forefront of this global challenge. They have also promoted initiatives for the reduction of emissions by producing electric cars with alternative fuels, in addition to adopting strategies for proper waste management. Similarly, they have social projects involving incentive programs for good practices, social works, and diversity and inclusion.

Despite this, it remains a challenge for companies in Argentina to incorporate into their business models more guidelines that determine the SDGs such as sustainable cities and communities through green energy for the vehicles and transportation. These developments bring about a transformation in management processes that encompasses institutional, socio-cultural, organisational, and technological changes. However, the current environmental situation requires intervention to drastically, rapidly, and sustainably reduce greenhouse gas emissions. In this regard, the private sector, which involves the three companies studied, plays a key role in achieving this goal.

In conclusion, it can be affirmed that, from the analysis and coding of the sustainability reports of three leading and emblematic companies in the automotive industry, it is evident that these companies, although local subsidiaries of global brands, adapt and design their initiatives locally, addressing the needs and peculiarities of the local market and its communities, regardless of their levels of export and business models in the country.

Considering the theories supporting reporting motivations, the initiatives are reported in detail following GRI schemes and therefore they show accountability. By examining the length of text dedicated to the different dimensions of sustainability in the reports, legitimacy motivations could not be identified with relation to the level of activity for every company in the industry. Influences of the global culture for Toyota and Renault can be argued in relation to the specificity of the implementations for the case of Toyota and the extent of social initiatives for the case of Renault. Lastly, no clear reflections of global communication events were found in the narratives of the reports, therefore not being able to sustain clear evidence of the impression management theory.

The managerial implications from this study indicate that automotive companies need to continue making investments in research and development to improve their management processes by reducing costs, waste, and achieving greater efficiency and productivity. Additionally, it is recommendable to focus on the development of

sustainable practices in categories where, up to this point, they have a very low number of implemented practices. Furthermore, it is also suggested to implement an integrated preventive strategy in their production processes that is oriented towards the conservation and rational and efficient use of natural resources and the elimination of toxic raw materials, as well as the reduction of polluting emissions and waste.

An important limitation presented by the study is the small number of cases studied because the rest of the companies with a higher proportion in sales and exports had published their sustainability reports at the moment of the study, preventing the generalisation of the results to the entire Argentine automotive industry. Thus, the conclusions drawn from this research might be influenced by the unique economic, cultural, and regulatory environment specific to Argentina, which could limit the broader applicability of the results.

Future research could benefit from including a more diverse set of companies from various geographic locations to enhance the generalisability and robustness of the findings, examining the variations according to different countries in the Latin American context. Also, in terms of qualitative research, comparisons can be made between different industries in the Argentine market,

Additionally, it is recognised that the information was obtained from secondary sources, and the lack of direct access to the companies may have limited the depth of the analysis. It remains for future analysis to understand how the industrial trends manifest themselves in company decisions. Likewise, the way in which these companies have established themselves in Argentina and the way in which they have developed relationships with the different interested parties also represent a determining factor in understanding which aspects of the sustainable field have a greater preponderance. This paper leaves room to continue analysing the sustainability reports of the three companies, to study evolution and trends.

With a different approach, future research could expand the sample size of this study to explore the effectiveness of their initiatives in terms of sustainability. For instance, a quantitative instrument could enable analysing the impact that sustainable practices promoted by companies have on society and thus measuring in real terms the contribution that each company makes to sustainability in the automotive sector. That could allow to analyse how actions aimed at promoting sustainability have impacted resource management, as well as whether they have eventually modified the economic and financial results of the involved companies.

As a final remark, it is expected that the dynamics of the sustainability trend, for such being a concept still in development, will evolve in the way in which different sectors adopt this criterion, and the changes expected for the automotive industry (both globally and locally) will lead to enrich future analyses.

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