NICOLAUS COPERNICUS SUPERIOR SCHOOL | SGMK
Copernican Journal of Law
No. 1 (2024), pp. 91–114
DOI: https://doi.org/10.71042/CJL01202407

Carlos E. VANNEY
University Austral, Argentina*

Artificial Intelligence within Corporate Structures: The Case of Argentina's Simplified Joint Stock Companies

• **Abstract** •

The increasing integration of artificial intelligence (AI) into corporate law has prompted consideration of its role within corporate structures. Among the various corporate entities, the simplified joint stock company (SJSC) or SAS (Sociedad por Acciones Simplificada, for its Spanish designation) – a flexible corporate form known by different names in different jurisdictions – offers greater adaptability in structuring internal governance. This paper explores the potential for incorporating AI into the governance of the Argentine SJSC, analyzing its legal implications and practical feasibility.

Keywords: Digital transformation, Simplified corporation, Corporate governance, Supervisory bodies, Principle of the autonomy of the will, SAS.

Introduction

Within the broad and flexible corporate structure of the simplified joint stock company,[1] the autonomy of the shareholders serves as a guiding principle, allowing them to tailor the design of the company to their specific needs. However, this principle is not unique to Argentina; it is reflected in various jurisdictions around the world, where flexible business models are becoming increasingly important. In this context, the emergence of AI within corporate structures will be explored.[2]

* ORCID ID: 0009-0008-7136-1627; address: Cerrito 1250, 1010 Ciudad de Buenos Aires, Argentina; e-mail: CVanney-ext@austral.edu.ar

[1] Throughout this article, we will use the English abbreviation SJSC instead of the corresponding Spanish abbreviation SAS, although we will be referring more specifically to this type of corporation as it exists in Argentina.

[2] This article builds on previous research, offering a more in-depth analysis of these issues by unifying and expanding on topics previously addressed in separate works. See, Vanney, 2022a; Vanney, 2022b; and Vanney, 2019a.

To contextualize this analysis, three fundamental concepts will be examined:

- The principle of autonomy of will that prevails in contemporary corporate law, not only in Argentina – where this phenomenon is gradually being observed depending on the jurisdiction – but globally, with the proliferation of simple, flexible corporate forms tailored to the specific needs of partners.
- How this principle of autonomy of will affects Argentina's SJSC and how it enables partners to design the organizational structure of each company.
- Within this organizational design, the possibility of replacing human individuals in corporate roles with artificial intelligence, with a specific focus on the case of Argentina's SJSC.

The autonomy of will as a substantial element of modern simplified corporate forms

Societies have undergone profound transformations over time. From the earliest forms of association in ancient civilizations to modern companies, the evolution of corporate law has been marked by numerous changes. Since the days of the Code of Hammurabi,[3] corporate regulations have shifted dramatically, not only in terms of structure but – more critically – in the limitation of liability. While some have sought to identify traces of limited liability in Roman law, historical evidence suggests otherwise. Though certain contractual forms in early commerce, especially maritime law, limited liability – such as the bottomry loan or the *fortuna maris* doctrine, which protected the *fortune du terre* of shipowners – it can be posited that the true advent of limited liability can be traced to the rise of Indian trading companies around 1600, particularly in the Netherlands. There, the perfection of accounting techniques and corporate governance mechanisms played a pivotal role (Duprat, 2024). The establishment of limited liability was the first major leap in corporate law. The second, albeit of lesser significance, is the freedom to design corporate structures that contemporary legal forms now allow.

Given this foundational change, it is evident that the concept of limited liability has profoundly influenced corporate governance – a sentiment echoed by Nicholas Butler in 1911, when he, a Nobel Peace Prize laureate and dean of Columbia University, remarked on its groundbreaking nature. He asserted that its emergence was more transformative than the discoveries of steam and electricity,

[3] "If a man gave money to (another) man for a partnership, they shall divide equally in the presence of god the profit or loss which was incurred". This precept of the first normative body of history dictated by the King of Babylon shows us that 4000 years ago the idea of some kind of associative form already existed.

positing that both would be virtually powerless without the fundamental innovation of the Limited Liability Company (LLC), thus highlighting the profound impact of this legal development on modern economic structures (Hadad, 2023).

This major milestone in corporate law is also highlighted in a major work covering that branch of law, where it was held that "limited liability shields the firm's owners – the shareholders – from creditors' claims. Importantly, this facilitates diversification. With unlimited liability, the downside risk borne by shareholders depends on the way the business is carried out. Shareholders will therefore generally prefer to be actively involved in the running of the business, to keep this risk under control. This need to be 'hands-on' makes investing in multiple businesses difficult. Limited liability, by contrast, imposes a finite cap on downside losses, making it feasible for shareholders to diversify their holdings. It lowers the aggregate risk of shareholders portfolios, reducing the risk premium they will demand, and so lowers the firm's cost of equity capital" (Kraakman et al., 2017, p. 9).

On the other hand, the second leap in modern corporate law – the emergence of simplified corporate types, in which the shareholders' freedom to create the internal structure of the entity prevails – signified a true paradigm shift and a rethinking of more stagnant corporate concepts and structures, transforming them into flexible frameworks designed to meet the partners' needs.

This structural flexibility and the empowerment of partners' freedom at a global level align with the legislator's intent to modernize commerce and the tools that support it. Therefore, by granting SJSC in Argentina considerable freedom and delegating to its shareholders the creation of most of its organizational structure, the legislator demonstrated confidence in their exercise of autonomy of will, which is one of the main characteristics of this type of company (Pérez Hualde, 2017).

An Overview of Simplified Corporate Structures around the world[4]

The global phenomenon of corporate simplification and recognition of the freedom of the shareholders in the organization of their own entity is not unique to this 21st century. In fact, already at the end of the last century, this paradigm shift in corporate organization was beginning to be noticed.

In France, the first simplified company of its kind in the world, the *société par actions simplifiée* (SAS),[5] was legislated in 1994, serving as the basis for the subse-

[4] The source of most of the information regarding simplified companies worldwide referenced in this section is: Ramirez, 2023.

[5] The French *société par actions simplifiée* was created in 1994 by Law 94-1 (January 3, 1994). This type of company was designed to function as a partnership entity, as only legal entities could act as partners.

quent SAS, which was reformed in 1999 to extend its applicability to natural persons (Law 99–587). In Spain, the legislative innovation occurred in 2003 with the enactment of Law 7/2003, which established the *sociedad limitada nueva empresa*. Subsequently, in 2013, Law 14/2013 was enacted to simplify the establishment of companies with the aim of promoting economic recovery and supporting entrepreneurial development. Finally, in 2022, Law 18/2022, known as the "Create and Grow" Law, was passed, which amends various provisions, including the Consolidated Text of the Capital Companies Law, effectively abolishing the requirement for share capital by reducing it to a minimum of one euro. In 2012, Italy legislated a derivation of the *società a responsabilità limitata* (SRL) by creating the *società a responsabilità limitata semplificata* (SRLS). Its shareholders must be natural persons, and unlike the SJSC, it was initially conceived as a subtype of the SRL rather than as an autonomous type.[6] In the corporate law of the Kingdom of the Netherlands, the entity similar to the SJSC is the *Besloten Vennootschap* (BV). This country has always been characterized by a strong respect for the autonomy of will in corporate matters, not requiring minimum capital (only € 0.01) and allowing considerable flexibility in designing the organizational structure of the entity.

Outside of Europe, corporate flexibility is also evident in Asia. While each country possesses its unique characteristics and the extent of simplification in corporate structures and requirements varies, this phenomenon is apparent in Hong Kong, Japan, India, and the United Arab Emirates. In the case of Singapore, it is noteworthy that for quite some time, it has been one of the countries in the region that has most effectively adapted its corporate regime to the phenomenon of entrepreneurship. This adaptation is driven by the need to compete with the various jurisdictions of its neighbors and the growth of China and its business ecosystem. Consequently, in 2005, Singapore legislated its Limited Liability Partnership (LLP)[7], modeled on the LLPs of Delaware and the United Kingdom, providing flexibility in its organizational structures alongside a pass-through taxation regime (McCahery et al., 2006).

In Africa, several countries are in the process of modernizing their corporate legislation to simplify it. For example, Kenya has introduced provisions for Single-Member Companies,[8] eliminated minimum capital requirements, and developed electronic company registration. Meanwhile, in Oceania, New Zealand stands out as a leader in terms of ease and efficiency in the incorporation of com-

[6] Law 27/2012 (new Article 2463-bis of the Italian Civil Code), June 26, 2012.

[7] Singapore Limited Liability Partnerships Act, April 11, 2005; amended on December 1, 2021.

[8] Company Act of the Republic of Kenya, *Kenya Gazette Supplement*, September 15, 2015, p. 267.

panies. Turning to the Americas, the continent on which this article primarily focuses, many countries have embraced corporate simplification and recognized the autonomy of will as a guiding principle in this area.

In the United States, several types of companies cater to small businesses, with the most common being the LLC and the LLP. Notably, the evolution of the LLC has made it the most widely used business structure, second only to corporations. One of the key advantages of the LLC is the ability to choose the applicable tax system, allowing it to be taxed as either a partnership or a corporation. This tax flexibility, combined with the broad recognition of the partners' autonomy, has led to the LLC becoming the preferred business structure across all states in the country.

Among the countries of South America, Colombia serves as the most significant example regarding the SJSC, which was established in 2008 by Law 1258.[9] It serves as a reference point across the continent for regulating this type of company and has become a common source for comparative law, as it represented a completely disruptive innovation in the traditional corporate law of Hispanic America. Beyond the initial shock, the reality of its acceptance by Colombians prevailed, and it is now the most commonly chosen corporate structure in the country.[10] Its distinguishing features include: the ability to be a single-member company, establishment through a private document, limitation of liability for the company's obligations, an indeterminate corporate purpose, an indefinite duration, classification of shares, the possibility of multiple voting rights, the abolition of the requirement for plurality in quorum and decision-making majorities, the option to waive the right to be called to assembly meetings, freedom regarding the proportion between authorized and subscribed capital, an extensive period of two years for the integration of social capital without adherence to a defined initial contribution ratio, the effectiveness of shareholders' agreements – including the possibility of enforcing specific performance of agreed-upon obligations – and the removal of prohibitions for corporate administrators and limits on the distribution of profits.

In other countries of the region, several have recognized the success of this corporate form in Colombia and have subsequently implemented modifications to their company regulations. Simple corporate structures have been introduced, characterized by a predominant emphasis on the freedom to design their internal structures and define the rights of the shareholders.

[9] Law 1258/2008 on "the creation of the simplified stock company", December 5, 2008.

[10] According to official data, approximately 98% of the new companies established in Colombia are SJSCs.

In Chile, the joint-stock company was made more flexible in 2007 to promote the venture capital industry and modernize the capital market.[11] This type of company is the most similar to the SJSC, as its flexibility allows shareholders – or a single shareholder, since it permits sole membership – to establish their rights and obligations in a practically unrestricted manner. In contrast, Mexico introduced the SJSC in 2016 as an easy and inexpensive registration system, but it is limited to micro-enterprises and stipulates that only natural persons can be partners of the SJSC.

Uruguay established the simplified SJSC through the 2019 Law on the Promotion of Entrepreneurship,[12] largely following the Model Law of the Organization of American States (OAS). The Uruguayan SJSC can be incorporated digitally with electronic signatures, allowing for both natural and legal persons to be shareholders. Meanwhile, Paraguay legislated the SJSC in 2020.[13] It can also be established electronically, with no minimum capital requirement, and it can be a single-member entity. In 2018, Peru introduced the Closed Simplified Joint Stock Corporation through Legislative Decree 1409, aimed at regulating an alternative corporate framework of limited liability to formalize and invigorate micro, small, and medium-sized enterprises (MSMEs).[14] This type of company can also be established electronically; however, it notably cannot be a single-member entity, with only natural persons permitted to be members and a maximum of 20 shareholders allowed. Ecuador, a country that sought to position itself as a leader in this area, enacted legislation in 2006 to establish single-member limited liability companies (*Empresas Unipersonales de Responsabilidad Limitada* – EURL).[15] However, due to certain regulatory limitations, the EURL failed to gain traction. The modernization of the corporate framework occurred in 2020 with the adoption of the SJSC,[16] which has since become the most commonly used corporate structure in the country, also drawing upon the OAS Model Law. Consequently,

[11] Law 20190 on the "Introduction of Tax and Institutional Adjustments for the Promotion of the Risk Capital Industry and the Continuation of the Process of Modernization of the Capital Market", May 17, 2007; amended on May 24, 2019.

[12] Law 19820 on "the Promotion of Entrepreneurship", September 18, 2009.

[13] Law 6480/20, on "the creation of the Simplified Joint-Stock Company", November 14, 2019; regulated by Decree 3998/2020, August 28, 2020.

[14] Legislative Decree 1409, introducing the "Sociedad por Acciones Cerrada Simplificada", September 12, 2018.

[15] Law 2005-27, introducing the "Empresas Unipersonales de Responsabilidad Limitada", January 26, 2006.

[16] Through the Organic Law of Entrepreneurship and Innovation, the Rules of Good Corporate Governance and the Law of Modernization of the Companies. *Official Gazette* No. 151, February 28, 2020.

the Ecuadorian SJSC provides substantial flexibility to shareholders in determining the operational and structural aspects of the company, making it a highly attractive option due to its adaptability, ease of incorporation, tax benefits, and capacity to respond to the changing needs of the market.[17]

In the context of Central America, Guatemala stands out for the enactment of Decree 20–2018, which reinforced entrepreneurial initiatives by establishing a comprehensive framework designed to promote and stimulate such activities, notably through the establishment of the Entrepreneurship Company (*Sociedad de Emprendimiento* – SE).[18] In the Dominican Republic, the General Law on Commercial Companies and Limited Liability Individual Enterprises (Law 479–08) incorporated the SJSC.[19] This corporate structure emphasizes the autonomy of freedom in the organic design of the entity, provided that it does not contravene public order.

Finally, it is essential to highlight the legislative models or guidelines provided by international organizations such as the United Nations Commission on International Trade Law (UNCITRAL) and the OAS.

Since 2013, the UNCITRAL has been developing a document to offer recommendations to countries on corporate legislation for MSMEs, culminating in the 2021 approval of the UNCITRAL Legislative Guide on Limited Liability Companies.[20] This guide emphasizes key features such as freedom, autonomy, and flexibility, alongside the speed and simplicity of establishing and maintaining an entity, and the security and protection of partners' assets through a distinct patrimony. To achieve these objectives, it advocates for respect for the autonomy of the will as a guiding principle, a broad or indeterminate corporate purpose, the absence of a minimum capital requirement for incorporation, the allowance of single-member entities, the freedom to design the internal structure of the entity, and the use of alternative dispute resolution mechanisms, among other recommendations.

Regarding the OAS, it is noteworthy that in June 2017, the General Assembly of the organization adopted a resolution approving and requesting a report on the Model Law on Simplified Joint Stock Companies, as approved by the Inter-American Juridical Committee.[21] This resolution invited OAS member states

[17] The Argentine case is not addressed here, as it will be discussed in the following section.

[18] Decree 20-2018 "Law on Strengthening Entrepreneurship", October 29, 2018.

[19] Through the amendment of Law No. 31-11 of February 11, 2011.

[20] Legislative Guide on Limited Liability Companies, adopted at its fifty-fourth session, Vienna, June 28 – July 16, 2021.

[21] AG/RES. 2906 (XLVII-O/17) Model Law on the Simplified Corporation, adopted at the first plenary session, June 20, 2017.

to adopt the Model Law in accordance with their own legislation and regulations, providing assistance for this purpose. The Model Law emphasizes the facilitation of registration by removing formalities and allowing for incorporation through a private instrument. It permits participation by both natural and legal persons, accommodating both single-member and multi-member structures, establishes limitations on the liability of partners, allows for indefinite duration, and provides for an unlimited corporate purpose.

The autonomy of the will as a typifying element of Argentine SJSC

In 2017, the Argentine Republic enacted Law 27349, known as the Law for the Support of Entrepreneurial Capital (*Ley de Apoyo al Capital Emprendedor* – LACE), which introduced the SJSC into the nation's legal framework.[22] Article 33 of the LACE characterizes this entity as "a new type of company"[23] and establishes that it will be governed by "the scope and characteristics outlined in this law." Additionally, it specifies that "supplementarily, the provisions of the General Corporations Law shall apply (...) insofar as they are compatible with those of this law." Consequently, it is clear that the General Corporations Law (*Ley General de Sociedades* – LGS[24]) do not govern the SJSC in instances where it conflicts with the stipulations of the LACE.

[22] Law 27349 for the Support of Entrepreneurial Capital. *Official Gazette*, April 12, 2017. Articles 33 to 62.

[23] The discussion regarding whether a new type of corporate entity is being addressed proves futile, as the law explicitly establishes this. Those who hold a differing view should advocate for legislative reform to amend the definition outlined in Article 33 of the LACE. Therefore, it is perplexing that the former head of the Public Registry of Commerce of Buenos Aires denied something so evident and even went further by asserting that they are not companies, stating that the SJSC "are not – legally speaking – legal entities nor – by obvious consequence – companies" (Nissen 2022, p. 3). It is also contradictory that an individual who directly denies in an academic publication that the SAS is a legal entity and a company, when issuing general resolutions for the agency he led, asserted that "the SAS can be a valuable legal instrument provided that they are utilized by genuine entrepreneurs and that they do so in conditions of transparency and fairness" (considerations of the General Resolution IGJ 9/2020) – but were they not even legal entities? Furthermore, it is striking that he stated, "the Simplified Joint Stock Company under Law 27,349 is a subtype of joint-stock company, along with others contemplated in Law 19,550, such as the single-member joint-stock company and the joint-stock company with majority state participation" (considerations of the General Resolution IGJ 44/2020). According to these statements, it appears that the SJSC is a subtype of joint-stock company; however – weren't the SJSC not even considered companies? Or is he suggesting that the joint-stock company is not a company either?

[24] General Corporations Law 19550, April 3, 1972, amended by the Annex to Decree 841/84 *Official Gazette*, March 30, 1984.

Regarding the organizational structure of the SJSC, Article 36 of the LACE states that "the constitutive instrument, without prejudice to the clauses that the partners choose to include, must contain at least the following requirements." Among these, it stipulates that the contract must provide for: "7. The organization of the administration, of the partners' meetings, and, if applicable, of the control; 8. The rules for distributing profits and bearing losses, as well as the clauses necessary to establish the rights and obligations of the partners among themselves and with respect to third parties." This article enshrines the partners' freedom to redact the constitutive instrument, subject to the limitation – or, more precisely, the minimum content – that the law explicitly requires. Consequently, the partners must delineate how the internal structure of the company will be organized, specifically detailing the functioning of the corporate bodies. Moreover, the LGS will only apply to this organization – established by the partners in accordance with an explicit legal provision – if it aligns with the structure they have created.

The regulation of the SJSC outside of the LGS is a result of the legislator's intention, and it must remain this way, as "the importance of maintaining the regime in this form lies in the paradigm shift represented by the SJSC, as a new conception of corporate law. If it had been incorporated into the LGS, there would be a risk of analyzing it from different perspectives, assumed as dogmas within the LGS" (Ramírez, 2019).

There are also certain matters in which the shareholders of the SJSC cannot exercise such freedom, and thus the principle of autonomy of the will does not apply. This is the case, for instance, with the liability regime for capital contribution set forth in Article 43 of the LACE (whereby the shareholders jointly and unlimitedly guarantee the full contribution of the share capital to third parties), which cannot be altered in the constitutive instrument. This example clearly demonstrates that when the law intends to limit the autonomy of the will of the shareholders, it does so expressly and unambiguously, whereas the principle of the autonomy of the will in the SJSC applies to matters such as the composition, competences, duration, and requirements of the company's governing bodies.

Freedom in Establishing the Organizational Structure of the Company in the Argentinean SJSC

Chapter IV of the LACE, titled "Organization of the Company", addresses the organizational structure of the SJSC. This is articulated through five articles. In the first one (Art. 49), it establishes the general principle of the partners' freedom to determine the organizational structure of the company, stating that there will

be an administrative body, a governing body, and that there may – or may not – be a supervisory body. These bodies "shall operate in accordance with the provisions set forth in this law, in the constitutive instrument, and, supplementarily, by those applicable to Limited Liability Companies and the general provisions of the General Corporations Law (LGS)".

This means that the LACE clearly states that the LGS is applicable supplementary to its provisions – just like the regulations pertaining to limited liability companies – such that the general law may only be applied to matters not addressed in the LACE or not specified by the shareholders in the constitutive instrument. Consequently, the only limitation on the freedom of the partners is the LACE itself, as its provisions are the only ones that take precedence over the autonomy of the will.[25]

The law subsequently regulates, in three articles – Articles 50 to 52 – the administrative body and the representation of the company, and then, in Article 53, it addresses the governing body. Notably, this same article regulates the supervisory body in a single sentence (literally!).[26]

Concerning the administrative body, Article 50 stipulates that it may consist of "one or more natural persons, whether or not they are partners, appointed for a specified or unspecified term". This provision explicitly limits the autonomy of the shareholders' will, excluding the possibility of this body being composed of a legal entity,[27] as well as an algorithm or artificial intelligence.

Article 51 addresses the functions of this body, stipulating that if it is composed of more than one person, the law requires the constitutive instrument to

[25] Obviously, the general principles of the law and the National Civil and Commercial Code also apply, especially its first articles (Art. 9: Principle of Good Faith and Art. 10: Abuse of rights). However, in order to avoid abuse or to recognize good faith, it will not be necessary to resort to the LGS, since the LACE itself expressly clarifies that it is of supplementary application. The LGS should not be applied, except when applicable by reference – supplementarily – from the LACE. However, the legal system as a whole can and must be applied.

[26] It is challenging to assert that the norm 'regulates' the supervisory body in that single sentence, as it merely establishes that this body may or may not exist.

[27] This is a topic that has long been discussed in legal doctrine but clearly exceeds the scope of this paper. In an earlier presentation by Alberto Verón titled "La capacidad de una persona jurídica para ser director" ("The Capacity of a Legal Entity to Serve as a Board Director"), presented at the II Congress of Corporate Law (Mar del Plata, 1979), the doctrinal positions on this matter are summarized. Verón explains that "Halperin, Zaldívar, Arecha, and García Cuerva, along with Perrotta, lean toward the permissive thesis. In contrast, Farina and Mascheroni consider it inadmissible to appoint a legal person as the director of a corporation." Furthermore, the classic "Cuadernos de Derecho Societario" ("Corporate Law Notebooks") stated regarding the Board of Directors that "without natural persons who form the will of the society, it cannot fulfill the specific purpose for which it was created" (Zaldivar et al., 1982, p. 453).

specify the functions of each administrator or to indicate that they will act jointly or collegially. This provision introduces a new limitation on the autonomy of the members' will, as they cannot determine that the body itself will establish these functions. Similarly, it is not permissible to appoint administrators who all reside outside the country, which represents yet another limitation on the partners' freedom. Regarding the way the meeting is to be held – and its summons – the law grants the partners the liberty to define these aspects.

This same article also refers to the legal representation of the company. The aim of this text is not to delve into the discussion about whether the legal representative must be a member of the administrative body or whether they can be distinct persons or even different bodies.[28] However, the law stipulates that the legal representation of the company shall also be entrusted to individuals, whether they are members or not, and that the constitutive instrument will establish the method of designation. If this is not specified, the meeting of shareholders will appoint the legal representative. I concur with Ramírez (2019, p. 179) and Balbín (2020, p. 121) that the LACE distinguishes between the administrative body and the representation body, but I do not agree with the requirement of certain public registries that the legal representative of the SJSC must be a member of the administrative body (Vanney, 2019a).[29]

In turn, Article 52 establishes that the duties, obligations and liabilities set forth in Article 157 of the LGS (i.e. the same as those of the managers of the LLC) are applicable to the administrators and legal representatives. This provision explicitly references the LGS and imposes limitations on the partners' autonomy in these matters. Additionally, it addresses the responsibilities of de facto administrators, stipulating that shareholders cannot absolve them of these responsibilities, thereby introducing another limitation.

After three articles dedicated to the administrative body, the LACE refers to the governing body in a single article – Article 53. Within that same article, it

[28] My position on this issue has already been articulated – expressing my opposition to that requirement – in a paper presented at the XIV Argentine Congress of Corporate Law and X Ibero-American Congress of Corporate and Business Law, Rosario, Argentina, September 4–6, 2019, entitled "Representar sin administrar" ("Representing Without Managing"), a title that reveals precisely what that stance is (Cf. Vanney, 2019b).

[29] General Resolution 6/2017 issued by the General Inspection of Justice (IGJ), the regulatory authority in Argentina responsible for overseeing and enforcing compliance with corporate and commercial laws, under the Ministry of Justice, "Art. 29.- The legal representative of the company must have the character of administrator of the same. In case of silence of the constitutive instrument and its subsequent amendments regarding the exercise of the legal representation, all the administrators may represent the SAS individually and indistinctly."

briefly addresses the supervisory body in just one sentence. Regarding the governing body, it establishes that it is the "Meeting of Shareholders", delegating to them the authority – in the constitutive instrument – to determine the manner in which these meetings will be conducted (whether in person, remotely, at the company's registered office, outside of it, or even asynchronously by sending their expression of intent etc.). Concerning the domicile of the shareholders, the law does set a guideline, as they must specify it in the constitutive instrument and subsequently inform of any changes.

As can be clearly observed, the LACE only provides general guidelines regarding these bodies and leaves many aspects of their functioning to the autonomy of the will. Furthermore, it does not specify their competencies. Additionally, when the law intends to impose a limit on the freedom of the shareholders, it does so explicitly. Ultimately, what the legislator intended was for the shareholders, in the constitutive instrument – and potentially in its amendments – to establish the rules for each particular company.

There is no doubt that the shareholders are the ones who best understand what is most convenient for them and how they want the company they are forming or in which they are involved to operate, rather than a legislator dictating norms that limit their autonomy of will and constrain the operation of a company that the legislator will not be a part of. As states Hadad (2019) "the Simplified Joint Stock Company came to put an end to the paternalistic era of corporate law, it came to eliminate the technocratic prejudice of thinking that the legislator and the doctrine are in a better position than the shareholders and their lawyers to provide more efficient rules to the companies."

It could be argued that within the framework of the SJSC, there exists the potential to blur or even redefine the traditional boundaries between corporate bodies and their respective competences. In alignment with Balbín's perspective, "the strict separation of functions among corporate bodies, typical of the LGS, is relaxed in the context of the SJSC. In the latter, the allocation of powers is subject to the discretion of the shareholders as stipulated in the constitutive instrument. The shareholders are thus afforded the freedom to determine these competences without constraints, save for those imposed by the LACE, and may even overlap them should they find it beneficial." (Balbín, 2020, p. 26).

The assertion that the LACE *mistakenly* reserves the decision of early dissolution of the company to the shareholders' meeting does not appear to be valid. The law reflects a clear expression of the legislator's intent, designating such a significant decision exclusively to that body, thereby limiting autonomy in this regard. This reinforces the argument that the competencies of the corporate bodies of the

SJSC may be freely determined by the shareholders, provided that the LACE does not impose restrictions on such freedom. When limitations are intended, the law articulates them explicitly, as evidenced by the provision regarding the decision on early dissolution.

This underscores the position that shareholders' freedom to organize the corporate structure of their company should not be restricted – except where explicitly stipulated by law – merely due to potential 'conflicts' with established interpretations developed from years of application of the LGS. In essence, who is better suited than the shareholders themselves to decide how to structure their company internally, as well as determine the powers granted to each body? If they make an error, as Hadad (2019) suggests, the financial loss will be theirs. However, such losses should not result from being compelled to conform to decisions imposed by external parties (legislators), particularly when these limit the shareholders' autonomy in structuring their SJSC.

Regarding the supervisory body – mentioned in the final sentence of Article 53 – the LACE merely states that its existence is optional, without imposing any restrictions on the shareholders' decision to establish it or not.[30] Furthermore, concerning the internal organization of this body and the freedom shareholders have to appoint professionals beyond just lawyers or accountants, I maintain, as have previously stated, that if the shareholders "decide that the SJSC will have a supervisory body, they may design it with complete freedom, without the functional, professional, or numerical limitations imposed by the corporate forms under the LGS" (Vanney, 2019a).

It should not be feared that shareholders, when embarking on a new business or project, would want to do so with an instrument – the company – tailored to their needs or desires. This consideration applies not only to the internal organization of the SJSC but also to the competencies of its governing bodies. Furthermore, there should be no concern regarding their decision to relinquish certain rights or confer powers traditionally reserved for shareholders under the LGS to individuals who may not be shareholders themselves.

The freedom of shareholders to organize the company, along with the enshrinement of the principle of autonomy of will, is explicitly articulated in the law itself. This freedom encompasses the power to determine the internal organization of the company and the functions of its governing bodies. Within this framework, share-

[30] This is why I believe that Article 4 of the now-repealed General Resolution 9/2020 of the IGJ infringed upon the law by mandating the obligatory existence of the supervisory body when the capital of the SJSC exceeds the threshold specified in paragraph 2 of Article 299 of the LGS.

holders can decide whether to appoint individuals as members of these bodies or to designate an algorithm or artificial intelligence, provided that the regulations governing each body do not limit its composition to natural or legal persons.

Artificial intelligence in Corporate Law

Stepping away from Argentine national legislation, it is essential to examine – if only briefly – the application of artificial intelligence in modern corporate law and the potential designation of such technology as members of corporate bodies. This consideration comes despite specific limitations that may exist in some countries, which stipulate that the members of corporate bodies can only be human or legal persons. This possibility is neither utopian nor part of a magical realism narrative. Globally, this issue is currently under active discussion, with notable developments emerging over the past few years (Boza, 2018). For example, the case of Deep Knowledge Ventures, an investment fund based in Hong Kong, exemplifies this trend, as it has appointed an algorithm to its board of directors (Wile, 2014).

However, the debate surrounding this issue is not confined to corporate law. News reports increasingly highlight instances of artificial intelligence replacing certain tasks that were previously performed by humans. Additionally, the potential application of these technological tools within insolvency law is beginning to be considered.

In this context, Lorente (2023) has suggested that AI-driven algorithms can efficiently analyze large volumes of economic, financial, accounting, and legal data, enabling professionals working in the field of insolvency to assess the financial health of companies with greater accuracy. By leveraging machine learning techniques, AI can identify patterns and detect early warning signs of insolvency, allowing stakeholders to take proactive measures. Furthermore, AI can automate routine tasks such as document review, data extraction, and contract analysis, thereby reducing administrative burdens, lowering costs, and enhancing the overall efficiency of bankruptcy processes.

Moreover, as will be emphasized later in this article, AI can facilitate the development of predictive models for asset valuation, leading to more effective liquidation processes and ultimately improving the estimation of creditor recovery rates. These models can assist in determining optimal strategies for asset distribution, thereby maximizing returns for creditors. Additionally, in insolvency proceedings, blockchain technology can offer an auditable, secure, and immutable record of transactions, asset transfers, and creditor claims. This transparency enhances the accuracy and integrity of asset distribution, thereby reducing the risk of fraud and

disputes. Smart contracts – self-executing agreements embedded in blockchain – can automate key aspects of insolvency, including the distribution of funds and the processes for approving or rejecting bankruptcy proposals. Most importantly, they ensure the effective and automatic compliance with obligations arising from approved insolvency agreements. Furthermore, blockchain-based tokens can represent fractional ownership of assets, thereby enhancing liquidity and facilitating the sale of distressed assets.

Lorente also notes that the use of artificial intelligence is prominent in business law, particularly in the realm of contracts. In this context, it has been stated that Smart Contracts are self-executing agreements in which the terms are directly embedded in code, triggering predefined actions upon the fulfillment of specific conditions.

However, the emergence of AI in legal matters and its application in law has prompted discussions not only about its utilization across various areas of commercial law or its direct integration into the governance of corporate entities but also about the possibility of granting legal personality directly to artificial intelligence.

In this context, there are both supporting and opposing views regarding the recognition of legal personality for artificial intelligence. Notably, in 2017, the European Parliament approved the "Civil Law Rules on Robotics", which addressed the question of liability concerning robots and artificial intelligence requesting that (no. 59) "when carrying out an impact assessment of its future legislative instrument, to explore, analyze, and consider the implications of all possible legal solutions, such as: (…) f) creating a specific legal status for robots in the long run, so that at least the most sophisticated autonomous robots could be established as having the status of electronic persons responsible for making good any damage they may cause, and possibly applying electronic personality to cases where robots make autonomous decisions or otherwise interact with third parties independently".[31] On the other hand, those who hold the opposing position – denying the possibility of granting legal personality to AI – argue that "although AI appears to have a certain autonomy by making decisions without the need for a proper order by the human being, such behavior is nothing more than a result of its technological construction, which will only have a specific function that responds to the intention of its creator" (Quiñones, 2024, p. 26).

It is worth noting that the debate is not limited to the application of modern technologies in the field of corporate law; rather, it is much broader, and the dis-

[31] Resolution of 16 February 2017 with recommendations to the Commission on civil law rules on robotics (2015/2103(INL). Retrieved November 3, 2024, from https://www.europarl.europa.eu/doceo/document/TA-8-2017-0051_EN.pdf

cussion is much deeper. However, when focusing on its application, it should be emphasized that not only is the role of AI in the integration of corporate structures being discussed, but also its involvement in debt restructuring and liquidation proceedings. These tools may, in the near future, prove useful, expedite procedures, and perform tasks that would otherwise take a human being many hours or even weeks. The significant problem of the length of bankruptcy proceedings could potentially be alleviated with the introduction of artificial intelligence. Furthermore, within corporate law, the execution of contracts through technological tools that do not require human activity or decision-making for their formulation and execution is already a reality.

The emergence of artificial intelligence in business law is both complex and promising. Thus, an in-depth exploration of specific AI disciplines, such as ML – defined as a system that autonomously learns by identifying intricate patterns within vast amounts of data, analyzing them, and predicting future behaviors or outcomes – will not be undertaken here. The potential applications in this realm are virtually limitless. Similarly, the concept of Decentralized Autonomous Organizations (DAOs), which is rooted in blockchain technology and enables the establishment of organizations governed by code rather than centralized authorities or individuals, will also not be discussed. The DAO is a community-driven entity governed by computer code that can function autonomously without the need for central leadership and, unlike traditional organizations, does not allow a single person or group to enforce decisions unilaterally but rather all members of the community can suggest ideas and vote on them, ensuring that decisions are made by the entire group, not just a few powerful individuals.[32]

Artificial Intelligence as a Member of a Corporate Body

Beyond the application of AI to various aspects of corporate law, this analysis specifically aims to explore the potential for this technological resource to be integrated into a corporate body as one of its members. It has been noted that there exists a precedent – particularly in Asia – where AI has been incorporated into the organizational structure of a corporate entity. Consequently, this study will concentrate on the feasibility of such integration occurring within Argentine corporations, with a primary focus on SJSC, as previously discussed.

[32] See: https://academy.binance.com/en/articles/decentralized-autonomous-organizations-daos-explained I have self-imposed these limitations since the specific purpose of this article is just to focus on the possibility of an AI being part of an organ of a traditional commercial company.

As previously mentioned, one of the defining characteristics of SJSC is the considerable freedom afforded to shareholders in organizing the company's bodies, including their composition and functions. The law explicitly states that it is the shareholders who determine the organizational structure of the company, with the bodies operating in accordance with the LACE, the constitutive instrument, and, in a supplementary manner, the regulations governing LLC and the LGS.[33]

The regulatory framework in Argentine law imposes more stringent requirements regarding the composition of the administrative and governing bodies. The former must consist solely of natural persons (Article 50 LACE), while the latter, at least in its initial composition, must be composed by natural or legal persons.[34] In contrast, the supervisory body is subject to minimal regulation, as the law merely states that it may or may not exist, thus leaving its organization and composition entirely to the discretion of the shareholders. Although the legal text specifies that "a supervisory body, syndic, or council may be established", it does not suggest that these are the only forms of oversight permitted within a SJSC, as the law merely references them as illustrative examples.[35] Therefore, shareholders are free to rename the supervisory body and define its functions, membership requirements, election procedures, and other relevant aspects.[36]

In this context, shareholders of a SJSC may ascertain that, for effective oversight of the company they are forming, alternative personal qualifications beyond the stringent requirements outlined in the LGS are essential. Consequently, they could customize the composition of the supervisory bodies to align with the corporate purpose or the activities undertaken by the company within its broad objectives, establishing additional criteria relevant to that activity. For instance, they

[33] First paragraph of Article 49 of the LACE – Internal Legal Organization: Shareholders shall determine the corporate structure of the company and the other rules governing the operation of its corporate bodies. The administrative, governing, and supervisory bodies, where applicable, shall operate in accordance with the provisions established in this law, in the founding document, and, subsidiarily, in the regulations governing limited liability companies and the general provisions of the General Law of Corporations, 19,550, as amended in 1984.

[34] This initial integration arises from Article 34 of the LACE, which regulates its constitution, establishing that the members are the shareholders who will form that initial governing body. However, the law does not specify who may be part of the administrative body when regulating its functioning in Article 53.

[35] It can be inferred that Perciavalle and Martorell are against this position (Cf. Perciavalle, Martorell, 2018, p. 163).

[36] Boquín (2019) has argued with respect to the SJSC that "there is nothing to fear from the freedom to act. Freedom with responsibility is typical of culturally advanced societies... jurisprudence will have the last word and will mark whether as a society we are up to the challenge of acting freely and responsibly."

might impose distinct professional qualifications, allowing for the stipulation that the supervisory body need not consist solely of accountants or lawyers (Ramírez, 2019, p. 210).

As an illustration, in a SJSC with an agricultural purpose, the members of the supervisory body could include a geneticist, an agronomist, and a veterinarian. In a SJSC with a petroleum-related objective, the supervisory body could comprise a geologist, a petroleum engineer, and an environmentalist. Similarly, in a SJSC with a sports-related focus, the members of this body could be a technical director, a sports journalist, and "an expert in sports administration".[37]

Similarly, the functions and responsibilities of this body can also be established by the shareholders in the constitutive instrument or during a shareholders' meeting. Thus, a supervisory body may possess broader functions than the traditional roles of a supervisory board, potentially having the authority to remove directors or auditors or to make decisions typically reserved for a board of directors in conjunction with it. Furthermore, if this oversight body is characterized by the expertise of its members in areas related to the company's activities, it may also make business decisions concerning the management of operations, such as authorizing new projects. The possibilities are extensive and will depend on the size of the business.

It is within this extensive range of possibilities that the integration of an algorithm, artificial intelligence, or machine learning into the supervisory body of a SJSC warrants consideration. If the law explicitly outlines or restricts who may constitute specific bodies – particularly the essential bodies of the SJSC, namely administration, representation, and governance – by stipulating that these bodies must comprise individuals, whether natural or legal persons, it can be inferred that, in the absence of specific provisions regarding the composition of the supervisory body, the shareholders will determine who or what may constitute it, should they choose to establish such a body. In this regard, the shareholders are not obligated to appoint lawyers, accountants, or firms comprising them, nor are they required to adhere to prior operational rules or competencies. They also do not have to designate partners as controllers. Instead, they can choose to appoint a unipersonal syndic, establish a supervisory committee, or form a supervisory board in accordance with the provisions of the LGS, or select any other body they deem suitable to implement the desired type of control for their company. If, as stated above, shareholders can organize oversight by appointing members from various professions or

[37] As required by Article 8 of Law 25284 (assuming it can eventually be determined what this requirement specifically refers to).

activities, it can also be maintained that a step further can be taken by designating an algorithm, artificial intelligence, or even a machine learning system for that function – and thus as part of the supervisory body.

Without claiming to be an expert – far from it – it is essential, even at a basic level, to differentiate between the following three concepts, which are often confused with one another:[38] An algorithm is a set of clear rules and instructions that process data to generate a solution. While the term is commonly used in computing, algorithms are not limited to this field and have been utilized for thousands of years. For example, the Sieve of Eratosthenes is an ancient algorithm for finding all prime numbers up to a specified given natural number. Artificial intelligence refers to systems designed to mimic human problem-solving and decision-making abilities in order to perform specific tasks. These systems can also improve over time. Machine learning is a branch of artificial intelligence focused on generating predictions about events based on previously obtained data.

Within the considerable freedom granted to the shareholders in forming the supervisory body, they may choose to have the company's oversight executed not by individuals (either natural or legal persons) but rather by an AI or a ML system. Such systems would operate independently of personal biases, favoritism toward any member of another governing body, and would not be susceptible to superficial or prejudiced oversight. Therefore, what is proposed here, while it may initially seem like a strained interpretation of the law that pushes the boundaries of a legal void – specifically the limited regulations surrounding the oversight body and the absence of a clear mandate that it must be composed exclusively of "persons" – should not be perceived as an attempt to misinterpret the law. Instead, it represents a legitimate exploration of one of the numerous options permitted by the existing regulations.

In comparing this proposal with a "traditional" supervisory body as defined by the LGS, it is essential to reflect on its functioning and outcomes over more than fifty years since the enactment of the Argentine General Corporations Law, particularly concerning closed companies. In these instances, the professionalism and independence of the syndic are generally not considered, and they often do not act as true third parties; instead, they frequently serve the interests of the majority shareholder who appointed them, resulting in biased and one-sided oversight. In summary, oversight bodies composed of individuals appointed by individuals have

[38] I would like to express my gratitude to my son Francisco, a computer science student, for the foundational explanations he provided on these topics, which significantly enhanced my understanding.

demonstrated their inadequacy. While it remains uncertain whether an AI or ML system would perform better, at the very least, an opportunity should be afforded to assess their potential for more efficient control.

Laws – not only the LACE but laws in general – are full of loopholes and gaps that can, and often must, be interpreted and supplemented by legal actors. The norms regarding the supervisory body of the SJSC serve as an example of this. Article 33 of the LACE establishes that the rules of the LGS shall be applicable "insofar as they are reconciled with those of this law." Following this reasoning, this proposal recognizes the freedom granted by the LACE to the shareholders regarding the internal organization of the company. Thus, when they determine that the traditional supervisory bodies defined by the LGS – which, it should be noted, have failed in practice over the past fifty years – are not suitable for the purposes of the SJSC, they may exercise their freedom to create a supervisory body that differs from any existing model. Today, technology offers opportunities that were not available a few years ago, suggesting that the time has come to capitalize on these advancements.

This freedom and this opportunity are, on one hand, constrained; yet, on the other hand, they are acknowledged in the draft reform of the SJSC recently presented by ASEA (Association of Entrepreneurs of Argentina) and prepared by a group of eight specialists in corporate law.[39] The constraints arise from Article 53 bis, which the draft adds to the existing legislation, stipulating that the supervisory body – if established – must be composed of natural or legal persons. Nonetheless, it explicitly recognizes the potential, within the oversight body, to "establish automatic control mechanisms operated by artificial intelligence or similar systems, delineating the functions and powers of these entities."[40]

The myriad possibilities that technology currently offers, and may continue to offer in the future, such as DAOs, smart contracts, tokenized shares, and other related innovations, will not be explored in depth here. The current text of the

[39] Preliminary Draft Bill for the Reform of the Simplified Joint Stock Company presented by ASEA (Association of Entrepreneurs of Argentina), authored by Sebastián Balbín, Ricardo Cony Etchart, Lisandro Hadad, Fernando Pérez Hualde, Alejandro H. Ramírez, José Sala Mercado, Manuel Tanoira, and Carlos E. Vanney. Published in the special supplement of *La Ley* (March 14, 2024).

[40] The complete text of Article 53 bis of the Preliminary Draft is as follows: "Supervisory Body. A supervisory body, whether unipersonal or plural, may be established, consisting of either natural or legal persons. The constitutive instrument may specify the personal and/or professional qualifications of its members, the duration of their positions, and their functions and powers. Automatic control mechanisms may be implemented, utilizing artificial intelligence or similar systems, detailing their functions and authorities. The provisions of the General Companies Law No. 19,550, as consolidated in 1984 and its amendments, shall apply supplementarily, unless otherwise stipulated by the shareholders. The establishment of a supervisory body is always optional."

LACE restricts certain options (for instance, DAOs) by requiring the involvement of natural persons in both management and representation, as well as stipulating that governance must be carried out by natural or legal persons. Nevertheless, within the existing legal framework and the considerable freedom granted to shareholders, the use of certain technologies, such as smart contracts or tokenized shares, remains permissible.

While it may be argued that oversight or supervision could be challenging, given that it involves the analysis of automated operations, this still falls within the scope of the shareholders' autonomy. Shareholders ultimately retain the freedom to decide whether such a form of control is appropriate for their SJSC. They may also decide that the supervisory body should include not only an AI or ML system but also other members – either natural or legal persons – each with assigned functions. However, if no additional members are appointed, the AI or ML system could still communicate the results of its analysis to the appropriate parties.

In this context, shareholders could assign specific tasks to the AI or ML, such as overseeing certain automated operations and reporting the results to designated recipients – whether other members of the supervisory body (if applicable), another control body established by the incorporation instrument, the shareholders, investors, or other relevant entities. Any current limitations in the ability of AI or ML to perform this oversight may be overcome as these technologies evolve. The future remains uncertain, but the possibilities are limitless.

And it is important to insist that the law does not prohibit what is being proposed here. Therefore, this approach is legally permissible.[41]

Conclusion

Having analyzed the issues raised in the first section of this article – namely, the autonomy of will that prevails in current corporate law and the proliferation of simple, flexible corporate types tailored to the needs of shareholders; the impact of this principle on the Argentine Simplified Joint Stock Company (SJSC), which permits shareholders to design the organizational structure of their company; and, within that organizational design, the possibility of replacing human members of the governing bodies with artificial intelligence – it can be concluded that, under the current legal framework, this replacement would only be feasible within the supervisory body.

[41] According to Article 19 of the National Constitution of the Argentine Republic which, in its pertinent part, establishes that "No inhabitant of the Nation shall be obliged to perform what the law does not demand nor deprived of what it does not prohibit."

Although the absence of limitations regarding the composition of the supervisory body could be interpreted as an oversight by the legislator or as a reflection of insufficient emphasis on the control function, it can also be contended, as articulated herein, that this is not merely an omission. Rather, the legislator may have intentionally opted to afford shareholders greater latitude in configuring this body, refraining from imposing restrictions on its composition or functions, particularly in light of the shortcomings observed in the supervisory bodies established under the General Corporations Law (LGS). From this perspective, it can be cogently claimed that the shareholders may establish a supervisory body comprising not only natural or legal persons but also AI or ML systems, thereby assigning specific functions and determining the recipients of their reports.

References

Balbín, S. (2020). *SAS. Sociedades Por Acciones Simplificadas* (Simplified Joint Stock Companies). Buenos Aires: Cathedra Jurídica.

Boquín, G. (2019). Prelación normativa y sujetos pasivos en las acciones de responsabilidad en el régimen de las SAS (Normative Precedence and Liable Parties in Liability Actions under the Simplified Joint Stock Companies). In: Congreso Argentino de Derecho Societario (ed.), *Hacia un nuevo derecho societario*, pp. 1213–1216. Rosario: Universidad Nacional de Rosario.

Boza, B. (2018). ¿Algoritmos en el directorio? (Algorithms in the board of directors?). Ernst & Young. September 30, 2018. Retrieved October 29, 2024, from https://www.ey.com/es_pe/news/2018/09/algoritmos-en-el-directorio

Duprat, D. (2024). Los elementos esenciales de las sociedades de capital. Origen y evolución (The Essential Elements of Capital Companies. Origin and Evolution). *Jurisprudencia Argentina 2024-I*, pp. 159–178.

Hadad, L. (2019). Ud. debería confiar en que aquellos que arriesgan su propio dinero hagan los cálculos adecuadamente. Podrán estar equivocados, pero estarán menos equivocados que los académicos y los legisladores que están decidiendo con el dinero de otro (You should trust that those who risk their own money will make the calculations properly. They may be wrong, but they will be less wrong than academics and legislators who are deciding with someone else's money). In: Congreso Argentino de Derecho Societario (ed.), *Hacia un nuevo derecho societario*, pp. 999–1003. Córdoba: Advocatus.

Hadad, L. (2023). Acerca de la persona jurídica y su concurso preventivo. La no diferenciación con sus socios y administradores por la justicia penal (On the legal entity and its preventive bankruptcy. The failure to distinguish between the entity and its partners and managers by the criminal justice system.). Paper presented at the XXII National Conference of Institutes of Commercial Law, Austral University, November 2–3, 2023.

Kraakman, R., Armour, J., Davies, P., Enriques, L., Hansmann, H., Hertig, G., Hopt, K., Kanda, H., Pargendler, M., Ringe, W. G., and Rock, E. (eds). (2017). *The Anatomy of Corporate Law: A Comparative and Functional Approach*. Oxford: Oxford University Press.

Lorente, J. (2023). Aplicación de inteligencia artificial, blockchain y smart contracts cadena de bloques en procedimientos concursales: el futuro es hoy (Application of Artificial Intelligence, Blockchain, and Smart Contracts in Bankruptcy Proceedings: The Future is Now). Paper presented at the XXII National Conference of Institutes of Commercial Law, Austral University, Pilar, November 2–3, 2023.

Mccahery, J., Vermeulen, E., Hisatake M. and Saito, J. (2006). *The new company law – what matters in an innovative economy? ECGI – Law Working Paper 75/2006*.

Nissen, R. (2022). *Memoria, balance y estado de resultados de las sociedades por acciones simplificadas, a casi cinco años de la vigencia de la ley 27.349* (Report, Balance Sheet, and Income Statement of Simplified Joint Stock Companies, Almost Five Years After the Enactment of Law 27.349). Buenos Aires: La Ley.

Perciavalle, M., Martorell, E. (2018). *SAS – Ley Comentada de la Sociedad por Acciones Simplificadas – Teoría y práctica de su funcionamiento* (Annotated Law of the Simplified Joint Stock Company – Theory and Practice of Its Operation). Buenos Aires: Erreius.

Pérez Hualde, F. (2017). La autonomía de la voluntad como nota tipificante de la Sociedad por Acciones Simplificada (The Autonomy of Will as a Defining Characteristic of the Simplified Joint Stock Company). *La Ley 2017-F*, pp. 561–567.

Quiñones, M. C. (2024). La personalidad jurídica de la inteligencia artificial (The Legal Personality of Artificial Intelligence). *El Derecho: Derecho, innovación & desarrollo sustentable 20/2024*, pp. 21–26.

Ramírez, A. (2019a). La regulación de la SAS por fuera de la Ley General de Sociedades (The Regulation of the SJSC Outside the General Companies Law). In: Congreso Argentino de Derecho Societario (ed.), *Hacia un nuevo derecho societario*, pp. 913–916. Rosario: Universidad Nacional de Rosario.

Ramírez, A. (2019b). *SAS – Sociedad por Acciones Simplificadas* (SJSC – Simplified Joint Stock Company). Buenos Aires: Astrea.

Ramírez, A. (2023). El auge de las Sociedades por Acciones Simplificadas en Latinoamérica: Análisis comparativo de su regulación (The Rise of Simplified Joint Stock Companies in Latin America: A Comparative Analysis of Their Regulation). *Revista Latinoamericana de Derecho Societario I-2023*. Retrieved October 29, 2024, from https://ijeditores.com/pop.php?option=articulo&Hash=236170f74e7f0073ab3a24cc951b5cc4

Vanney, C. E. (2019a). La autonomía de la voluntad y la fiscalización de la SAS (The Autonomy of Will and the Supervision of the SJSC). In: Congreso Argentino de Derecho Societario (ed.), *Hacia un nuevo derecho societario*, pp. 1151–1156. Rosario: Universidad Nacional de Rosario.

Vanney, C. E. (2019b). Representar sin administrar (Representing Without Managing). In: Congreso Argentino de Derecho Societario (ed.), *Hacia un nuevo derecho societario*, pp. 1143–1149. Rosario: Universidad Nacional de Rosario.

Vanney, C. E. (2022a). ¿Una inteligencia artificial fiscalizando? (An Artificial Intelligence Supervising?) Paper presented at the XV Argentine Congress of Corporate Law and XI Ibero-American Congress of Corporate and Business Law "Por un nuevo Derecho Societario: Libertad bajo responsabilidad" – Córdoba, Argentina, October 26–29, 2022.

Vanney, C. E. (2022b). En los órganos de la SAS la autonomía de la voluntad prevalece sobre las previsiones de la Ley General de Sociedades (In the Bodies of the SJSC, the Autonomy of Will Prevails Over the Provisions of the General Companies Law). Paper presented at the XV Argentine Congress of Corporate Law and XI Ibero-American Congress of Corporate and Business Law "Por un nuevo Derecho Societario: Libertad bajo responsabilidad" – Córdoba, Argentina, October 26–29, 2022.

Verón, A. (1979). La capacidad de una persona jurídica para ser director (The Capacity of a Legal Entity to Be a Board Director). Paper presented at the II Congress of Corporate Law, Mar del Plata, Argentina, October 11–13, 1979.

Wile, R. (2014). *A Venture Capital Firm Just Named an Algorithm to Its Board of Directors – Here's What It Actually Does*. Retrieved October 29, 2024, from https://www.businessinsider.com/vital-named-to-board-2014-5

Zaldivar, E., Manovil, R., Ragazzi, G. and Rovira, A. *Cuadernos de Derecho Societario* (Corporate Law Notebooks), vol. III. Buenos Aires: Abeledo Perrot.