

ARTIFICIAL INTELLIGENCE BETWEEN DISRUPTIVE INNOVATION, ACCESSIBILITY AND INCLUSIVE CORPORATE GOVERNANCE

L'INTELLIGENZA ARTIFICIALE TRA INNOVAZIONE DIROMPENTE, ACCESSIBILITA' E CORPORATE GOVERNANCE INCLUSIVA



Double Blind Peer Review

Citation

Carbone, M., Sozio, A., Catalano, E., & De Giuseppe, T. (2025). Artificial intelligence between disruptive innovation, accessibility and inclusive corporate governance. *Giornale italiano di educazione alla salute, sport e didattica inclusiva*, 9(2).

Doi:

<https://doi.org/10.32043/gsd.v9i2.1366>

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gsdjournal.it

ISSN: 2532-3296

ISBN: 978-88-6022-510-8

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ABSTRACT

The digital revolution is also changing corporate governance, in which a great diffusion of AI is plausible. As the consequences are significant, it is necessary for the company to take actions that affect its organizational culture. Faced with this need, the research project is developed, which intends to stand as a declination of the Flipped inclusion model: it is necessary to act pedagogically on the training of people (and machines) because only the creation of inclusive and prosocial personalities can ensure the achievement of corporate organizational well-being.

La *rivoluzione digitale* sta modificando anche la corporate governance aziendale, in cui è plausibile una grande diffusione dell'IA. Essendo rilevanti le conseguenze, è necessario che l'azienda intraprenda azioni che incidano sulla propria cultura organizzativa. A fronte di tale esigenza si sviluppa il progetto di ricerca che intende porsi come declinazione del modello Flipped inclusion: è necessario agire pedagogicamente sulla formazione delle persone (e delle macchine) perché solo la creazione di personalità inclusive e prosociali può assicurare il conseguimento del benessere organizzativo aziendale.

KEYWORDS

Artificial intelligence, corporate governance, flipped inclusion, organizational well-being.

Intelligenza artificiale, corporate governance, flipped inclusion, benessere organizzativo.

Received 30/04/2025

Accepted 16/06/2025

Published 20/06/2025

Introduction

The transformation of economic activities as a result of the use of Artificial Intelligence technologies is a phenomenon that has been underway for some time but has become impetuous over the past few years, leading to an evolution that has prompted even experts in corporate law and business organization to confront each other on a global scale regarding the effects that this technological revolution is bringing about today, and is likely to produce to an even more pronounced extent in the near future, on the reality of companies. This opens up and prefigures new opportunities, but at the same time poses unprecedented interpretative problems and equally innovative regulatory demands on legislators and supervisory authorities. According to many, Artificial Intelligence (AI) is destined to be the driving force introducing central to the "fourth industrial revolution" by incontrovertibly changing the way we live our daily lives.

More interconnected societies will base their decision-making processes on the analysis and exploitation of so-called Big Data; firms, engaged in increasingly competitive markets will be able to access capital and other resources at much cheaper prices; and it will be possible to purchase goods and obtain services from anywhere in the world by interacting with non-human automated services.

The organization and management of the modern enterprise are undergoing a metamorphosis (Rossi, 2012) due to the "crisis of imperativeness of the norm belonging to the individual order" (Zoppini, 2021), from which emerges a modified genetic code of corporate governance, characterized by a renewed balance between inter-organic dynamics and positioning on an increasingly globalized and digital market. Accessibility and interoperability among communication platforms supports processes of technological democratization as the foundational basis on which to root the promotion of shared surplus value and well-being for all.

It is observed that by entrusting "machines" with corporate compliance, administrators would return to business, zeroing in on conflicts of interest endemic to the human person. Neologisms have appeared in the international vocabulary such as "robo-board," "corp-tech," and "self-driving corporations," indicative of an impending dehumanization of the corporate legal person (Abriani, 2020). The possible related risk is that of disruptive winners by which corporations that will tend to dominate markets will see digital interaction, enabled by big data analytics, prevail (Mancuso Hobey, 2020).

Corporate governance, understood as the institutional framework that regulates the process of formulating and implementing corporate decisions, is in constant

flux, and one of the most frequently asked questions in this recent period concerns precisely the impact that new Artificial Intelligence technologies have and will have on corporate structures and in particular on corporate governance itself.

Corporate governance benefits from the process of disruptive innovation in many ways (Sickle, et al. 2018): companies are not only making use of new technologies for production and distribution but also for management and control, to improve their performance in the market and to improve processes and decision-making mechanisms internally.

This debate is bound to renew itself continuously as, on the one hand, it is subject to regulatory developments that condition the activities of corporate governance actors, and, on the other hand, the actors themselves modify their behavior, with a view to sustainable value creation.

In fact, many of the most important business players in the market, precisely from this point of observation, characterized by an awareness of the importance of innovation and change in order to continue to operate and remain competitive, are taking various actions such as, for example, to review their business model and internal organization in a new key, to redefine their vision and with it their strategic goals, to strengthen their culture and engagement on these issues, and to seek a balance between recruiting and re-training.

They are witnessing a shift from platform governance to community-driven governance. In particular, the largest and most efficient economic players in the market are using Artificial Intelligence technologies not only to facilitate economic exchanges, but also, and more importantly, to enable an increasing number of stakeholders to participate and play a key role in corporate assets. This practice takes place through the tool of feedback (Scarchillo, 2019), which identifies a real process, in which the result of a system's action has repercussions on the system itself, thus influencing the operator's future behavior.

The needs of top management and the tools at their disposal to be able to respond in a timely manner to the strategic challenges already present today and those that are foreseen for tomorrow are changing, but at the same time, the relationships between functions within the organization, customer responses to product and service offerings, and stakeholder engagement are also changing rapidly.

The ordering and organization of companies are undergoing profound and rapid transformation, from whose technologization a new balance of values is emerging. Debates about the purpose of business and its social responsibility will have to take into account the genetic mutation that the corporate organism is undergoing.

Added to this is the ethical problem of the limits of Artificial Intelligence use and the preservation of human primacy.

While human beings fall ill, may experience restrictions in movement and limitations in cognitive and behavioral faculties, are prone to bias and experience emotions, Artificial Intelligence, on the other hand, is insensitive to such variables and therefore particularly resilient even in scenarios of systemic shocks. At present, Artificial Intelligence seems destined, in management, to a function still confined to the mere support, especially in corporate reporting, of directors, auditors and investors in the activities of analysis and control of the financial information produced and disseminated by the company (Montagnani, Passador, 2021).

At present, in short, Artificial Intelligence and new technologies are capable of assisting but not replacing the functions entrusted, in companies, to the administrative and control bodies. However, the contribution made is valuable in terms of:

- integration of investigative activity, which involves a series of operations instrumental in making more informed and efficient decisions that are well suited to be carried out by Artificial Intelligence systems;
- automated prediction to support the strategic direction and management choices to which the board is called, through the acquisition and then processing of data and solutions, which correct themselves and assess risks and opportunities in real time;
- corporate reporting activities, since the added value of new technologies consists precisely in the agility with which Artificial Intelligence systems collect, analyze and aggregate data and in the speed with which they generate reports from them;
- compliance, thanks to the system's own ability to monitor the regulatory landscape with the possibility of real-time notification of individual legislative changes;
- production and management of internal information flows: one thinks, for example, of data protection, since the information transmitted in the corporate sphere often contains information of particular importance (this is the case, first and foremost, of privileged information);
- self-assessment of the board;
- identification of the "best candidates" in the case of co-option or even, more generally, nomination and preparation of the list by the outgoing board of directors;

- management of shareholder dialogue and shareholder participation in social and corporate life, now increasingly central, ensuring participation at a widespread and widespread level (up to so-called platform governance and community-driven governance).

The applications of Artificial Intelligence systems as a tool, aid and support even in corporate governance are many and all useful. They are uses at the service of and not in substitution for governing bodies, and, as such, subject to careful and conscious human oversight.

To continue along the path of "algo-governance" while respecting the human-centric vision, which is the basis of the European strategy, the marked path is one-way: we need to invest in the culture of Artificial Intelligence, strengthening the trust of users and beneficiaries but, above all, the accountability and verifiability of the algorithms employed.

1. Roles of artificial intelligence and corporate compliance.

The coronavirus experience has shown that the digitization of business activity already belongs to the present of corporate law (Pellegrini, 2019), while the use of Artificial Intelligence is an increasingly imminent phenomenon. Artificial Intelligence is increasingly entering everyday life: since early 2023 we are witnessing an explosion of online services based on generative models, both textual (ChatGPT by OpenAI first and foremost) and graphical (Midjourney, Stable Diffusion, and DALL-E) which have raised the levels of attention from regulators.

AI-based technologies are also causing significant changes in the way enterprises approach and address information analytics and compliance issues. Already in the short term, however, a widespread development of AI systems is plausible in the area of corporate monitoring as well, in order to assist the administrative body in corporate compliance and related accountability processes through the processing of increasingly relevant amounts of data and information (Hilb, 2020).

Information-based technologies are playing an increasingly important role both within companies and in boards of directors by influencing how decision-making is carried out and its outcomes.

This is particularly true for companies in industries where big data, the Internet, and algorithms are most important (e.g., platforms such as Amazon, Google, Uber, YouTube, Netflix, Facebook) but it is also true for companies that rely on platform-based technologies to develop their business (e.g., financial companies).

Artificial Intelligence can be employed within the board of directors to achieve more streamlined and efficient strategic decisions and to guide the decisions made according to the company's strategic goals and social responsibility profiles. In the face of these deployments, which are likely to grow over time, Artificial Intelligence calls for a reinterpretation of some aspects characterizing corporate governance. In order for the entry of Artificial Intelligence into the board of directors to become a concrete resource for directors in carrying out administration and control functions, it is necessary for them to consider both the relative potential and the relative risks also with respect to the liability regime and in light of the principle of the unquestionability of management choices.

It is, therefore, necessary to consider, on the one hand, the role of Artificial Intelligence in structuring appropriate organizational, administrative and accounting arrangements within companies (Mosco, 2019), in which the same technological tools constitute an unfailing component, and on the other hand, it is necessary to consider, the use of algorithms to immediately support corporate decision-making processes.

In the medium to long term, on the other hand, with the proper regulatory arrangements (Mosco, 2019), it is also possible to imagine "a Roboboard entirely composed of Robocompanies," with the direct appointment of algorithms to boards of directors at first at least in subsidiaries.

Taking the above into account, there is a rather widespread feeling that the boards of the most advanced companies should start already today to consider equipping themselves with structures capable of enhancing in-house IT and digital expertise, if necessary by setting up special committees dedicated and specialized in this matter (corptech committees). Such endoconsiliar bodies could be entrusted with system development and monitoring tasks aimed at censoring and verifying what data fed the algorithm, how it works and its parameters of reliability (Montagnani, 2020). And this is also in order to protect from potential liability the governing body that has made use of the support of artificial intelligence tools in conducting business.

This requires a necessary revision of corporate governance by entailing radical changes in boards of directors. A balanced way of thinking about the participation of Artificial Intelligence in the corporate governance of a company is to conceptualize it not as a substitute, but as a support for human directors, so that the board of directors can become a place for the fruitful interaction of "intelligent machines together with intelligent people."

Artificial Intelligence research tends to distinguish between Assisted, Augmented and Autonomous Artificial Intelligence based on the role it plays within the decision-making process:

- Assisted Artificial Intelligence performs only specific tasks; it is useful for automating processes that preside over serial and repetitive functions, identifying patterns and applying predetermined solutions;
- Augmented Artificial Intelligence merely supports human decision making, it allows it to assist (but not yet replace) human intellectual functions, correcting and approximating the outcome;
- Autonomous Artificial Intelligence enables software to a conclusion, process a recommendation, until make a decision. Such are, in practice, those systems that make decisions autonomously without the need for human interference; they operate in place of human beings and thus as an operational substitute for human intelligence (Rao, 2016).

2. Blockchain, social responsibility processes and disintermediation.

In this framework, some interesting experiments of the most recent corporate practice are considered, which indicate an increasingly frequent use of algorithms for the selection of directors and especially for the integration of the preliminary investigation functional to the taking of efficient managerial decisions. Along this line of thinking, possible evolutionary scenarios are being considered in which algorithms come to stand alongside directors as components of the administrative body, even going so far as to replace them.

Research carried out in 2015 by the World Economic Forum claimed that by 2025, corporate governance would have undergone a massive process of robotization and the artificial directors would have shared "seats" and especially decision-making power with human ones.

Indeed, back in 2014, Deep Knowledge Ventures, a Hong Kong-based venture capital fund, announced the appointment of Vital, an artificial intelligence-based algorithm, as a board member tasked with sifting out possible losses from overinvestment in overvalued projects. The rationale behind this choice lied in the ability of such an algorithm to automate due diligence processes through the processing of a huge amount of data, such as to highlight economic trends of the analyzed companies not immediately perceptible to the human eye. However, Deep Knowledge Ventures explained in a cautionary statement to the appointment

that Vital would have operated solely as a mere "observer," whose advice could have supported, to some degree, decisions made by humans.

In 2016, Tieto of Norway, a leading Nordic IT company, included an artificial intelligence named Alicia T on its board of directors, part of a newly established business unit based on data analysis with the task of supporting decision-making and innovating. Technically, Alicia T comes with a conversational interface system so that you can have a discussion with it and ask questions about anything.

Also noteworthy is the DAO-project (an acronym for Decentralized Autonomous Organization Project) launched in 2016 in Germany by Christoph Jentzsch. The DAO's main purpose was to automate corporate governance and was based on the idea that since human people are not always inclined to follow rules, it might be safer and more efficient to use a computer code to manage various aspects of the organization as well as corporate choices (Fenwick, Vermeulen, 2018). The organizational structure envisioned by the DAO was horizontal in nature and was based on the so-called community-driven' forms of business organization in which corporate choices are not entrusted to a single administrative body, but are the responsibility of the investor community through artificial intelligence (in this case through smart contracts that ran on the Ethereum blockchain platform). The DAO-project subsequently failed due to a hacker attack.

Although the technological scenario is evolving rapidly, the times still seem immature for the emergence of Robobords. The function of the board today consists primarily of supervising executives: directors spend most of their time on information flows and monitoring regulatory and management issues. Artificial Intelligence could free directors from such tasks, allowing them to spend more time on more relevant business matters. This would, in turn, allow for the emergence of a new type of board of directors: lean, open, digitized, innovation-oriented and operational by focusing only on strategic aspects of management.

In such a scenario, Blockchain (Enriques, Zetzsche, 2019) can also play an important role in facilitating these changes within the business environment. The dominant doctrine believes that the potential impact of Blockchain on the relationship between shareholders and the company should not overshadow its potential value and usefulness for boards of directors. This is particularly true when it comes to monitoring, an activity that Blockchain can simplify to a large extent by increasing the transparency and certainty of information flows available to executives. Blockchain could also make bookkeeping easier and help record the entire decision-making process: managers and executives would then be subject to "disintermediation" and more effective board oversight, which shareholders, in

turn, would more easily oversee, particularly with regard to potential conflicts of interest. Most importantly, Blockchain could prove useful in building a fully decentralized model of governance. Artificial intelligence can contribute to this process in a number of ways: fostering shareholder activism, helping directors deal with the challenges associated with increasingly complex organizations, giving decision makers access to assessments untainted by the influence of executives and major shareholders.

The use of artificial intelligence tools by directors parallels the different question about whether such tools can be appointed to the office of directors (Petrin, 2019). On the scale of AI involvement in administrative activity outlined by the doctrine, the latter hypothesis would correspond to the most extreme variant of AI Autonomous, that is, of artificial intelligence as an "autonomous" administrator agent, as opposed to the more "mild" variants of artificial intelligence as a tool to support (AI Assisted) and empower (AI Augmented) the administrative body.

On a legal level, the legitimacy of configuring artificial intelligence in the role of administrator is closely related to the broader debate about the possibility of recognizing legal subjectivity to artificial intelligence tools (Teubner, 2019).

The use of new technologies in corporate governance also suggests a reflection on the possible need for a rethinking of the expertise required within boards and subject to self-assessment by the board itself. The possible technological metamorphosis of boards of directors seems destined to reverberate on the expertise required of board members, within which computer and data science knowledge to manage and in turn interpret the artificial intelligence tools employed will assume increasing prominence. And while some recent research already suggests that companies with a digital savvy board perform better than those without one (Weill, et al., 2019), it is barely worth noting how much more compelling this makes the need for board rejuvenation, which will require the provision in company bylaws of reasonable age limits, even more pressing.

According to some scholars, the phenomenon of the increasing digitization of the relationships between the governing bodies of big data companies would underlie the shift from traditional corporate governance to "platform governance" (Fenwick, et al. 2018), i.e., corporate governance developed across platforms, also referred to as CorpTech governance based on the decentralization of decision-making hubs and more generally on an organization of corporate structures that is more open to the community. The success of this platform-like structured management model underlies recent reflections on the desirability of enhancing a horizontal and open corporate governance model that is more easily accessible by shareholders.

This is a phenomenon not relegated to larger companies alone, with reference to which a new paradigm of "community-driven governance," based on greater shareholder involvement, has been evoked in the doctrine (Fenwick, et al. 2018). Corollary to this new management configuration would be the questioning of traditional hierarchical arrangements based on the top-down placement of the governing body (Henri, 2018). Digitized corporate management through new tools of connection, communication and control would, in fact, give rise to new forms of "flat hierarchy." A board modulated on such a basis would provide greater operational efficiency without suffering a corresponding decrease in the quality and effectiveness of oversight of managerial actions or corporate transparency as a whole.

It is necessary, therefore, to consider the continuing relevance of the human factor in the conformation of algorithmic design employed for administration purposes. At the same time, it is necessary to point out the risks of distortion of administrative operations that the automation of management may bring about, particularly with regard to conflict-of-interest situations; risks accentuated by the reported obscurity of algorithmic infrastructures, which could reverberate negatively on the degree of transparency of largely automated managerial operations.

Artificial Intelligence could be profitably employed only if absorbed within the processes that regulate the functioning of the board of directors, and therefore it would be necessary to place the supervision of the use of artificial intelligence tools within the framework of corporate governance, understood as a laboratory for the development of rules on the functioning of the board of directors.

3. Pedagogical research in companies, between theoretical frameworks and inclusive methodologies.

The exploratory-descriptive, multi-method research project being tested at the Telematic University "Giustino Fortunato" in Benevento is proposed as a pilot study to investigate whether within a well-delineated reference context, namely the corporate governance of small and medium-sized enterprises, it is possible to act pedagogically to form an organizational culture devoted to inclusion.

More specifically, the project aims to apply cooperative learning methodologies, typically used in formal contexts such as schools, within non-formal contexts such as corporate ones, in order to obtain a greater degree of inclusiveness among the subjects who operate there by acting on the corporate organizational culture.

Among the various cooperative methodologies, the project proposes to apply Flipped Inclusion model combined with Cohen's complex instruction method because through the creation of heterogeneous team work and interdependence of roles, the resources of all group members can be enhanced for an investment in teamwork supported by new Artificial Intelligence technologies.

Achieving such results would also have a significant implication in terms of corporate social responsibility, which creates tangible and intangible values that are win for the company, its people, the territory and the environment in which it operates. Among the intangible factors, the intellectual, professional, and relational growth of employees and collaborators, which are considered determinants of the company's success over time, is fundamental. Therefore, it is necessary for the corporate governance of each company to take actions that affect its organizational culture (Buemi, et al. 2015).

The Flipped Inclusion (De Giuseppe, 2018) understood as a design model, centered on the reversal of vision and mission, retraces the logic of Computational thinking to foster a systemic approach to inclusivity, with a view to permanent life long learning.

Computational thinking is a way of approaching problems and situations that involve processing information and using computers to solve them efficiently and effectively. Some key aspects of computational thinking are:

1. decomposition that is the ability to break down a complex problem into simpler, more manageable problems to approach them logically and sequentially;
2. pattern recognition that is ability to identify patterns or trends within a data set or situation to simplify the problem and to find efficient solutions;
3. abstraction that is the elimination of nonessential details and focusing on fundamental concepts. Abstraction is useful for creating conceptual models that simplify the understanding of a problem or system;
4. arithmetic design that is subjecting something to an experiment, with the aim of evaluating its quality, properties and capabilities, to implement the final model.

The application of computational thinking can: lead to more efficient problem-solving, better data analysis skills, more effective design of systems and processes, and greater adaptability to rapidly changing technological challenges.

Flipped Inclusion (De Giuseppe, 2018) traces the perspectives of the Flipped Learning teaching methodology, which consists of the reversal of the traditional lesson. It is a teaching methodology in which it changes: the meaning of educating,

the teaching strategies used, and the role and functions of those who teach them. The first reversal concerns the time and place of learning: (1st phase) the teacher provides an initial framework and the hypermedia and hypertext materials, uploaded in virtual classrooms on which to research; (2nd phase) at home the student views the materials provided by the teacher and amplifies the content with personal research; (3rd phase) back in the classroom there will be a discussion among individuals on the knowledge gathered and exhibited through strategies of "Brainstorming," "Circle-time," "Peer to peer," always under the supervision of the teacher; (4th phase) verification of the knowledge and skills of the class with different tests. It is to invest in learning centered training activities, which through an investment in emotional-affective-motivational skills, points to a social-relational management and cognitive and metacognitive reworking of inclusive prosocial skills (De Giuseppe, 2020).

In the Flipped inclusion model the systemic development of *semplessi* (Sibilio, 2023) processes of inclusiveness is achieved through four preparatory stages:

1. Exploring, to identify the challenge/problem, through inquiry learning (Inquiry learning) (Kuhn, et al. 2000);
2. Ideate, to discover the relevant aspects on which to hypothesize structurally shareable the elements in the next phase (discovery learning) (Bruner, 1960);
3. Designing, to master tools and resources in a structurally organized manner with respect to purposes to be achieved (mastery learning) (Bloom, 1994);
4. Experimenting to gather feedback and bring out nodal elements for the implementation of inclusiveness model to resolve the identified problems (Experiential learning) (Kolb, 2014).

The promotion of knowledge-building communities with the help of intellectual technological partners, in their being support with computational thinking, enables the construction of authentic contexts of social/communicative interaction, through the experimentation of prosocial inclusive interdependence behaviors. This is what the Flipped Inclusion model (Corona, De Giuseppe, 2017) tries to pursue on the educational-training side.

Elisabeth Cohen's Complex instruction (Cohen, 1994) is a program, begun 20 years ago at Stanford University, that aims to achieve equity in the group, relying primarily on cooperation through teaching specific skills and organizing complex tasks. This method uses Learning Centers, in which subjects work differently on different materials and even less gifted subjects can play a role and emphasize

certain skills. It is a methodology that is based on the recognition of the plurality of intelligences, to be activated through the work of restructuring relationships in the group, in which heterogeneity does not constitute a disadvantage but becomes an opportunity for growth both cognitively and socially.

There are three phases of the work in Complex Instruction:

1. the gathering of information
2. the preparation of the work
3. the revision i.e. reflection on what has been done and suggestions for other activities.

With artificial intelligence you try to do just that: to create algorithms that, through loops and iterations can repeat an action over and over, learn from mistakes and thus learn more and more about doing that action. If, for example, a robot is asked to play chess over and over again and learn from mistakes, it will begin to statistically analyze all the possible plays and understand, from all those plays and all the wins and losses, a little more about the game of chess. There will come a time when the machine will surpass the human being in the game of chess, having learned for a very long time all the possible moves, and that is why artificial intelligence can be considered as the "automation of intelligent behavior."

The current difficulty is the entry of Artificial Intelligence into corporate governance and is represented by the need for AI tools to "learn" the work to be done correctly. At this precise moment in history, there is a desire to create working groups even within corporate governance based on cooperation and interaction between humans and machines capable of interacting with each other by each making their skills and potential available to the other with the aim of achieving that system learning according to which everyone works to achieve a single goal, each, however, carrying out its own task. The application of a methodology such as Flipped Inclusion, based on flipping and the spread of computational thinking, certainly can be helpful and contribute to the formation of heterogeneous work groups. Teams in which everyone brings their own knowledge, skills and competencies with the knowledge that they can discover through life-long learning other skills, acquire new knowledge and bring additional competencies creating a further circle of information capable of making the group increasingly inclusive.

Specifically, the survey, aimed at small and medium-sized companies in the Campania region, operating in even different sectors among them, will be developed according to the following consecutive phases:

- *FIRST PHASE* in which a review of national and international for a socio-educational and economic-business framing of the problem. The sources used for the research project consisted, mainly of books and scientific articles but also from statistical data, interviews, newspaper articles and miscellaneous documentation;

- *SECOND PHASE* in which the characteristics of the sample and the pre-test being proceeding to administer to identify small and medium-sized companies that use in their corporate governance and thus in strategic decision making, AI tools. The characteristics of the subjects the research will be aimed at are regional small and medium-sized companies operating in any production sector. It was preferred to broaden the research to all sectors instead of limiting it to a single sector in order to order to be able to identify the technological diversity of the various sectors prevalent in Campania: Agribusiness, Manufacturing (fashion, mechanics, ceramics), Tourism and services, ICT and digital services, Logistics and transport to also learn about: the digital maturity and readiness of each sector to adopt AI tools of AI; differences in access to digital infrastructure with respect to geographic location (mainly between urban areas (Naples, Salerno) and inland areas (Avellino, Benevento); how the legal form (SRL or SPA) influences the adoption of AI solutions; how ownership structure (family businesses family and non-family) affects the propensity to innovate.

- *THIRD PHASE* in which the Flipped inclusion model will be applied in companies and to the collection of data by observing the following intervention protocol: 1) *EXPLORE PHASE* in which. we proceed to the establishment of the IA inclusive governance committee formed by the managers of the key business functions, experts in AI and emerging technologies, heads of human resources human resources and training, legal and compliance representatives. The committee will be responsible for defining the corporate strategy for AI adoption, establish ethical guidelines for the use of AI, monitor the impact of AI on the workforce and corporate culture. With the goal of overseeing the integration of AI into corporate governance, ensuring inclusiveness, ethics, and regulatory compliance. 2) *PHASE OF THE IDEA* in which the Flipped Inclusion model is implemented through the implementation of cooperative learning methodologies by organizing training sessions in which the participants take active roles, prepare materials, lead discussions and use tools digital tools to facilitate access to information and participation of all team members. The goal is to promote an inclusive learning and collaborative environment, valuing diversity and individual skills. 3) *DRAFTING PHASE* in which training and development is carried out by of skills by offering AI training programs tailored to different levels and roles

in the company, promoting a culture of continuous learning and adaptability, encouraging the sharing of knowledge through workshops, seminars and collaborative platforms. The goal is to ensure that all members of the organization understand and are able to use AI effectively and responsibly. 4) EXPERIMENTATION PHASE in which evaluation is carried out by establishing metrics to measure the impact of AI on performance, inclusiveness, and employee satisfaction by conducting periodic audits to ensure compliance with ethical and regulatory guidelines, gathering feedback from employees and stakeholders to identify areas for improvement. The goal is to assess the effectiveness of integrating AI and the inclusive approach into corporate governance.

- *FOURTH PHASE* in which the data collected will be analyzed using statistical tools descriptive, such as measures of central tendency (mean, median, fashion), measures of variability (variance, standard deviation, interquartile range), graphs and tables (histograms, scatter plots, pie and bar charts). And inferential statistics tools such as tests of hypotheses (t-tests, chi-square tests, ANOVA tests) to compare the relationships between variables, and analyses of regression to examine the relationship between variables.

- *FIFTH PHASE* in which the results will be interpreted to arrive at the validation of the hypotheses and theses.

The following research questions will be pursued:

1. Is it possible to educate on corporate governance to foster a participatory environment?
2. Is it possible to integrate two cooperative learning models (one horizontal such as Complex Instruction and the other vertical ecosystemic such as the Flipped Inclusion model) to develop a corporate governance organizational culture capable of creating inclusive corporate governance?

The research hypothesis is that the integrated activation of these methods can promote an inclusive organizational climate, acting on the education of inclusive personalities from attribution styles with internal locus control, as envisaged with the application of the Flipped Inclusion model. All this to encourage the activation of inclusive corporate governance processes and create a corporate organizational culture aimed at social well-being.

Conclusions

The influence of Artificial Intelligence is particularly evident with regard to information and corporate management: on both sides the issue is assuming increasing relevance, even at the operational level, coming to touch on issues traditionally addressed by the doctrinal debate related to the two basic questions about how much information to require in the corporate field and, reflexively, what specific discipline to grant it. Questions of general scope, these, that the digital revolution is loading with original and largely unexplored content and reflections in merit and method. Recognition of the opportunities and risks consequent to the changes underway suggest, in fact, additional reflection with regard to the repercussions on the legal level of the innovations that involve at all levels the structures of companies organized in corporate form.

The variety of opportunities for the use of technologies in the corporate context imposes, first of all, the distinction of the various planes on which artificial intelligence comes to interact with the organization and management of the enterprise. The legitimacy of the use of IT tools for administrative and decision-making purposes must be scrutinized before even from a legal standpoint, from an ethical standpoint. In this regard, it would be desirable to develop special guidelines, along the lines of those that have been issued by the European Commission for the Efficiency of Justice's (CEPEJ) European Ethical Charter on the Use of Artificial Intelligence in Judicial Systems and Related Areas (CEPEJ, 2018).

The logics of Computational thinking represent the new educational challenge, with which to solve the problems of post-modern society from an inclusive-metacognitive-prosocial perspective. Computational thinking education thus turns out to be, indispensable to facilitate the understanding of innovative external events, with the aim of both detecting critical elements to be managed and the enhancement of individual and contextual specialties to be invested in from a prosocial-systemic perspective. Computational thinking should be taught not only to foster the individual's personal growth and participation in social life, but also to enable the acquisition of the skills needed to live in post-modern society, coping with its technological challenges and the difficulties of acting in permanent change, generated by the speeding up of the processes of collective technologization.

It is a matter of investing in learning centered training activities from the multidimensional perspective, which through an investment in emotional-affective-motivational skills, points to a socio-relational management and a cognitive and metacognitive reworking of inclusive prosocial skills. The suggestion

of those who believe that the company's approach to Artificial Intelligence should transition, at least initially, from an experimental phase based on self-discipline, benefiting from the flexibility that the propulsive role of corporate governance codes notoriously allows in the business world. In this way, in fact, the guise offered by corporate governance rules will physiologically and progressively adapt to a renewed apparatus, which, thanks to the contribution offered by technological support, will be increasingly uniform and organic, as is natural in mechanical bodies as opposed to those that are properly human.

The corporate legal person, while turning toward a dehumanization of its organizational arrangements and related technologization of its decision-making processes, recovers a new humanism at the level of social interest and purpose. The market seems to have appreciated the increasingly widespread recognition of the importance for the corporate entity of objectives beyond the mere pursuit of profit for shareholders, including in particular the protection of stakeholders understood in a broad sense, including the workforce, customers, suppliers, the environment and, more generally, the community of reference. This is, however, an ethical shift that, in some ways, seems more apparent than real. In sum, the technologization of the organizational processes of the corporate legal person may find adequate balance in a progressive rediscovery of the more human dimension of social purposes.

This latter component, further strengthened by the pandemic (which has shown the ability and willingness of large economic operators to place themselves at the service of the community by initiating corporate productions of an emergency nature) foreshadows new scenarios in which the corporate enterprise, while leaving the responsibility for corporate compliance processes to the "machines," will be called upon, with more vigor than in the past, to orient its managerial choices under the banner of a kind of new humanism of values. In other words, if it is true that corporate discipline is the organizational guise of the enterprise, the increasingly widespread use of Artificial Intelligence in business processes will foster a Darwinian evolution of society toward increased structural standardization. All while reserving for human sensibility the power and responsibility to plan high corporate strategy, with the task of dealing with major issues and the ability to focus attention and efforts on aspects of fundamental importance to the enterprise. Finally, it is necessary to highlight the interdependent relationships between digitization and the corporate sustainability of corporate governance. To this end, it is necessary to highlight the relevance of digital technologies both as a risk and as an (additional) tool of sustainable corporate governance.

Regarding the risks associated with the internalization of new technologies into the fabric of organizational and administrative arrangements, it is emphasized that the proper management of digital tools and the mitigation of risks related to them looms as an autonomous social interest that must be adequately considered by the administrative body in the materialization of the goal of sustainable success, precisely through the establishment of appropriate arrangements for this, thus revealing the importance of Corporate Digital Responsibility as a useful perspective to begin to place the notion of good corporate governance on the plane of good governance of algorithmic codes.

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