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The Role of the Board of Directors in the Bankruptcy Process of Individual Companies: Analysis of Positivism with an Artificial Intelligence Approach

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ABSTRACT: The Job Creation Law and Government Regulation No. 8 of 2021 introduces an individual company owned by one individual. This can confuse personal and corporate interests and obscure responsibilities between directors and shareholders and is vulnerable to the risk of bankruptcy. Additionally, advances in artificial intelligence (AI) can improve decision-making efficiency and accuracy. The purpose of this study is to identify and analyze the role of directors in the bankruptcy process of individual companies through the lens of positivism, as well as to explore the integration of artificial intelligence in improving board decision-making. The research method used is normative juridical, using a legislative approach and an analytical approach. The results of the study show that the board of directors has an important role in managing the bankruptcy process, especially in data-driven decision-making. In the event of bankruptcy, the board of directors faces certain legal consequences in accordance with Articles 16, 69 paragraphs (1), 97, and 104 of Law No. 37 of 2004 concerning Bankruptcy, as well as Article 93 of Law No. 40 of 2007 concerning Limited Liability Companies. Artificial intelligence has been proven to help directors in analyzing risks and predicting outcomes, making decisions more informative and strategic. This study concludes that the application of positivism and artificial intelligence in the analysis of the role of directors in the bankruptcy process improves the effectiveness and efficiency of decision-making, especially in complex situations.

Keywords: board of directors, bankruptcy, individual companies, positivism law, artificial intelligence

INTRODUCTION

A Limited Liability Company (PT) is a widely recognized business structure within the entrepreneurial landscape. This format is commonly utilized by capital owners to engage in business operations aimed at generating profit. According to the Law on Limited Liability Companies Number 40 of 2007, a Limited Liability Company is defined as follows:(Undang-Undang Nomor 40 Tahun 2007.)

> "A Limited Liability Company, hereinafter referred to as the Company, is also a legal entity that is a capital partnership, established based on an agreement, carrying out business activities with authorized capital which is entirely divided into shares and meets the requirements set forth in this Law and its implementing regulations."

Doing business through the formation of a limited liability company is generally the main choice, especially for large-scale or seriously oriented businesses. Among various business entities in Indonesia such as Firms (Fa), Cooperative Societies (CVs), Cooperatives, and the like, Limited Liability Companies (PT) stand out as the form of business entities that receive the most attention in economic activities. Moreover, in Indonesian corporate law, the identity of a Limited Liability Company as a legal entity originates from the establishment agreement among the parties involved. This indicates that a Limited Liability Company cannot be formed or owned by a single individual; it requires a minimum of two people to create an agreement before a notary to draft a Deed of Establishment, which also includes the Company's Articles of Association (Hilmi, Hurriyati, & Lisnawati, 2018)

A limited liability company as one of the business entities in economic activities, needs an arrangement that is able to keep up with the times considering the rapid development of science and technology(Hartono, 2000) Especially in facing the era of economic globalization in structuring business laws must be able to overcome various developments in the business and trade world, thus creating a Limited Liability Company and a conducive situation for economic actors to do business in a healthy manner.

Nonetheless, this was subsequently amended by a new concept related to the Company's legal entity introduced in Law Number 11 of 2020 concerning Job Creation (hereafter referred to as the Job Creation Law). The Job Creation Law presents a new type of legal entity known as an Individual Legal Entity. This legal entity is linked to the provisions regarding Limited Liability Companies outlined in the aforementioned law. Article 109 Number 1 Part 5 of the Job Creation Law establishes a new legal entity called an Individual Company, which alters the definition of a Limited Liability Company as follows:

> "A Limited Liability Company, hereinafter referred to as the Company, is a legal entity that is a capital partnership, established based on an agreement, carrying out business activities with authorized capital which is entirely divided into shares or an individual legal entity that meets the criteria of Micro and Small Enterprises as regulated in the laws and regulations regarding Micro and Small Enterprises".

Small businesses play a crucial strategic role in economic, social, and political contexts. From an economic standpoint, small businesses supply goods and services to consumers with low to moderate purchasing power and significantly contribute to the country’s foreign exchange earnings. Micro businesses, which are often categorized as marginal enterprises, are characterized by their relatively simple technology use, limited capital, and sometimes restricted access to credit, while generally focusing on the local market. Various studies conducted in multiple countries indicate that micro enterprises significantly impact economic growth, create jobs, provide goods and services at affordable prices, and help address poverty issues (Nadela, 2017)

Micro, small, and medium enterprises (MSMEs) engage in activities that contribute to job creation, offer widespread economic services to the community, and participate in promoting equitable income distribution. They also support economic growth and contribute to achieving national stability (Hadi, 2017). MSMEs need to be effective as a driving force for the national economy. The main movement of the economy in Indonesia is basically MSMEs. The main function of MSMEs in driving the Indonesian economy is MSMEs as a provider of jobs for millions of people who are not accommodated in the formal sector, then MSMEs have a contribution to the formation of gross domestic product (GDP). On the other hand, the MSME sector is a source of state foreign exchange income through the export of various types of products produced by this sector (Fitra, 2018)

Individuals frequently opt for Individual Companies as their business entity when conducting MSE activities, although MSEs can also take the form of CVs, firms, or civil partnerships. Essentially, there are no specific regulations for Individual Companies in Indonesia's positive law; instead, they have evolved to meet the needs of the Indonesian populace. The government's amendments and adjustments to the laws governing Limited Liability Companies in Indonesia indicate the state's involvement in promoting national economic development. One significant change has been the introduction of the concept of Individual Companies to benefit MSE actors within Indonesian company law (Kasih, 2022).

The creation of an individual company under the Job Creation Law represents a collaboration between lawmakers and the government aimed at fostering a favorable business environment, particularly for micro and small business operators. By establishing an individual company with the concept of limited liability as a legal entity, the government seeks to offer legal protection to entrepreneurs. This is achieved by distinguishing between personal and corporate assets and facilitating access to bank financing for business owners. Moreover, establishing this Individual Company is straightforward, requiring only the completion of an electronic statement of incorporation form (Siregar, 2022) In this context, the Job Creation Law, along with Government Regulation Number 8 of 2021 regarding the Authorized Capital, Registration, Establishment, Amendment, and Dissolution of Companies that Meet SME Business Criteria, introduces the concept of limited liability for individual companies. This regulatory framework modifies the management aspects of these companies, which operate under sole ownership and possess an independent governing body.

However, there is legal ambiguity in Article 7 paragraph (2) letter g and Article 8 paragraph (2) letter g of Government Regulation Number 8 of 2021, as these provisions differ in meaning and interpretation concerning the structure of the board of directors in individual companies. The stipulations for forming an Individual Company suggest that the founder can also serve as the director of the company. The opportunity for a conflict of interest here is very large, so it must be really ensured that when the founder, who also plays the role of a director of the Company, carries out a legal act on behalf of the Individual Company, the legal act is indeed carried out for the benefit of the Individual Company including the stakeholders) Individual Companies, which include employees, customers, and creditors of Individual Companies, are not solely for the personal interests of the founders.

In this context, Article 97 Paragraph (5) of the Limited Liability Company Law implicitly states that if a director encounters a conflict of interest—either directly or indirectly—while fulfilling their duties, resulting in losses for the company, they can be held liable for those losses. However, given that one of the advantages of a legal entity is its organized structure, it would be preferable for the supervisory role of the Commissioner in an Individual Company to be filled by someone other than the founder. An individual company is a new business entity in Indonesia characterized by sole ownership, meaning the owner manages and oversees the company. This arrangement could potentially lead to issues concerning responsibility and governance within the management of the individual company.

The board of directors plays a crucial role in any company, including individual companies, particularly when facing critical situations like bankruptcy. The board is tasked with managing and ensuring the continuity of the business. If the company approaches insolvency, the board must take strategic actions to ensure the bankruptcy process is handled effectively without harming stakeholders. In this regard, Indonesian law, as outlined in Law No. 37 of 2004 on Bankruptcy and Suspension of Debt Payment Obligations, emphasizes the authority of the board of directors in managing the company during bankruptcy proceedings.

The introduction of individual companies as a new legal entity under Law No. 11 of 2020 concerning Job Creation allows for more flexible management of companies. This structure facilitates the establishment of limited liability companies by individuals. However, during bankruptcy, the responsibility of the board of directors remains crucial, as it is essential to balance the interests of the individual owner with those of creditors. The directors' ability to manage assets, debts, and navigate the bankruptcy process is vital.

With the advancement of technology, artificial intelligence (AI) is increasingly influencing directors' decision-making processes, including in bankruptcy situations. AI enables directors to gain more accurate analyses of financial conditions, market trends, and timely predictions regarding bankruptcy. It assists in early problem identification and provides improved solutions based on measurable data. This aligns with the positivist approach in law, which emphasizes a decision-making process grounded in factual and data-driven evidence

The positivism approach in law views that decision-making must be based on existing rules and relevant empirical data. The integration of AI in the decision-making process by directors during bankruptcy can help reduce subjectivity and increase transparency. By leveraging AI, directors are able to design bankruptcy strategies that are more responsive to the conditions of the company, creditors, and other stakeholders, while still adhering to the applicable legal framework. Therefore, the use of AI is a solution to overcome the complexity of the bankruptcy process of individual companies in today's digital era.

In this context, the study of the role of the board of directors in the bankruptcy process of individual companies with an artificial intelligence approach is very important. This study not only provides a new understanding of how technology can support directors in carrying out their legal responsibilities, but also answers the challenge of creating a legal framework that is more adaptive to technological developments and business dynamics.

Several studies have explored the role of directors in corporate governance, focusing on their responsibilities during insolvency. For instance, Alwi & Djahja (2019) emphasized the legal obligations of directors under Indonesian bankruptcy law, particularly regarding their accountability to creditors and shareholders. Similarly, studies by Sari & Budiyono (2022) highlighted the legal implications of directors' decisions during bankruptcy, underscoring the need for careful compliance with regulations to protect stakeholders. However, these studies largely neglect the integration of technological advancements such as artificial intelligence (AI) in supporting directors' decision-making processes, leaving a gap in understanding how AI can enhance governance efficiency during complex legal and financial challenges.

The introduction of individual companies under the Job Creation Law and the increasing complexities of corporate governance in bankruptcy scenarios demand innovative solutions to enhance decision-making processes. With businesses facing global economic pressures, directors require tools that enable accurate, data-driven decisions to mitigate risks and navigate legal challenges effectively. The integration of AI in corporate governance is critical to address the pressing need for more efficient, transparent, and adaptive decision-making frameworks in rapidly evolving business environments.

While existing research provides insights into directors' legal responsibilities and governance roles, there is limited exploration of how AI can be applied to optimize decision-making processes, particularly in the context of individual companies during bankruptcy. The lack of focus on technological interventions leaves a significant gap in addressing the practical challenges faced by directors in fulfilling their legal and fiduciary duties in complex financial situations.

This study uniquely combines legal positivism with artificial intelligence to analyze the role of directors in the bankruptcy process of individual companies. By integrating AI into the legal and decision-making framework, the research provides a novel perspective on how technological tools can enhance directors' accountability, efficiency, and strategic planning in managing insolvency while adhering to the legal framework.

The primary aim of this study is to analyze the role of the board of directors in the bankruptcy process of individual companies through the lens of legal positivism, while exploring the potential of AI to enhance decision-making. The research seeks to evaluate how AI can support directors in managing risks, improving transparency, and fulfilling legal obligations during insolvency.

The findings of this research are beneficial for policymakers, corporate leaders, and legal practitioners, offering practical insights into the integration of AI in corporate governance. It provides a framework for improving decision-making efficiency and enhancing stakeholder trust during bankruptcy, contributing to the development of a more resilient and adaptive corporate governance structure.

The study emphasizes the importance of adopting AI as a strategic tool in corporate governance, particularly in managing legal and financial complexities during bankruptcy. The implications extend to legal reform, encouraging the creation of a more inclusive regulatory framework that accommodates technological advancements. Additionally, the research highlights the need for continuous training and capacity building for directors to leverage AI effectively, fostering a culture of innovation and accountability in corporate management.

RESEARCH METHODOLOGY

This research employs a normative juridical methodology, utilizing both case and conceptual approaches to examine the role of the board of directors in the bankruptcy process of individual companies, as well as the potential application of artificial intelligence (AI) in decision-making throughout this process. This approach includes a review of laws and regulations, such as the Bankruptcy Law and the Job Creation Law, as well as an analysis of relevant bankruptcy cases. Data collection techniques are carried out through literature studies and analysis of legal documents, such as company deeds of establishment and court decisions. The data obtained was analyzed qualitatively with descriptive analysis to identify the role of AI in improving transparency, accountability, and efficiency of board decisions during the bankruptcy process.

RESULT AND DISCUSSION

The Role of the Board of Directors in the Bankruptcy Process of Individual Companies through the Lens of Positivism

Indonesia's current economic development often fluctuates as a result of global dynamics. Crises that arise in various parts of the world always have an impact on the economic situation in Indonesia, especially related to the decline in the Indonesian currency exchange rate. No wonder many companies and businesses face challenges that go up and down. This resulted in an increase in the number of unemployed people and fluctuations in the rupiah exchange rate against foreign currencies, especially the dollar. Along with the progress of the times, the complexity of economic problems is also increasing.

In the business world filled with fierce competition, economic actors are required to maintain their businesses. Business actors who are able to keep up with economic trends will be able to survive in this limitless competition, so that they can meet the needs of the evergrowing market. The growth of the business sector motivates entrepreneurs to compete against one another in pursuit of greater profit opportunities through various strategies. This is what encourages elements of society to establish business entities in running their businesses(Saliman, 2005)

Economic competition in the national and global realms requires all individuals to compete in various areas of life. The competition must be carried out fairly, so regulations are needed that can protect all economic actors when running their businesses. In Indonesia, such regulations are regulated in legislation, known as positive law. The dominant role of the state in the formation of positive law is in line with the concept formulated by Plato in the 4th century BC, which states that a good state is one based on a good system of regulation, referred to as "nomoi"(Huda, 2005)

In the context of business, law is often considered a rigid element and does not fit into the dynamics of flexible economic activity. In fact, the consistent application of the law in every stage of business is considered a preventive measure against potential conflicts in the future. However, too much reliance on legality can also result in a loss of trust among business stakeholders. It is rooted in family values and beliefs that are an integral part of the business culture in Indonesia. In addition, excessive reliance on the legal framework in business operations can be interpreted as a protective measure, thereby reducing the level of trust among business partners. Therefore, it is crucial to strike the right balance between the need for legal compliance and the development of mutually beneficial business relationships (Norman, 2011).

Indonesia's positive law has regulated almost all sectors of life ranging from the civil, administrative, criminal, state-based, to international realms. All of these legal sciences have one of the same objects, these objects are the determining factors in the economic development of a country, namely business activities. The implementation of this business activity is a staple that is accommodated by various regulations today. These regulations were born as a fulfillment of legal needs for all elements involved in the business world, both by individuals and for business entities.

In the Criminal Code and laws outside the Criminal Code, "company" is an economic term(Kansil & Cristine, 1995)However, the Criminal Code itself does not explain the official definition of the term "company". Article 1 of Law No.3 of 1982 concerning Mandatory Company Registration (UWDP), letter (b), defines a company as: "Every type of business that runs every type of business that is permanent and continuous and is established, works, and domiciled in the territory of the Indonesian state for the purpose of obtaining profits".

Article 1 letter (d) of the UWDP defines "business" as any action, deed, or economic activity undertaken by entrepreneurs with the intention of generating profits. In contrast, Article 1 letter (c) defines an "entrepreneur" as any individual, partnership, or legal entity that operates a type of company. In this context, two key aspects can be highlighted: business as an organization or business entity and the type of business as ongoing economic activities aimed at profit generation. Molengraaff's view emphasizes the company as a business activity that is carried out regularly, with the aim of making profits through trade or trade agreements, so that the definition of a company here is more related to economic activities than a business entity (Tulus, 2011).

Business entities are divided into two categories, namely legal entities and unincorporated persons. Legal entity business entities such as foundations, limited liability companies, and cooperatives have a separate legal status from their owners, thus providing more legal protection for their owners. Foundations have social, religious, and humanitarian goals, while limited liability companies focus on business activities with the distribution of shares, as well as cooperatives established on the basis of family principles.

Meanwhile, unincorporated business entities such as firm partnerships, CVs, individual companies, and civil partnerships do not have a separate legal status from their owners. In this business entity, the owner's liability for business liabilities can include personal assets, depending on the structure of the business entity. The main difference between these two types of business entities lies in the level of legal responsibility and the separation of wealth between the business and its owner(Salim & Sutrisno, 2017) (Salim & Sutrisno, 2017).

The most fundamental difference between a non-legal entity and a legal entity lies in its position as a legal subject. Legal entity (legal entity) are recognized as legal subjects in the Indonesian legal system in addition to human law subjects (natural person). A legal subject is something that is capable of performing legal acts such as performing an engagement and various other civil acts (Wahyu, 2018)

The legal implications of a Limited Liability Company being recognized as a legal entity include that all actions of the entity, as well as the profits earned, belong to the Limited Liability Company as its rights and assets. Conversely, if there are losses, the Limited Liability Company is responsible for bearing them.(Hartono, 2000). Humans, in the sense of individual persons who exist apart from Limited Liability Companies except Limited Liability Companies in the banking world "*Personal Standi in Judicio*", a Latin expression used to describe the independence status of the Limited Liability Company.

In examining business practices, it appears that entrepreneurs prefer to establish their business entities as legal entities. There are several reasons for this choice, including the fact that the continuity of a Limited Liability Company is not reliant on its owners but rather on the capital that has been accumulated (Amelia & Rohman, 2021). Additionally, a fundamental aspect of a Limited Liability Company's status as a legal entity is the distinction between the owner's personal assets and the company's assets (Sembiring, 2007). This principle is commonly referred to in business law as separate corporate personality or separate entity. It differentiates a Limited Liability Company as a legal entity from other forms of business, such as Cooperative Partnerships (CV), Firms, and Civil Partnerships, which are considered unincorporated entities (Rajagukguk, 2011).

Before the reform, the business world did not require business actors to form their business entities into legal entities, so business actors tended to choose to create a *Commanditaire Vennootschap* or abbreviated as a CV as an initial business entity. This is due to several factors, such as the manufacturing procedure tends to be easier and simpler because it has light requirements, accompanied by affordable costs for business actors. These things encourage new business actors to establish business entities in the form of the Cooperative Fellowship in starting their businesses.

After the business initiated by entrepreneurs in the form of a Commanditaire Fellowship progressed and evolved, the entrepreneurs subsequently transitioned their business entity into a Limited Liability Company. This shift was driven by the entrepreneurs' own desire to change their business structure, as well as the encouragement and demands from their partners or third parties who insisted that their business entity be established as a Limited Liability Company. According to the Great Dictionary of the Indonesian Language, a partner is defined as someone who has a reciprocal relationship in the realm of business or trade; essentially, business clients.

Article 109, paragraph 2 of the Job Creation Law modifies Article 7 of the Job Creation Law by stating that a company can be established by two or more individuals through a notary deed in Indonesian. Furthermore, it introduces an exception to the requirement for companies established by two or more individuals by incorporating provisions for those that meet the MSE criteria. This change aligns with the intent to facilitate easier business operations, particularly for MSMEs.

In Indonesia, the MSME Law defines MSEs and sets their criteria in Article 6. However, Article 87, paragraph 1 of the Job Creation Law revises Article 6 of the MSME Law to include various criteria for MSMEs, such as a) business capital; b) turnover; c) net worth indicators; d) annual sales results or investment value; e) application of environmentally friendly technology; and g) number of employees. Additionally, Articles 35 and 36 of Government Regulation Number 7 of 2021 outline further provisions regarding MSME criteria. Article 35 categorizes MSMEs based on business capital or annual sales results.

Micro businesses are defined as having a business capital of no more than one billion rupiah (excluding the value of land and buildings) and annual sales revenue of no more than two billion rupiah. Small businesses, on the other hand, are characterized by a business capital exceeding five billion rupiah (excluding land and buildings) and annual sales revenue of no more than fifteen billion rupiah. However, Article 36 of Government Regulation Number 7 of 2021 allows ministries or institutions to apply different criteria for specific purposes, which may include turnover, net worth, investment value, workforce size, incentives and disincentives, local content, and the use of environmentally friendly technologies.

The government must pay attention to the problems that occur in MSEs today. The situation in the field shows that MSE actors have difficulty categorizing MSEs based on turnover because they do not know how to define turnover. In addition, the current settings are not enough to address this issue. In addition, defining MSE criteria sourced from the number of workers is also difficult for small and micro start-ups that have a large turnover but only employ 2 or 3 people. In conclusion, the criteria for MSEs cannot be strict depending on turnover. However, when several criteria are combined, there are things to consider, such as the classification of which businesses help the economy the most. In addition, the author considers the Job Creation Law and Government Regulation Number 7 of 2021 to be insufficient because various implementing regulations detail MSMEs. The government must take this into account when considering the rules made by the government.

Regarding the capital of Limited Liability Companies, Article 32, paragraph (1) of the previous Limited Liability Company Law required a minimum capital of fifty million rupiah. However, Article 109, number 3 of the Job Creation Law introduces an additional requirement that the authorized capital must be held by the Company, with the amount determined by the founders' decision.

The establishment of a sole proprietorship can occur without the need for a notary deed. This is outlined in Article 109, number 5 of the Job Creation Law, which adds Article 153A, allowing one individual to set up a Company that meets the MSE criteria, with the establishment being conducted solely in Indonesian through a Statement of Establishment. Furthermore, in accordance with Article 6, paragraphs (1) and (2) of Government Regulation Number 8 of 2021, an individual company can be established by an Indonesian citizen aged at least 17 years who possesses legal expertise, by completing a Statement of Establishment in Indonesian. For an individual Limited Liability Company to be recognized as a legal entity, the legality of the documents and the identity of the founder must be verified to prevent identity fraud.

For MSEs, only the individual founder is considered the founder and shareholder of the Limited Liability Company. According to Article 153E, paragraph (1) of Article 109, number 5 of the Job Creation Law, shareholders of MSE companies must be natural persons. Moreover, paragraph (2) states that a founder can establish an individual company only once within a period of one year if it meets the MSE criteria. The wording of Article 153E, paragraph (2) sets a minimum limit for annual establishment but does not impose a minimum limit for each individual. This creates a potential issue where individuals might establish a new company each year to profit while relying on limited liability protections(Riyanto, 2020).

To qualify as meeting the MSE criteria, a sole proprietorship Limited Liability Company can be recognized under the Job Creation Law. However, it's important to remember that one of the fundamental principles of a Limited Liability Company is that it must be established through an agreement, as stated by Pramono (Pramono, 2013). Since the Limited Liability Company Law is based on the doctrine of agreement, the formation of a Limited Liability Company (PT) must adhere to the elements, principles, and legal requirements outlined in Book III of the Civil Code. According to this doctrine, a Limited Liability Company must be formed by at least two individuals through an authentic deed from a Notary. Failure to meet these criteria will result in the Limited Liability Company losing its limited liability status, meaning shareholders become personally liable for all actions and losses incurred by the company. This situation contradicts the fundamental principle of "Limited" liability inherent in the concept of a Limited Liability Company.

Establishing a Limited Liability Company as a sole proprietorship does not align with the principle of limited liability, as management should involve two or more individuals. This structure is crucial for implementing "checks and balances" in strategic decision-making. Furthermore, while the principle of limited liability applies to Limited Liability Companies, the requirement for at least two individuals to establish such a company is not mandatory

Integration of Artificial Intelligence in Improving Board Decision Making in the Bankruptcy Process

The board of directors of a company carries substantial legal responsibilities, particularly in the context of managing bankruptcy. These responsibilities not only pertain to the continuity of the company's operations but also to adherence to various legal regulations. Articles 16, 69(1), 97, and 104 of Law No. 37 of 2004 regarding Bankruptcy highlight the critical role of the board of directors in effectively handling the company's assets and liabilities during bankruptcy situations (Anti, 2020). Moreover, Article 93 of Law No. 40 of 2007 concerning Limited Liability Companies underscores the duty of the board of directors to protect the interests of the company and its stakeholders. A key element of the legal accountability of directors is ensuring that their decisions are based on accurate and relevant information. Neglecting this duty could lead to losses for the company and its creditors, potentially exposing board members to personal liability. Therefore, it is essential for the board of directors to fulfill their responsibilities in good faith and with reasonable caution, as outlined in the relevant laws. (Alwi & Djahja, 2019).

If directors do not fulfill these responsibilities, they may encounter significant legal repercussions, such as damage claims from creditors and administrative penalties. In certain situations, board members could also face criminal charges if it is proven that they engaged in actions harmful to the company or violated the law. Consequently, it is vital for board members to have a thorough understanding of the relevant regulations and the legal obligations associated with their roles (Priyadi & Zainal, 2020)It is important to remember that in a bankruptcy situation, the board of directors is not only accountable to shareholders, but also to creditors and other stakeholders. This means that every decision taken must consider the long-term impact on all parties involved. The Board of Directors needs to maintain transparency in decision-making and ensure that the process is carried out fairly and in accordance with applicable laws(Setiawan, 2021).

Therefore, the legal responsibilities of the board of directors in handling bankruptcy are intricate and demand careful consideration. Neglecting to meet these obligations can lead to negative repercussions for both the company and the individual board members(Sari & Budiyono, 2022). Therefore, it is important for the board of directors to understand the existing regulations and apply best practices in the management of the company, especially in a bankruptcy situation.

Artificial intelligence (AI) has emerged as a crucial instrument for data analysis across multiple sectors, including the business industry.. AI allows directors to analyze large amounts of data with much higher speed and accuracy compared to traditional methods. According to Russell and Norvig in their book, Artificial Intelligence: A Modern Approach, AI is capable of running complex algorithms to find patterns and relationships in data, which can aid in better decision-making (Pappas & Pateli, 2020)One of the main advantages of AI is its ability to process information very quickly. In the context of bankruptcy, where time is of the essence, the use of AI can speed up the process of analyzing financial and operational data of companies. According to a study published in Journal of Business Research, companies that implement AI in data analytics report up to a 30% increase in efficiency in strategic decision-making.

AI is not only fast, but it is also capable of providing deeper insights through predictive and prescriptive analytics. Using machine learning techniques, AI can analyze historical trends and predict possible future outcomes. According to Zhang et al. in Decision Support Systems, the use of AI in data analysis can reduce the risk of human error and improve the quality of information used by directors in making decisions (Zhang, Zhao, & Liao, 2019). In a bankruptcy situation, decisions taken by the board of directors should be based on careful analysis to minimize further risks. AI provides tools that allow directors to evaluate various scenarios and their impacts before making a final decision. Research conducted by Buhl et al. in Business & Information Systems Engineering demonstrate that AI-powered data-driven decision-making can reduce uncertainty and improve overall company outcomes (Buhl, 2019)

While AI offers many benefits, its use also faces challenges, including ethical issues and data reliability. The Board of Directors shall ensure that the data used in the analysis is accurate and relevant. As noted in the report The Ethics of Artificial Intelligence and Robotics by Vincent C. Müller, it is important to consider the ethical implications of decisions generated by AI, especially in sensitive situations such as bankruptcy. Therefore, AI integration must be done carefully and accompanied by policies that ensure transparency and accountability.

Companies that are on the verge of bankruptcy are faced with a large amount of data that must be analyzed in depth to determine strategic measures. This data includes company financial statements, market information, economic trends, and ongoing legal situations. The collection and analysis of such data is very important so that companies can map out effective rescue or restructuring strategies. In these cases, delays or errors in interpreting the data can be fatal, hastening bankruptcy or worsening the company's financial situation. According to White and Case LLP (Ummah, 2019) Financial statement analysis is key in ensuring the sustainability or liquidation of bankrupt companies.

Artificial Intelligence (AI) has a significant impact on the data management of bankrupt companies. AI technology is able to process big data quickly, including analyzing historical financial data, market projections, and identifying patterns that may be missed by humans. AI can replace time-consuming manual processes by automatically analyzing thousands of documents and notes. According to Brynjolfsson and McAfee (rynjolfsson & McAfee, 2014), AI is able to provide more accurate and faster analysis results compared to traditional processes. This allows companies to make smarter and more timely decisions in the face of the bankruptcy process.

In finance, AI can identify declining liquidity trends, analyze financial ratios, and in-depth asset valuations. AI can also help in forecasting a company's rescue scenario and determining whether a restructuring or asset sale strategy is more appropriate. With more comprehensive analysis, boards of directors can receive deeper insights and support data-driven decision-making, which would not have been possible in a short time without the help of AI(Friedman, 2020).

Market information also plays an important role in the bankruptcy process. AI can analyze external data such as commodity price fluctuations, changing market conditions, and consumer trends to help companies understand their position in the market when they are experiencing financial difficulties. Based on research by (Agarwal, Gans, & Goldfarb, 2020) AI's ability to process and analyze market data in real-time helps companies to react more quickly to economic changes, something humans can't do at the same rate.

The legal situation associated with bankruptcy is also often complex, involving regulations that vary depending on the jurisdiction. AI can help identify applicable legal and regulatory requirements and predict legal outcomes based on precedents or trends in similar cases in the past. This provides a significant advantage in determining the right legal strategy for the company. As explained by (Marr, 2021)AI is able to analyze legal and regulatory data to provide useful insights in dealing with bankruptcy legal proceedings.

One of the key benefits of artificial intelligence (AI) technology is its capability to forecast different decision scenarios encountered by businesses. By utilizing machine learning algorithms, AI can examine historical data from various areas of the company, such as financial, operational, and market aspects, to produce accurate predictions about the outcomes of each decision made. This advantage enables company management, particularly the board of directors, to assess the potential risks and rewards associated with each option. According to Revelation (Wahyudi, 2019)in his book Industrial Revolution 4.0 and Its Impact on the Business World, AI's ability to analyze and provide recommendations based on factual data helps directors to make more informed and measurable decisions.

AI utilizes machine learning algorithms that constantly learn from new data and refine the predictions it produces. Based on research conducted by Putra and Kurniawan (Putra & Kurniawan, 2020) These machine learning algorithms not only look at patterns in historical data, but can also estimate how certain decisions may affect a company's performance in the future. This provides valuable insight for the board of directors in evaluating each available option. Thus, AI not only relies on static data, but also dynamically adjusts its predictions according to changes in the company's internal and external conditions.

This predictive advantage of AI significantly reduces the risks faced by companies, as management can anticipate a wide range of possible outcomes from the decisions they make. In strategic decision-making processes, such as new product development, investment, or market expansion, AI predictions help directors to choose the most profitable options based on accurate risk and opportunity analysis. Sutrisno (Sutrisno, 2021) in his journal Risk Management Based on Artificial Intelligence Technology said that with the help of AI, companies can minimize speculative decisions and focus more on choices based on concrete and measurable data, thereby optimizing the chances of long-term success.

Integrating artificial intelligence (AI) into an existing management system in a company is not a simple process. Many companies have systems that have been running for a long time and are already used in various business operations. This system, which is often called legacy system, generally not designed to work with new technologies such as AI. Therefore, careful planning is needed in terms of technology architecture, so that AI can function optimally without disrupting operations that are already running. As explained by Gunawan (Gunawan, 2020) in his book Digitalization and Business Transformation in the Industrial Era 4.0, one of the biggest challenges in AI integration is ensuring that legacy management systems can adapt or be updated without causing significant downtime for the company.

The process of integrating AI into management systems also requires considerable investment, both in terms of technology and human resources. AI implementation requires a strong technological infrastructure, such as more advanced servers, more advanced software, and experts who are able to manage and monitor the AI system. In addition, companies must train employees to understand and use this technology. According to research conducted by Ambarwati (Ambarwati, 2021) in a journal Challenges of Business Digitalization and AI Integration, companies that are successful in integrating AI are those that are able to allocate adequate resources and carry out comprehensive planning related to changes in the technological structure and human resource management.

The successful integration of AI into a company's management system can have a major impact on operational efficiency. AI is able to automate many tasks that previously required a lot of time and effort, such as data analysis, inventory management, or customer service. Thus, companies can save costs and increase productivity. In addition, AI can also provide deeper insights based on big data analysis, which helps in strategic decision-making. Companies that successfully integrate AI with their management systems experience an increase in efficiency of up to 30%, which has an impact on increasing long-term profitability(Rahman, 2022).

Thus, the integration of artificial intelligence in board decision-making during the bankruptcy process has great potential to increase effectiveness and efficiency. While challenges remain, the benefits offered by AI in terms of data analysis, bias reduction, legal compliance, and risk management make it an invaluable tool for corporate directors facing bankruptcy.

CONCLUSION

Indonesia's economic development has fluctuated influenced by global conditions, thus impacting the exchange rate and domestic business. This triggers challenges for business actors to survive and adapt to increasingly fierce competition. Legal regulations in Indonesia, which are based on the concept of "nomoi," play an important role in protecting economic actors, although they are sometimes considered rigid. In Indonesia, business law differentiates between legal entities like limited liability companies, which provide enhanced legal protection, and non-legal entities such as CVs. Legal reforms, including the Job Creation Law, facilitate the establishment of individual limited liability companies for MSMEs. However, fundamental principles such as limited liability must still be taken into account to ensure balance in business management.

The company's board of directors has significant legal responsibilities in managing insolvency, including compliance with strict regulations and protection of stakeholder interests. Failure to carry out this responsibility can have serious legal consequences. In the bankruptcy process, artificial intelligence (AI) can be a very valuable tool with its ability to analyze data quickly and accurately, provide deeper insights, and help with data-driven decision-making. Despite the challenges in AI integration, its benefits in improving operational efficiency and strategic decision-making make it an important solution for directors facing bankruptcy

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