

Digital Transformation of Corporate Governance and Its Impact on Enterprise Investment Attractiveness

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Abstract. Digital transformation has become an important factor in the modernization of corporate governance and investment management. In the digital economy, enterprises increasingly use management information systems, artificial intelligence, blockchain, cloud services, big data analytics, ERP, CRM, and BPM platforms to improve transparency, corporate control, reporting quality, managerial decision-making, and stakeholder communication. These changes directly influence investment attractiveness because investors require timely, reliable, and structured information for assessing corporate performance, risks, and long-term value creation. The objective of this article is to identify the key features of the digital transformation of corporate governance and to assess its impact on enterprise investment attractiveness, investment activity, and managerial decision-making effectiveness. The study applies a conceptual and analytical methodology based on the systematization of literature on digital transformation, corporate governance, agency theory, investor protection, data-driven decision-making, and investment efficiency. The article uses SWOT analysis, conceptual modelling, and an author-developed Digital Corporate Governance Investment Attractiveness Index. For the demonstration of the proposed index, the study applies proxy-based scoring to selected Ukrainian enterprises using publicly available annual reports, sustainability disclosures, investor relations materials, corporate governance information, and governance transformation projects. The results show that digital transformation enhances corporate transparency, reduces information asymmetry, improves managerial decision-making, strengthens corporate monitoring, reduces agency costs, and increases investor confidence. The SWOT analysis demonstrates that the benefits of digital corporate governance include automation, real-time data analysis, improved investor communication, and better access to financial markets, while the main risks are cybersecurity threats, high implementation costs, dependence on IT infrastructure, and uneven digital maturity. The model calculation for Ukrainian enterprises shows that MHP, Kernel, Ukrgasbank, Naftogaz, and Ukrnafta differ in their levels of digital governance investment attractiveness due to differences in transparency, reporting, risk control, stakeholder communication, and digital risk exposure. The article concludes that digital transformation of corporate governance is a strategic factor in increasing enterprise investment attractiveness. Its positive effect depends not only on technology adoption but also on digital competencies, cybersecurity, regulatory compliance, data quality, and integration with corporate strategy.

Keywords: digital transformation; corporate governance; investment attractiveness; digital technologies; artificial intelligence; blockchain; big data analytics; corporate transparency; managerial decision-making; investment risks; agency costs; digital corporate governance.

JEL Classification: G30; G32; G34; M15; O33; D83.

Formulas: 4; **fig.:** 2; **tabl.:** 4; **bibl.:** 23

Introduction. Digital transformation has become one of the key directions in the modernization of contemporary enterprises. In the context of the digital economy, corporate governance is increasingly influenced by management information systems, artificial intelligence, big data analytics, blockchain technologies, cloud services, electronic document management, and digital platforms for communication with stakeholders. These technologies change not only operational processes but also the quality of managerial decision-making, corporate control, reporting, risk management, and investment communication.

The relevance of this topic is determined by the growing demand for corporate transparency and information reliability. Investors require timely and accurate information about financial performance, risks, corporate strategy, sustainability, and governance quality. Traditional corporate governance mechanisms often do not provide the required level of responsiveness and transparency, especially in highly competitive and technologically dynamic markets. Therefore, enterprises are increasingly forced to transform their corporate governance systems in order to reduce information asymmetry, improve accountability, and increase investment attractiveness.

Digital transformation of corporate governance is closely related to the problem of investment attraction. A company that uses digital tools for reporting, monitoring, risk assessment, shareholder communication, and managerial control can provide investors with better information and reduce uncertainty. In this way, digitalization becomes not only a technological process but also an investment factor. It influences investor confidence, access to external financing, market valuation, and long-term competitiveness.

The original manuscript emphasizes that digital technologies such as artificial intelligence, Big Data analytics, cloud services, blockchain, and digital platforms improve corporate transparency, reduce information asymmetry, strengthen investor confidence, and enhance investment attractiveness. Building on this logic, the present article restructures the study according to the journal format and adds an analytical model with calculations for selected Ukrainian enterprises.

The problem addressed in this article is that the relationship between digital transformation of corporate governance and investment attractiveness is often discussed in general terms but insufficiently structured through analytical models. Existing studies show that digital technologies improve productivity, corporate control, and information processing, while corporate governance theory emphasizes the importance of reducing agency costs and protecting investors. However, there is a need to connect these perspectives and explain how digital governance tools influence investment outcomes.

The objective of this article is to identify the key features of the digital transformation of corporate governance and to assess its impact on enterprise

investment attractiveness, investment activity, and managerial decision-making effectiveness.

Literature Review. The theoretical basis of digital transformation research is closely connected with the concept of the Fourth Industrial Revolution. Schwab (2016) argues that the Fourth Industrial Revolution is characterized by the integration of digital, physical, and biological technologies. This transformation changes business models, corporate governance mechanisms, investment attraction processes, and the logic of enterprise competitiveness. In this context, digital technologies become not only instruments of operational efficiency, but also strategic resources for corporate development, transparency, stakeholder interaction, and long-term value creation.

Brynjolfsson and McAfee (2014) emphasize that artificial intelligence, automation, and digital platforms fundamentally transform production processes and create new sources of competitive advantage. Their research shows that digital technologies improve productivity and strengthen the ability of companies to process information, coordinate resources, and generate value. Brynjolfsson and McAfee (2011) also demonstrate that the digital revolution accelerates innovation and changes employment, management practices, and competitive dynamics. These findings are important for analysing corporate governance because digitalization affects not only technological processes, but also decision-making, monitoring, reporting, risk management, and communication with investors.

The economic consequences of information technology adoption were analysed by Brynjolfsson and Hitt (2000), who showed that the productivity effect of digital technologies depends on organizational transformation. This is important for corporate governance because technologies alone do not automatically create value. Their effect depends on changes in management systems, decision-making procedures, information flows, and organizational capabilities. Brynjolfsson and McElheran (2016) further demonstrated the rapid adoption of data-driven decision-making, confirming the growing importance of data as a strategic resource. Therefore, digital corporate governance can be considered an organizational capability that transforms data, digital infrastructure, and managerial competencies into higher-quality governance decisions and stronger investor confidence.

Corporate governance theory provides another important foundation for this research. Jensen and Meckling (1976) developed agency theory and explained the conflict of interest between owners and managers. According to this approach, effective corporate governance reduces agency costs, limits opportunistic managerial behaviour, and protects shareholders' interests. Digital transformation strengthens this logic because digital monitoring, automated reporting, real-time dashboards, blockchain-based registries, and data analytics can reduce information asymmetry between management, shareholders, investors, creditors, and other stakeholders.

La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998) demonstrated that investor protection has a direct impact on financial market development, ownership structures, and companies' ability to attract capital. In later research, La Porta, Lopez-de-Silanes, Shleifer, and Vishny (2000) argued that the quality of investor protection determines access to external financing and investment confidence. These studies are important because they show that investment attractiveness depends not only on financial performance, but also on governance quality, transparency, shareholder protection, and control mechanisms. In the digital economy, these governance factors are increasingly supported by digital instruments that improve disclosure, accelerate reporting, enhance accountability, and make corporate decisions more visible to investors.

An important contribution to the study of corporate governance in the digital environment is made by Mihus (2024), who examines challenges to corporate governance in the digital society. The author emphasizes that modern corporate governance faces new risks and requirements related to cybersecurity, data privacy, digital literacy, ethical technology use, remote communication, digital fraud prevention, and digital transformation strategy. These issues are directly connected with enterprise investment attractiveness because investors increasingly evaluate not only financial indicators, but also governance quality, digital maturity, transparency, cybersecurity resilience, reputation, and strategic adaptability.

The role of blockchain technologies in strengthening corporate governance and protecting shareholders' interests is developed in the works of Mihus (2021, 2022a, 2022b). These studies show that blockchain technologies can reduce threats to the economic security of joint stock companies, protect shareholder property rights, prevent fraud, improve transparency, and increase trust in corporate transactions. In the context of digital corporate governance, blockchain-based systems may reduce manipulation risks, improve the reliability of corporate records, protect investors' interests, and reduce information asymmetry between corporate insiders and external stakeholders.

The relationship between corporate governance quality and enterprise economic security is further developed in a co-authored study by Akimova, Akimov, Laptev, Zakharov, Gaman, and their colleague (2022). These authors analyse the influence of corporate governance ratings on the assessment of non-financial threats to the economic security of joint stock companies. Their research is important for this study because it demonstrates that corporate governance indicators can be used not only for evaluating formal governance quality, but also for identifying reputational, managerial, informational, and organizational risks that may reduce enterprise stability and investment attractiveness. In the context of digital transformation, such risks become even more significant because investors require reliable

governance systems, transparent information flows, and effective control over non-financial threats.

Business reputation and reputation risk management are analysed by Korzhevskyi and co-author (2022). The authors define business reputation as an important intangible asset that influences trust, competitiveness, economic security, and stakeholder relations. Their study is relevant for analysing investment attractiveness because investors often interpret reputation as an indicator of corporate reliability, governance quality, transparency, and long-term stability. Digital transformation strengthens the importance of reputation because corporate information becomes more visible, more rapidly disseminated, and more easily assessed by investors, analysts, regulators, and stakeholders.

The strategic dimension of investment attractiveness is reflected in the study by Panchenko, Ilyina, Vavrin, Karpenko, and co-author (2019), who analyse the role of investment strategy in the strategic management system of service companies. These authors show that investment strategy is an important component of enterprise development because it determines resource allocation, long-term priorities, competitiveness, and the ability of a company to adapt to changing market conditions. This approach is relevant for the present research because digital transformation of corporate governance can influence investment attractiveness only when digital governance mechanisms are integrated into strategic planning, risk assessment, financial diagnostics, and long-term value creation.

The financial and diagnostic aspects of enterprise management during crisis conditions are examined by Denysenko, Rumyk, Laptiev, Kupriichuk, and co-author (2021). Their research on corporate financial diagnostics in the period of a crisis is important for understanding how enterprises can assess financial stability, identify crisis risks, and support managerial decision-making under uncertainty. In the context of digital corporate governance, financial diagnostics can be strengthened through automated reporting, real-time analytical dashboards, data-driven monitoring systems, and digital tools for assessing investment risks.

The role of corporate governance in ensuring enterprise economic security is also studied by Dmitrenko and co-author (2020) in the context of the construction industry. Their work confirms that corporate governance is not only a formal management system, but also an instrument for protecting enterprise interests, reducing risks, and ensuring long-term stability. This conclusion is relevant for analysing investment attractiveness because investors are more likely to support companies that have effective governance structures, transparent control mechanisms, and reliable systems for managing economic security threats.

A broader public governance perspective is presented by Akimova, Akimov, Koval, Dmitrenko, and co-author (2021), who propose an improved methodological approach to assessing the impact of public governance on

ensuring the economic security of the state. Although this study focuses on the state level, its conclusions are also relevant for corporate governance research because enterprise investment attractiveness depends on the quality of institutional environment, public governance, regulatory stability, transparency, and trust. In the digital economy, the interaction between public governance, corporate governance, and economic security becomes more interconnected because digital reporting, electronic registers, regulatory platforms, and open data systems influence both corporate transparency and investor confidence.

In the digital economy, the relationship between corporate governance and investment becomes more complex. Digital technologies can strengthen corporate transparency, improve risk management, accelerate information disclosure, and increase investor confidence. At the same time, digital transformation creates new risks, including cybersecurity threats, dependence on digital platforms, data-quality problems, high implementation costs, ethical concerns, and regulatory challenges. Therefore, digital corporate governance should be understood as a system that combines technological infrastructure, managerial competencies, corporate control, investor communication, digital accountability, and risk management. It is not simply the use of digital tools in management, but a transformation of governance logic toward data-driven, transparent, secure, and stakeholder-oriented decision-making.

The Ukrainian context is especially relevant for analysing digital corporate governance because Ukrainian enterprises operate under the combined pressure of war-related risks, infrastructure vulnerability, capital-market limitations, European integration requirements, and the need to maintain investor confidence. Public corporate reporting practices among Ukrainian companies differ significantly. MHP publishes integrated annual reports, GRI Content Index documents, standalone financial statements, and ESEF files, which provides a stronger basis for investor-oriented transparency. Kernel provides financial reports, current reports, sustainability information, and investor relations materials, and its shares have been traded on the Warsaw Stock Exchange since 2007. Naftogaz has undergone corporate governance reform based on OECD-oriented principles, and official information states that the company introduced corporate governance best practices compliant with OECD Guidelines. Ukrgasbank publishes annual and sustainability reports and provides disclosure on corporate governance and risk management. Ukrnafta has launched cooperation with the EBRD's Corporate Climate Governance Facility, aimed at strengthening sustainable corporate governance, resilience, and operational transparency.

These examples show that digital corporate governance in Ukraine is developing unevenly across sectors and ownership forms. Enterprises with stronger public reporting systems, structured investor relations,

sustainability disclosure, and digital financial reporting practices may have a higher capacity to maintain investor confidence, especially under conditions of uncertainty. At the same time, companies with limited transparency, weak digital reporting, or insufficient risk disclosure may face lower investment attractiveness because investors need reliable and timely information to assess governance quality, risks, and long-term value potential.

Despite the importance of this topic, several research gaps remain. First, many studies analyse digital transformation and corporate governance separately, without explaining their combined impact on investment attractiveness. Second, existing research often focuses on general digitalization benefits but pays less attention to investment outcomes. Third, there is insufficient modelling of the relationship between digital governance maturity, transparency, decision quality, risk control, and investor confidence. Fourth, more attention is needed to the risks of digital corporate governance, especially cybersecurity, data protection, technological dependence, digital fraud, data quality, and regulatory uncertainty. Fifth, in the Ukrainian context, more empirical attention should be given to how digital reporting, ESG disclosure, corporate governance reforms, and investor relations practices affect enterprise investment attractiveness under wartime and post-war recovery conditions.

These gaps justify the development of a structured analytical model that explains how digital transformation of corporate governance affects enterprise investment attractiveness. Such a model should connect digital governance tools with transparency, investor protection, decision quality, risk management, reputation, and strategic adaptability. It should also account for the specific institutional and security conditions under which Ukrainian enterprises operate.

Aims. The aim of this article is to analyse the digital transformation of corporate governance and determine its impact on enterprise investment attractiveness.

The objectives of the article are:

1. To systematize theoretical approaches to digital transformation, corporate governance, agency costs, and investor protection.
2. To identify the main digital technologies used in corporate governance.
3. To analyse the advantages, weaknesses, opportunities, and threats of corporate governance digitalization.
4. To develop a conceptual model of the impact of digital transformation on investment attractiveness.
5. To propose an analytical index for assessing digital corporate governance investment attractiveness.
6. To calculate the proposed index using proxy-based data for selected Ukrainian enterprises.

7. To determine the strategic conditions under which digital transformation strengthens investor confidence and enterprise competitiveness.

Methodology. The article applies a conceptual and analytical research methodology. The conceptual part is based on the analysis and systematization of scientific literature on digital transformation, corporate governance, agency theory, investor protection, digital decision-making, and investment attractiveness. The analytical part uses SWOT analysis, conceptual modelling, and index construction.

The study is based on the assumption that digital transformation affects investment attractiveness through several intermediary mechanisms: corporate transparency, quality of managerial decisions, risk control, stakeholder communication, and cybersecurity readiness. Therefore, digital technologies are interpreted not only as technical instruments but also as elements of corporate governance architecture.

The methodology includes five stages. The first stage identifies key digital enablers of corporate governance transformation: management information systems, artificial intelligence, blockchain, cloud services, and big data analytics. The second stage analyses the organizational outcomes of these technologies, including transparency, automation, decision quality, risk management, and corporate control. The third stage examines investment outcomes, including investor confidence, risk reduction, access to capital, market activity, and investment attractiveness. The fourth stage proposes the Digital Corporate Governance Investment Attractiveness Index. The fifth stage applies the model to selected Ukrainian enterprises through proxy-based scoring.

For the demonstration of the proposed index, the study uses proxy-based scoring of selected Ukrainian enterprises, including MHP, Kernel, Naftogaz, Ukrgasbank, and Ukrnafta. The scores are based on publicly available annual reports, sustainability disclosures, investor relations materials, corporate governance information, and governance transformation projects. The scoring is analytical and illustrative rather than a full audit of internal digital governance systems. This limitation is important because detailed internal information on ERP systems, cybersecurity architecture, data governance quality, internal decision-making systems, and digital risk incidents is usually not publicly disclosed.

Results. The digital transformation of corporate governance should be considered not only as the introduction of new technologies but also as a change in the logic of corporate control, reporting, communication, and investment decision support. In traditional corporate governance systems, information often moves slowly between operational units, management, boards, shareholders, and potential investors. Digital technologies reduce this delay by creating integrated information flows, automated monitoring systems, and more transparent reporting mechanisms.

The uploaded manuscript identifies management information systems, artificial intelligence, blockchain, cloud services, and big data analytics as the main digital enablers of corporate governance transformation. These technologies perform different but interconnected functions. Management information systems integrate internal corporate data and support monitoring of key performance indicators. Artificial intelligence improves forecasting, investment risk assessment, and managerial decision support. Blockchain can strengthen data integrity, digital audit, and transaction transparency. Cloud services enable remote corporate governance and scalable information infrastructure. Big data analytics allows companies to identify market trends, investor behaviour patterns, and hidden relationships in corporate development processes.

Taken together, these technologies create a new governance environment in which managers and investors can rely on more timely, structured, and verifiable information. This is particularly important for investment attractiveness because investors evaluate not only the current financial position of an enterprise but also the quality of its governance, the reliability of its information systems, and its ability to identify and control risks.

Digital transformation therefore affects investment attractiveness through several intermediate governance effects: improved transparency, faster information processing, stronger corporate control, better communication with shareholders, and reduced information asymmetry. However, the positive effect of digitalization is not automatic. It depends on whether digital tools are integrated into corporate strategy and whether the enterprise has sufficient digital competencies, cybersecurity capacity, and internal control mechanisms.

SWOT analysis of the digitalization of corporate governance. Before developing the conceptual model of the impact of digital transformation on investment attractiveness, it is necessary to identify the advantages and risks of this process. Digital corporate governance creates opportunities for enterprises, but it also introduces new organizational, technological, and regulatory challenges. Therefore, SWOT analysis is used to systematize the internal strengths and weaknesses of digitalization, as well as the external opportunities and threats that may influence its investment effect.

The SWOT analysis shows that the digitalization of corporate governance has a dual effect. On the one hand, it strengthens the internal capacity of an enterprise by improving transparency, reporting, control, and decision-making. On the other hand, it creates additional requirements for cybersecurity, staff training, data quality, and technological reliability. This means that digitalization can increase investment attractiveness only when its risks are properly managed.

Table 1. SWOT analysis of the digitalization of corporate governance

Strengths	Weaknesses
Enhancement of corporate transparency	High initial costs of digital transformation
Timely managerial decision-making	Need for staff training in new technologies
Automation of document management and reporting	Resistance to change from employees and managers
Improvement of corporate control quality	Dependence on IT infrastructure and digital solution providers
Reduction of agency costs and bureaucratic procedures	Risk of technical failures and data loss
Improved communication with investors and shareholders	High cybersecurity requirements
Ability to analyse data in real time	Uneven level of digital maturity across enterprise units
Opportunities	Threats
Attraction of new investors due to increased transparency	Cyberattacks and leakage of confidential information
Expanded access to international financial markets	Rapid obsolescence of digital technologies
Use of artificial intelligence for risk prediction	Increasing costs of software upgrades
Integration with ESG practices and sustainability standards	Strengthening regulatory requirements for data protection
Increase in company market value	Risk of erroneous decisions due to poor-quality data
Creation of digital ecosystems for investor engagement	Dependence on external cloud and digital platforms
Optimization of risk and resource management	Competitive pressure from more digitally advanced companies

Source: systematized by the author

The most important investment-related strengths are enhanced transparency, improved corporate control, and better communication with investors and shareholders. These factors directly reduce uncertainty and support investor confidence. At the same time, weaknesses such as high implementation costs, dependence on IT infrastructure, and uneven digital maturity may reduce the expected benefits of digital transformation. Therefore, the investment effect depends on the balance between digital opportunities and digital risks.

The opportunities identified in Table 1 show that digital corporate governance can expand access to international financial markets, support ESG integration, increase company market value, and create new forms of investor engagement. However, threats such as cyberattacks, regulatory pressure, data-quality problems, and dependence on external platforms may undermine investor confidence if they are not controlled. This confirms the need for a structured model that connects digital technologies, governance outcomes, and investment effects.

Conceptual model of digital corporate governance transformation.

After identifying the main strengths, weaknesses, opportunities, and threats, the next step is to explain how digital transformation changes the structure of corporate governance itself. The transformation begins with the adoption of digital enablers, but its real value appears only when these technologies

influence strategic, managerial, and operational levels of governance. This relationship is presented in Figure 1.

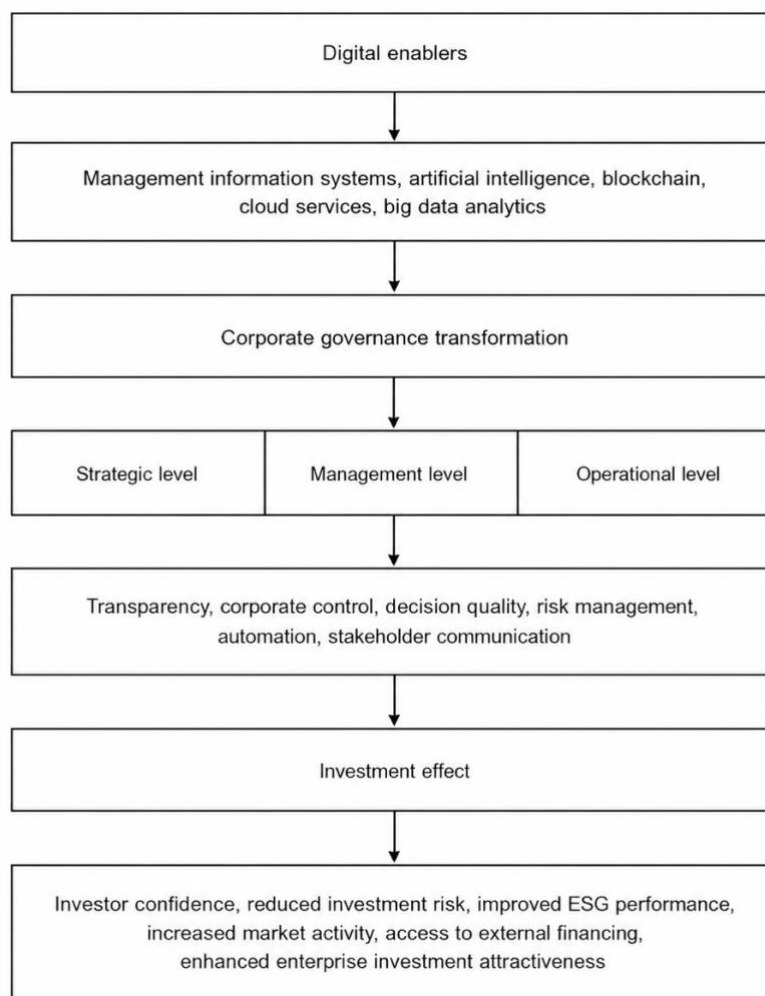


Figure 1. Model of digital transformation of corporate governance

Source: developed by the authors based on the uploaded manuscript.

Figure 1 demonstrates that digital technologies do not influence investment attractiveness directly. Their influence is mediated by governance transformation. At the strategic level, digital tools improve investment planning, risk forecasting, and long-term corporate control. At the management level, they support data-driven decision-making and monitoring of corporate performance. At the operational level, they automate internal processes and reduce delays in information exchange.

This sequence is important because investors are interested not only in the fact that a company uses modern technologies, but also in how these technologies improve governance quality. If digital tools lead to more reliable reporting, faster risk identification, and stronger corporate control, investors receive a clearer picture of the company's financial condition and future prospects. As a result, digital governance becomes an indirect but powerful factor in shaping investment attractiveness.

Conceptual model of the impact on investment attractiveness. The previous model explains the internal transformation of corporate governance. However, from the investment perspective, it is also necessary to show how internal governance changes are converted into external investment outcomes. This logic is presented in Figure 2, where digital technologies lead to organizational outcomes, and organizational outcomes generate investment effects.

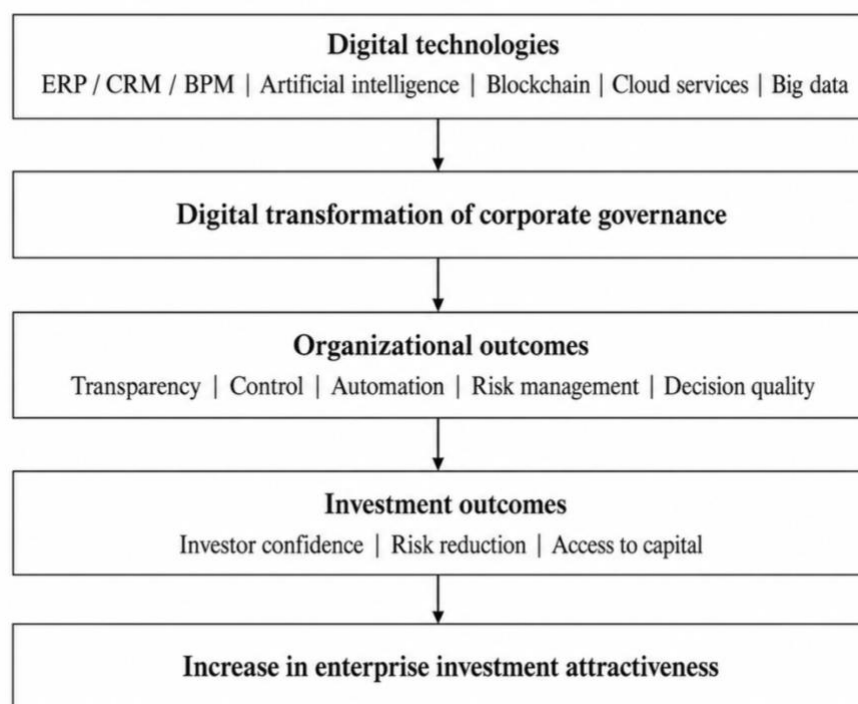


Figure 2. Conceptual model of the impact of digital transformation of corporate governance on enterprise investment attractiveness

Source: developed by the author

Figure 2 shows that the investment effect of digital transformation is formed gradually. First, enterprises implement digital technologies. Second, these technologies change corporate governance processes by increasing transparency, strengthening control, improving risk management, and enhancing decision quality. Third, these organizational outcomes influence investment outcomes by reducing uncertainty, improving investor confidence, and facilitating access to external financing.

This model also explains why digital transformation should not be assessed only by the number of implemented technologies. A company may introduce ERP, CRM, blockchain, or AI-based systems, but if these tools do not improve transparency, risk control, and stakeholder communication, their investment effect will remain limited. Therefore, the key question is not whether digital technologies are used, but whether they create measurable governance improvements that are visible and valuable to investors.

Digital Corporate Governance Investment Attractiveness Index. The conceptual models presented above demonstrate the logic of the relationship between digital transformation and investment attractiveness. However, for analytical purposes, it is useful to express this relationship through an index model. Such a model makes it possible to assess whether digital corporate governance creates a positive investment signal or whether digital risks reduce the expected effect.

To assess the relationship between digital corporate governance and investment attractiveness, the article proposes the *Digital Corporate Governance Investment Attractiveness Index*.

The general index is calculated as follows:

$$DCGIAI_i = \sum_{k=1}^6 w_k X_{ki} \quad (1)$$

where $DCGIAI_i$ is the Digital Corporate Governance Investment Attractiveness Index for enterprise i , X_{ki} is the normalized value of component k , and w_k is the weight of component k .

The model includes six components:

$$DCGIAI_i = 0.20DM_i + 0.20TR_i + 0.15DQ_i + 0.15RC_i + 0.15SC_i + 0.15CR_i \quad (2)$$

where DM_i is digital maturity, TR_i is corporate transparency, DQ_i is decision quality, RC_i is risk control, SC_i is stakeholder communication, and CR_i is cybersecurity readiness.

The inclusion of these six components reflects the idea that investment attractiveness depends on a balanced digital governance system. Digital maturity and transparency receive the highest weights because they determine whether digital transformation is sufficiently developed and visible to investors. Decision quality, risk control, stakeholder communication, and cybersecurity readiness are also included because they determine whether digitalization produces reliable and secure governance outcomes.

The investment attractiveness effect is expressed as:

$$IAE_i = DCGIAI_i - DR_i \quad (3)$$

where IAE_i is the investment attractiveness effect and DR_i is the digital risk coefficient, including cybersecurity threats, data-quality problems, technical failures, and dependence on external platforms.

The digital risk coefficient is calculated as:

$$DR_i = \frac{(CS_i + DQF_i + TD_i + DP_i)}{4} \quad (4)$$

where CS_i is cybersecurity risk, DQF_i is data-quality failure risk, TD_i is technological dependence, and DP_i is data-protection compliance risk.

The proposed model makes it possible to distinguish between formal digitalization and effective digital governance. Formal digitalization means that a company has introduced certain technologies. Effective digital governance means that these technologies improve transparency, reduce risks, support managerial decisions, and strengthen investor confidence. This distinction is important because investors may react negatively if digital transformation increases technological dependence or cybersecurity exposure without improving governance quality.

To interpret the index, the following scale is proposed.

Table 2. Interpretation of the Digital Corporate Governance Investment Attractiveness Index

DCGIAI value	Level of digital governance investment attractiveness	Interpretation
0.00-0.20	Very low	Digital transformation is fragmented and does not support investor confidence
0.21-0.40	Low	Basic digital tools exist but governance and investment effects remain weak
0.41-0.60	Moderate	Digital governance supports transparency and decision-making, but risks remain significant
0.61-0.80	High	Digital transformation strengthens corporate governance and investment attractiveness
0.81-1.00	Very high	Digital governance is strategically integrated and strongly supports investor confidence

Source: developed by the author

Table 2 provides an interpretation framework for the proposed index. A low value means that digital tools are either absent or poorly integrated into corporate governance. A moderate value means that digitalization supports some governance improvements but remains limited by risks or incomplete implementation. A high or very high value indicates that digital transformation is strategically integrated, contributes to transparency and control, and sends a positive signal to investors.

The proposed index also emphasizes the importance of digital risk management. If a company has a high digital maturity score but weak cybersecurity or poor data quality, the final investment attractiveness effect may decline. Therefore, enterprises should not treat cybersecurity, data governance, and regulatory compliance as secondary issues. They are essential elements of digital corporate governance and directly influence investor confidence.

Model calculation based on Ukrainian enterprises. To demonstrate the practical application of the Digital Corporate Governance Investment Attractiveness Index, the model is applied to selected Ukrainian enterprises. The calculation is based on publicly available corporate information, including annual reports, sustainability reports, investor relations materials, corporate governance disclosures, and information on governance-related transformation projects. The selected enterprises are MHP, Kernel, Naftogaz, Ukrgasbank, and Ukrnafta.

The assessment should be interpreted as a proxy-based analytical calculation rather than a full audit of digital governance maturity. This limitation is important because detailed internal data on ERP systems, cybersecurity architecture, digital risk incidents, data governance quality, and internal decision-making systems are usually not publicly disclosed. Therefore, the normalized scores used in the model are based on observable indicators: availability and quality of public reporting, investor communication, evidence of governance reform, sustainability disclosure, digital transformation practices, risk management disclosure, and cybersecurity-related transparency.

The scoring is based on the following logic. MHP receives a high score because it publishes integrated annual reports, GRI Content Index documents, standalone financial statements, and ESEF reporting files, which provide a strong public disclosure base for investors. Kernel receives a relatively high score because it provides financial reports, sustainability information, and investor relations materials, while its Warsaw Stock Exchange listing increases disclosure expectations. Ukrgasbank is assessed highly due to banking-sector disclosure requirements, annual and sustainability reporting, corporate governance information, and risk-management orientation. Naftogaz receives a strong risk-control score because of its corporate governance reform and OECD-oriented governance framework. Ukrnafta receives a moderate score because its governance and ESG transformation is still developing, although cooperation with the EBRD's Corporate Climate Governance Facility is expected to strengthen transparency and resilience.

Table 3. Proxy-based scoring of digital corporate governance components for selected Ukrainian enterprises

Enterprise	DM	TR	DQ	RC	SC	CR	Explanation of score basis
MHP	0.85	0.90	0.80	0.78	0.88	0.75	Integrated reporting, GRI Content Index, ESEF reporting, strong investor relations, and developed disclosure practices
Kernel	0.78	0.82	0.75	0.72	0.80	0.70	Annual reporting, sustainability and corporate governance disclosure, and public investor communication
Ukrgasbank	0.76	0.80	0.74	0.78	0.72	0.73	Annual and sustainability reporting, banking-sector disclosure requirements, governance strengthening, and risk-management orientation
Naftogaz	0.65	0.70	0.70	0.82	0.68	0.65	Corporate governance reform, OECD-oriented governance principles, internal control system, and supervisory board development
Ukrnafta	0.60	0.68	0.62	0.72	0.60	0.58	Ongoing governance and ESG transformation, EBRD-supported corporate climate governance project, and developing transparency practices

Source: calculated by the author based on public corporate reports and disclosures of MHP, Kernel, Ukrgasbank, Naftogaz, Ukrnafta, and EBRD project materials.

The following scale is used for normalized component assessment: 0.00-0.20 means very low development, 0.21-0.40 means low development, 0.41-0.60 means moderate development, 0.61-0.80 means high development, and 0.81-1.00 means very high development.

The calculation uses the formula for (DCGIAI_i), the digital risk coefficient (DR_i), and the final investment attractiveness effect (IAE_i). Table 4 summarizes both the positive digital governance score and the negative digital risk coefficient.

Table 4. Calculation of the Digital Corporate Governance Investment Attractiveness Index for selected Ukrainian enterprises

Enterprise	DM	TR	DQ	RC	SC	CR	DCGIAI I	CS	DQ F	TD	DP	DR	IAE
MHP	0.85	0.90	0.80	0.78	0.88	0.75	0.832	0.25	0.20	0.30	0.25	0.25	0.582
Kernel	0.78	0.82	0.75	0.72	0.80	0.70	0.766	0.30	0.25	0.35	0.30	0.30	0.466
Ukrasbank	0.76	0.80	0.74	0.78	0.72	0.73	0.758	0.27	0.25	0.30	0.29	0.27	0.480
Naftogaz	0.65	0.70	0.70	0.82	0.68	0.65	0.698	0.35	0.30	0.40	0.35	0.35	0.348
Ukrnafta	0.60	0.68	0.62	0.72	0.60	0.58	0.634	0.38	0.35	0.40	0.35	0.37	0.264

Source: calculated by the authors based on the Digital Corporate Governance Investment Attractiveness Index and proxy-based scoring from publicly available corporate disclosures

The calculation for MHP is as follows:

$$\text{DCGIAI MHP} = 0.20 \times 0.85 + 0.20 \times 0.90 + 0.15 \times 0.80 + 0.15 \times 0.78 + 0.15 \times 0.88 + 0.15 \times 0.75 = 0.170 + 0.180 + 0.120 + 0.117 + 0.132 + 0.1125 = 0.8315 \approx 0.832$$

$$\text{DR MHP} = (0.25 + 0.20 + 0.30 + 0.25) / 4 = 1.00 / 4 = 0.250$$

$$\text{IAE MHP} = 0.832 - 0.250 = 0.582$$

The result shows that MHP has the strongest digital corporate governance investment attractiveness among the analysed enterprises. This is explained by a high level of public reporting, investor communication, sustainability disclosure, and transparency. However, the final investment attractiveness effect is lower than the DCGIAI score because digital risks remain relevant even for companies with mature disclosure and governance practices.

The calculation for Ukrnafta is as follows:

$$\text{DCGIAI Ukrnafta} = 0.20 \times 0.60 + 0.20 \times 0.68 + 0.15 \times 0.62 + 0.15 \times 0.72 + 0.15 \times 0.60 + 0.15 \times 0.58 = 0.120 + 0.136 + 0.093 + 0.108 + 0.090 + 0.087 = 0.634$$

$$\text{DR Ukrnafta} = (0.38 + 0.35 + 0.40 + 0.35) / 4 = 1.48 / 4 = 0.370$$

$$\text{IAE Ukrnafta} = 0.634 - 0.370 = 0.264$$

The result indicates a moderate investment attractiveness effect. Ukrnafta is undergoing governance and ESG transformation, and cooperation with the EBRD may strengthen its corporate governance,

transparency, and climate governance practices. However, the current proxy-based score remains lower than for companies with more developed public reporting systems and more mature investor communication.

Interpretation of calculation results. The calculation confirms that digital corporate governance has a differentiated impact on investment attractiveness among Ukrainian enterprises. The highest DCGIAI score is observed for MHP, which reflects stronger public reporting, investor communication, and sustainability disclosure. Kernel and Ukrgasbank also demonstrate relatively high results, although their final investment attractiveness effect is reduced by digital and governance-related risks. Naftogaz demonstrates a strong risk-control component due to its corporate governance reform and OECD-oriented governance framework, but its final score is moderated by the complexity of state ownership, governance transition, and exposure to strategic-sector risks. Ukrnafta has the lowest final investment attractiveness effect among the analysed enterprises, but its score may improve as EBRD-supported corporate governance and climate governance initiatives are implemented.

The results show that the level of investment attractiveness depends not only on digital maturity but also on the ability to control digital risks. For example, an enterprise may have a relatively high transparency score, but if it faces cybersecurity risks, technological dependence, or data-quality limitations, the final investment attractiveness effect decreases. Therefore, investors should assess both the positive digital governance capacity and the negative digital risk coefficient.

The comparison also demonstrates that Ukrainian enterprises operate under specific conditions caused by war, infrastructure risks, regulatory changes, limited access to capital, and the need to align corporate governance with European standards. In this context, digital transformation of corporate governance becomes not only a modernization tool but also a mechanism for maintaining investor confidence, improving resilience, and supporting integration into international financial markets.

From a practical perspective, the proposed calculation can be used by enterprises to identify priority areas for improvement. Companies with lower scores should focus on strengthening cybersecurity, improving sustainability and governance disclosure, developing investor communication channels, and integrating digital systems into risk management and strategic decision-making. Companies with higher scores should focus on maintaining transparency, reducing technological dependence, and improving data governance quality.

Generalization of results. The results of the study show that digital transformation of corporate governance has a positive effect on enterprise investment attractiveness when it creates real improvements in governance quality. These improvements include greater transparency, faster decision-

making, stronger control, reduced agency costs, better risk management, and more effective communication with investors.

At the same time, the analysis confirms that digital transformation is not automatically beneficial. Its effect depends on the ability of the enterprise to manage digital risks, train personnel, protect data, ensure cybersecurity, and integrate technologies into corporate strategy. This means that investment attractiveness is shaped by the interaction between digital opportunities and digital risks.

The proposed models and index provide a structured explanation of this relationship. Figure 1 shows how digital enablers transform corporate governance. Figure 2 explains how governance transformation creates investment outcomes. The index model offers a tool for assessing whether digital corporate governance is sufficiently mature and reliable to strengthen investor confidence. Together, these results demonstrate that digital corporate governance should be understood as a strategic investment factor rather than only as an internal modernization process.

Discussion. The results confirm that the digital transformation of corporate governance is a strategic factor in enterprise investment attractiveness. Digital technologies strengthen the information basis of corporate governance and reduce information asymmetry between management and investors. This is consistent with agency theory, according to which effective control mechanisms reduce agency costs and protect shareholder interests (Jensen & Meckling, 1976).

The findings also support the institutional approach to investor protection. La Porta et al. (1998, 2000) emphasized that investor confidence depends on the quality of legal and governance mechanisms. In the digital economy, corporate transparency and investor protection are increasingly supported not only by legal rules but also by digital reporting, automated monitoring, blockchain audit trails, and real-time access to corporate information.

At the same time, the study shows that digital transformation is not risk-free. Enterprises may face high implementation costs, cybersecurity threats, resistance to change, dependence on IT providers, and data-quality problems. These weaknesses can reduce the positive effect of digitalization on investment attractiveness. Therefore, successful digital corporate governance requires not only technology adoption but also digital competencies, cybersecurity policy, internal controls, staff training, and regulatory compliance.

The calculation based on selected Ukrainian enterprises demonstrates that companies with stronger public disclosure, investor relations, sustainability reporting, and corporate governance transparency receive higher digital governance investment attractiveness scores. However, even companies with strong disclosure practices remain exposed to digital risks.

This confirms that digital transformation must be supported by cybersecurity readiness, data quality, risk control, and technological resilience.

For enterprise managers, the main implication is that digital transformation should be integrated into corporate strategy. Digital tools should not be implemented as isolated IT projects. They should support governance transparency, risk forecasting, investment planning, shareholder communication, and long-term value creation.

For investors, digital corporate governance can become an important signal of company quality. Enterprises that provide timely, structured, and reliable information are more attractive because they reduce uncertainty and enable better investment decision-making. For regulators, the development of digital corporate governance requires updated rules on data protection, electronic reporting, digital audit, cybersecurity, and investor rights.

Conclusions. The digital transformation of corporate governance is an important direction in the development of modern enterprises and a key factor in enhancing investment attractiveness. The implementation of digital technologies ensures corporate transparency, improves the efficiency of management processes, strengthens corporate control systems, and contributes to increased investor confidence.

The article systematized the theoretical foundations of digital transformation, corporate governance, agency theory, and investor protection. It showed that digital corporate governance reduces information asymmetry, improves decision-making quality, supports risk management, and creates more favourable conditions for attracting investment. The SWOT analysis demonstrated that digitalization provides significant advantages but also creates risks related to cybersecurity, implementation costs, technological dependence, and data quality.

The article proposed the Digital Corporate Governance Investment Attractiveness Index, which assesses the influence of digital maturity, transparency, decision quality, risk control, stakeholder communication, and cybersecurity readiness on investment attractiveness. The model shows that the positive investment effect of digital transformation depends on the balance between digital governance capacity and digital risks.

The calculation based on selected Ukrainian enterprises showed that MHP has the highest investment attractiveness effect among the analysed companies due to strong reporting, transparency, and investor communication. Kernel and Ukrigasbank also demonstrate relatively high results. Naftogaz shows a strong governance reform and risk-control profile, while Ukrnafta has moderate results but potential for improvement through ongoing ESG and corporate climate governance transformation.

The main conclusion is that digital transformation increases investment attractiveness only when it is strategically managed and institutionally supported. Enterprises should develop digital competencies, strengthen

cybersecurity, improve data governance, and integrate digital tools into corporate strategy and investor relations.

Further research should focus on empirical testing of the proposed index, assessment of industry-specific digital governance models, analysis of AI and blockchain in corporate control systems, and measurement of the financial impact of digital governance maturity on investment flows, market value, and cost of capital.

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