Artificial Intelligence critical or comfortable for Corporate Governance

Abstract: Artificial Intelligence (AI) and related technologies have emerged as a disruptive force in the present market and is impacted every business functions. AI plays a critical role in corporate governance (CG) practices but must be seamlessly integrated to achieve the desired outcomes. The purpose of this research is to assess the critical and comfortable aspect of AI for CG in an organization. A qualitative strategy was employed, involving semi-structured interviews with experts from the manufacturing industry. A total of 10 experts where interviewed from the manufacturing industry of China and the collected data analyzed using thematic analysis. It was found that AI is quite critical for CG since it can enhance all aspects related to it specifically risk management and decision making. However, the challenges faced with AI make it difficult to comfortably integrate the technology for improved CG practices. Nonetheless, appropriate mitigation strategies can be implemented like robust data governance frameworks that can make AI a critical aspect of CG and ensure that it is comfortably integrated in the business operations.

Keywords: *artificial intelligence (AI), corporate governance (CG), framework, ethical, decision-making, risk management*

1. Introduction

Corporate Governance (CG) is considered to be an integral element for the smooth functioning of the business operations while adhering to a particular ethical standard. CG is defined as the structures, processes and rules that control and guide the organization with the goal to balance the needs of all the stakeholders (Correia & Água, 2019). Despite the importance of CG for an organization, there have been numerous cases of CG mismanagement where corporations have found themselves at a center of a particular scandal. Volkswagen green washing, BP oil spill, Lehmann Brothers and Enron are some of the prominent examples of CG failures (Dworaczek et al. 2020). These scandals highlight the importance of further improving the CG frameworks or mechanisms in an organization. The growing importance of AI in every aspect of business functions provides an opportunity to apply it to CG in order to rethink and reinvent the mechanism. AI has the potential to disrupt all the existing frameworks and develop new approaches for effective management. The advanced capabilities of AI such as predictive analytics, pattern recognition and decision automation provides a significant opportunity for enhancing CG (Correia & Água, 2019). AI can analyze large amount of data to provide valuable insights that can improve decision making.

AI can also improve transparency by identifying hidden patterns and trends with the help of the predictive capabilities. However, the use of AI for CG also involves certain challenges which makes its application quite critical. The ethical aspect associated with AI is one of the biggest challenge involved in the process. The ethical issues faced with the use of AI in a particular business function are integrity, accountability and privacy (Dhirani et al. 2023). There is also concerns that the decisions made by AI are not fair or unbiased since they can be used influenced by the biases involved in the algorithms or training data used for the generative model (Daneshjou et al. 2021). These issues with AI make its application in CG quite critical and makes it necessary to create the required balance between the issues and benefits so that AI can be used for CG in a comfortable manner. Hence, this explores the critical aspect of AI so that it can be integrated with CG in a comfortable manner.

Further, China is at the forefront of implementing AI in every industry due to its strategic importance and global competition. Almost every sector in the Chinese economy is witnessing the implementation of AI due to its immense potential (Slotta, 2024a). Similarly, huge

investments are being made in research and development (R&D) to explore the full potential of AI. The size of Chinese AI market has increased from 15 billion yuan in 2016 to 304.3 billion yuan in 2024 (Slotta, 2024b). This unprecedented growth is due to the commitment of the Chinese government to make the country a leader in the segment. The manufacturing industry is the heart of the Chinese economy and majority of the AI investments are being made in the sector for increased automation to address issues like labor shortages and ageing population (Slotta, 2024a). The commitment and investment around AI in China only make it appropriate to explore its potential in CG in the manufacturing industry. Hence, the research will focus on the Chinese manufacturing industry to assess the criticality of AI for its comfortable integration in CG.

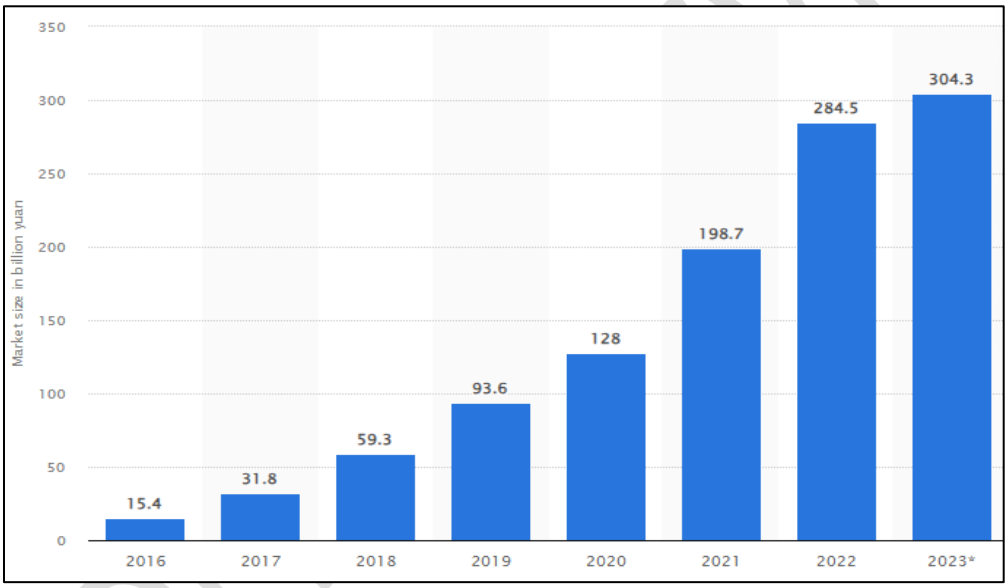

Figure 1: AI market size in China 2016-2023

(Source: Slotta, 2024)

2. Literature review

2.1 Artificial Intelligence (AI)

Artificial intelligence or AI is a technical innovation and AI mimics human intelligence. AI also allows firms to conduct important calculations for business decisions. Cioffi et al. (2020) addressed, AI is useful to solve critical issues in the production process. In this manner, firms often improve business operations and avoid wrongful decisions. AI includes versatile aspects

such as machine learning, data mining, and image processing and it helps users to make useful decisions or decode datasets. On the other hand, Andronie et al. (2021) addressed, AI is useful to make decisions with algorithm's help or large data sets. In other words, AI depends on large data sets in order to generate useful information and this information helps to make useful decisions or complete complex calculations. It also means, AI helps to produce useful information that may take a long time due to large data sets and AI's quick calculation process is useful to save time.

AI's use in the current era has gathered adequate attention as AI has the ability to complete tasks that require intelligence. Mukhamediev et al. (2022) addressed, AI's machine learning method is useful for speech detection and AI's economic impact on the transport, banking, commerce is also useful in the current era. AI is also useful to make predictions and AI models often use old data sets, identify patterns to make predictions based on historical data. Taheri et al. (2022) addressed, AI machines often demonstrate high intelligence and complete tasks that require high calculation of human intelligence. In other words, AI algorithms are also useful to fulfil complex tasks and also allow users to make predictions based on past data sets. Users may feed historical data to conduct calculators that require a high intelligence level. Hence, AI's contribution in the current era is high and it also allows users to achieve calculations with a high accuracy level.

2.2 Corporate Governance (CG)

Corporate governance or CG allows firms to control business operations or workplace activities in order to ensure a stable workflow. Almagtome et al. (2020) addressed, CG allows a business organization to fulfil shareholder's interest, helps to create robust relationship between organization and shareholders. Effective CG also allows firms to show social responsibility and also fulfil organizational duties in an effective manner that further allows firms to ensure a stable growth process. For this reason, firms often focus on creating robust CG in order to achieve organizational goals and create policies based on firm's or shareholder's interests. On the other hand, Castillo-Merino & Rodríguez-Pérez (2021) addressed, CG's effectiveness depends on board member's numbers. It also means, firms may folate board members with multiple individuals in order to undertake useful business decisions. In other words, firms often focus on achieving useful business goals for stable growth and a firm's CG or administrative members provide guidance for this purpose.

Corporate governance allows firms to achieve high profit margin as it involves workplace policies for smooth workflow and goal collection guidelines. Almashhadani (2021) addressed, corporate governance has a robust connection with a firm's financial performance rate as CG enables firms to make useful business decisions for a stable development process. On the other hand, Gutiérrez-Ponce et al. (2022) addressed, CG is also useful for firms to solve internal issues such as problems among investors. In other words, CG's useful nature in the current era is high for the modern business firms and effective CGs are useful for firms to overcome problematic situations. Thus, CG is useful for firms to avoid wrongful business decisions that may also save capital. Apart from that, effective CG is also helpful to overcome business barriers, issues among stakeholders in order to acquire adequate support for organizational goals. The overall discussion also shows firms require appropriate CG in order to achieve stable growth and overcome barriers in the development process.

2.3 Artificial Intelligence and Corporate Governance

AI and CG have robust conventions in the current era and firms often use AI to make CG decisions for a stable growth process. Hilb (2020) addressed, AI implementation has certain implications, as companies may often rely on AI rather than board members in order to increase rationality in the business decisions. Apart from that, AI often relies on large data sets and it is necessary for firms to ensure privacy for data as data may create legal disputes. Razzaque (2021) addressed, AI is useful to avoid repetitive decisions and present reliable information to assist firms for business goal achievement. Apart from this, AI is also useful to replace human intelligence with machine intelligence in order to complete tasks that require human intelligence such as account calculation. Hence, AI's importance in the CG is high as AI assists firms to make useful business deacons and integrate effective business methods in order to achieve organizational goals.

Organizational risk is an important aspect and a firm's CG is liable to detect potential risk factors in order to ensure organizational success. Rakha (2023) addressed, AI is also useful for firms to detect potential risk factors and it further shows AI's useful nature in the CG activities. AI may use historical data, or current datasets in order to predict potential risk that may damage a firm's business operations. AI based data analytics are also useful for firms to prevent fraudulent aspects in order to reduce resource waste in the current business era. Zuiderwijk et al. (2021)

addressed, AI is also useful in the governance system as AI algorithm is helpful to avoid bias, dilemma in the business decisions. In other words, AI may allow modern business firms to make judgments without any bias and avoid dilemmas to save time in the business decision-making phase. It also shows, AI's useful attribute in the CG that allows firms to consider bard member's feedback on situation and use AI to consider potential benefits in a business decision. Hence, from the overall analysis process it can be discussed, AI integration may cause firms to ensure superior CG formation and effective business decisions for modern organizations. On the other hand, firms in the current period may need to focus on data security as AI depends on large data sets.

3. Aim and objectives

The aim in this context is to understand the implications that AI has for CG practices in the manufacturing industry of China. The objectives to address this particular aim of the research are-

- To explore the role of AI in improving and enhancing the CG practices of manufacturing industry in China.
- To identify the potential issues or challenges that can be faced by Chinese manufacturing industry with the use of AI in CG.
- To outline appropriate mitigation strategies for addressing the issues faced with the integration of AI for CG in manufacturing companies of China.

4. Research questions

In line with the objectives, the research questions that would be answered in this particular study are-

- How AI can be used for improving or enhancing CG practices in manufacturing industry of China?
- What are potential issues or challenges that can arise with the use of AI for CG in Chinese manufacturing industry?

How can the issues be mitigated for the successful integration of AI for better CG in Chinese manufacturing companies?

5. Methodological plan

5.1 Data collection

A qualitative strategy has been used to achieve the aim and objectives of the work. Qualitative strategy helps in gathering large amount of data that help in providing a comprehensive account of the subject. This strategy becomes important to understand whether AI is critical or comfortable relative to CG. The non-numeric data collected using the qualitative strategy will help in exploring this phenomenon in a detailed manner (Tomaszewski et al. 2020). The common data collection methods that are used with qualitative strategy are interviews, focus groups, observation and document analysis. In line with the needs of this particular research, the data for the work has been collected using primary method specifically semi-structured interview.

The participants of the study were asked a set of open-questions which relates to the objectives and questions in a telephonic interview. The interview was recorded with the consent of the participants and then it was transcribed in order to be used for this research. The maximum duration of each interview was 30 minutes and the participation was voluntary where they had permission to leave the interview at any point. The participants were recruited from the Chinese social media application WeChat and Sina Weibo. Networking played an important role in the recruitment of the participants for the research from these platforms. Friends, peers and family members provided the required references that made it easy to recruit the necessary participants for the research. The experts were provided with the questions a week before so that they can have an idea of the subject and prepare accordingly.

5.2 Sampling and population

The population for the study are managers working in Chinese manufacturing firms and the sample size will be 10. It is not possible to include all the managers in the interview and thus the purposive sampling strategy was employed to select a sample from the entire population. Purposive sampling involves selecting the participants based on the characteristics, knowledge and experience (Campbell et al. 2020). These managers were selected since they had experience working with AI and would be able provide the required answers based on their knowledge of the matter. Hence, a total of 10 managers working in Chinese manufacturing firms will be interviewed to collect the required data for the research.

5.3 Analysis of data

The most common analysis technique that is largely associated with qualitative strategy is thematic analysis. Thematic analysis of the collected qualitative data has been done to gain the required insights. This involves looking for codes and patterns within the collected data to develop themes in order to analyze the data (Braun & Clarke, 2023). This particular techniques provides a higher level of flexibility to the researcher with the analysis of data and also makes it easy to analyze large amount of collected information. Since the participants of the research were asked questions directly relating to the objectives of the study, the themes of the work have been developed accordingly. The objectives of the research that have been mentioned above have been transformed into themes to carry out the research. Hence, three themes have been developed in line with the objectives to provide a comprehensive discussion on the subject.

6. Findings

6.1 Application of AI in CG

With decision-making being one of the key aspects of good CG practices, majority of the experts interviewed outlined the way in which AI is being used in their firms for better decision making, which in turn is going to improve the CG practices.

"*AI is a game-changer for our firm and has completely changed the way in which we are making decisions. With the use of AI, we are able to predict the trends in the market and make strategic decisions that are driven by data and accurate insights. It (AI) has helped in understanding the demands of the market in a very good manner and we are able to manufacture goods accordingly to satisfy the needs of the current. AI is changing everything for the good for our business and leading to improved outcomes*" [Expert 6]

"*AI has improved our oversight capabilities by providing us with real-time data and critical insights. Our company uses AI-driven dashboards that helps us in making informed decisions with up-to-date information. This further ensures that the company is on the right track*" [Expert 8]

Risk management is another important feature of good CG and AI can play significant role in it, with the experts also mentioning it in their responses to the research questions.

"*In my company, we are using AI for complying with the various rules and regulations at all levels, and also managing the risks for the business. Our compliance and risk management has only strengthened and improved with the use of AI in the process. It helps in monitoring all the operations in real-time and the algorithms flag any anomalies and irregular activities effectively. It is quite efficient that the traditional methods that were used in the company. Also, it helps us prepare accordingly to conduct the operations smoothly in the manner"* [Expert 4]

Similar to this another expert highlighted the way in which AI has improved the transparency and accuracy in their organization,

"*We have recently started using AI for our financial disclosures and I might say that the errors and inconsistencies has significantly reduced compared to previous times. Our reporting has become more transparent and accurate, and this has helped us build trust and gain confidence of our stakeholders."* [Expert 9]

Apart from all these, AI has also found it application in HR practices of an organization with one experts highlighting the way they are using the technology for hiring and managing talent.

"*Our company has been using AI for hiring new employees and managing them, I must say it has made the process more efficient and unbiased. The tools that we use makes it easy to screen the resumes and do the initial assessments, while making sure that we focus on the most qualified candidates, without any unconscious bias*" [Expert 7]

6.2 Challenges or issues with AI application in CG

Moving on, the experts also highlighted the challenges that they faced with the use of AI in their CG practices, when asked about it. One of the challenge that was common in most of the experts answer were data quality.

"*For our company, data quality is the biggest challenge since we rely heavily on reliable and accurate data, and any gap in the data can lead to inaccuracies and poor decisions"* [Expert 1]

"We face challenge making sure that the data that we use is clean, accurate, up-to-date and consistent." [Expert 5]

Another challenge highlighted from the expert answers was the ethical concerns involved with the use of AI.

"I think ethics is one of the biggest challenges in the AI use in the company. The biases that are present in the data on which AI was trained can lead to unfair outcomes" [Expert 7]

"Ethics is a concern for our business and this is why we constantly audit our model to look for and eliminate any biases" [Expert 3]

Some of the experts also highlighted the employees' resistance to change as one of the key challenge in the process.

"Our company faced some challenge with employees and managers who liked the previous methods used and do not want to use the AI tools for service. Getting them on-board and managing it was a challenge." [Expert 10]

6.3 Strategies to mitigate the challenges

Apart from the challenges, when asked about the ways these challenges could be addressed, the experts were also able to provide appropriate answers, with most asking to focus on data governance frameworks.

"In our company, we have implemented robust data governance frameworks which includes appropriate data collection and cleaning procedures along with regular audits" [Expert 5]

"We have set high quality standards and also trained our staffs for the same to make sure that AI is able to provide consistent results" [Expert 9]

"We have an ethics committee to ensure that AI is being used appropriately and regular audits are conducted to address any bias involved." [Expert 7]

Another strategy highlighted in the process was related to managing the change in an appropriate manner.

"We communicated with the employees and highlighted the benefits of the tools, and also provided them with appropriate training." [Expert 10]

"Engaging the employees in the entire process of implementing AI can make it quite easy and help get the desired outcome." [Expert 8]

7. Discussion

The analysis of the collected data was able to provide crucial insights into the role of AI in CG along with the challenges involved and mitigation strategies for the same. The analysis found that AI has a significant role in decision making when it comes to corporate governance and can significantly enhance the process. Most of the experts highlighted that the decision making in their organization has significantly improved with the use of AI in the business operations. AI has significantly enhanced the decision making process as Hilb (2020) mentions that the organizations can rely on AI to make decisions rational decisions. AI can analyze large amount of data to make decisions that can help achieve the goals and as mentioned by Razzaque (2021) it helps in avoiding repetitive decision and makes use of reliable information for making the right decisions. The implications that AI has for decision making makes it an important tool for enhancing CG practices in an organization.

Another important role of AI in the entire process was found to be risk management with experts believing that AI can help in identifying and mitigating the risks of the business. Risk management is an important feature of CG which involves identifying and addressing the potential risks facing the company. The review of literature highlighted that AI is useful the detecting the risks faced by the company in the market. The use of historical and present data can help AI detect the potential risks that might the operations of the company in the future (Rakha, 2023). With risk management being one of the key elements for the long term success of an organization and dictating the CG practices in an organization, AI has an important role to play in the entire endeavor. Another important role of AI as highlighted in the interview was in recruitment and talent management. The application of AI made it quite simple and easy to recruit and manage talent in an organization as evident from the expert answers.

Nonetheless, there were also certain challenges that were highlighted by the experts when asked about it. One of the most common challenges with the use of AI in CG relates to data quality and this is evident from the response of the experts. The data that is bias or inaccurate can lead to poor decision making and have a negative impact on the operations of the company. It was also found that there are ethical concerns involved with the use of AI for good CG practices in the organization. Again, the ethical concerns are stimulated from the use of data that is bias in the AI-models being used in the organization. Companies have also faced resistance from change when implementing AI, as evident from the response of the participants. Employees or managers

who are comfortable with the traditional methods do not want the implementation of AI and thus resist the change. Among all these challenges, the interview also highlighted the steps that can be taken to address the challenges. Most of the experts suggested that the organization must use appropriate data governance frameworks that ensure that data collection process are robust along with appropriate data cleaning. It was also suggested by some experts that the employees must be actively involved in the implementation of AI and provided with proper training to make sure that there is no resistance to the change process.

8. Conclusion

AI is becoming increasingly important for organizations for good CG practices and thus is a comfortable component. However, the challenges involved with AI makes it critical aspect in the implementation of the tool in CG practices. It is important for organizations to address the critical aspects to make sure that AI is integrated in the CG practices of an organization in a more comfortable manner. This research has successfully discussed both the critical and comfortable aspects associated with the use of AI for CG in an organization. The mitigation strategies that can help address the critical aspects of AI and ensure that is comfortably integrated in CG practices have been clearly outlined with the help of the interview data. This study is quite significant for companies in the present environment since AI has emerged as a transformative force in the market. This study will help understand the importance of AI for CG and the way in which it can be achieved successfully. Nonetheless, this research also had limitations that can be explored in the future. The sample size included in the study serves as a limitation since only 10 experts were interviewed for the study. On the other hand, the study also focuses on the manufacturing industry in China but AI has implications for all industries irrespective of industry and sector. This research has not includes perspective from other industries to understand the critical and comfortable aspect of AI for CG. Hence, there is a scope to conduct research on other industries and outline the similarities or differences that exists in the adoption of AI for better CG practices.

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