

# Literature Review of Domestic and International Research on Virtual Shareholder Meeting

Yi Wei

Max L. Rowe Auditorium, College of Law, University of Illinois Urbana-Champaign, Champaign, The United States

yiwei66070@gmail.com

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**Abstract:** The rapid advancement of digital technology, together with the catalytic effect of the COVID-19 pandemic, has accelerated the digital transformation of global corporate governance, making the "Virtual Shareholder Meeting" become the focus of academic and practical attention. While virtual shareholder meetings demonstrate advantages in reducing costs and increasing participation, they also face challenges due to insufficient legal safeguards, particularly in China. Although the Company Law of the People's Republic of China (2023 Revision) provides principled recognition of virtual shareholder meeting at the legal level for the first time, the lack of operational details has led to practical difficulties. A systematic literature review of China and other countries reveals that while both sides acknowledge the trend toward digitalization of shareholders' meetings and emphasize the balance between efficiency and fairness, foreign studies focus more on practical reflection, whereas research in China concentrates on principal legal construction. Common shortcomings include a scarcity of empirical studies and a lack of interdisciplinary integration.

## 1. Introduction

Since 2000, technology has advanced rapidly around the world. More countries have started adopting digital tools, leading society into an era of high connectivity and information. As the economic base determines the superstructure, tech innovation has not only helped the digital economy grow but has also changed how companies are managed. New digital platforms and tools have provided more ways for companies to make decisions and have opened new paths to modernize traditional governance. Technologies like artificial intelligence, big data, and blockchain are becoming more mature, pushing corporate governance toward a smarter, more accurate, and less centralized model. The sudden outbreak of COVID-19 in 2020 became a key opportunity for companies to speed up the use of electronic governance. During the pandemic, many in-person events were restricted, making it difficult to hold physical shareholder meetings. This pushed companies to quickly adopt remote meetings and online voting to keep operations running smoothly. For example, in 2021, Apple Inc. held its annual shareholder meeting online for the first time. The pandemic showed how useful technology can be in corporate governance, but it also revealed that current systems and technical preparations still have limitations. This further prompted explorations and responses regarding virtual shareholder meetings at both legal and practical levels. Therefore, technological advancement and the impact of the pandemic collectively act as major external driving force for the development of virtual shareholder meetings, which indicates an inevitable transformation in corporate governance models.

## 2. Development and Challenges of Virtual Shareholder Meetings in China

While the trend towards digital governance is clear globally, China has its own distinct path, shaped by its unique legal and business environment. In practice, the traditional shareholders' meeting system faces multiple challenges. A common issue is the widespread "rational apathy" among shareholders, particularly minority investors, who often show little interest in actively participating in corporate governance. This leads to continuous low attendance rates at general

meetings. At the same time, in-person meetings usually involve high time and financial costs. Geographical constraints further limit participation, especially for investors located in different regions. These factors not only reduce the breadth and depth of engagement in shareholders' meetings but also undermine the efficiency and representativeness of corporate resolutions. As a result, the traditional model of shareholders' meetings often falls short of achieving its intended governance objectives.

In this situation, virtual shareholder meetings have emerged as a new form of corporate assembly. By using internet tools, electronic voting, and remote conference systems, they overcome geographic and cost barriers, improving both shareholder engagement and transparency in corporate governance. However, legal support in this field in China remains inadequate. Although the China Securities Regulatory Commission has issued related documents, these only serve as industry guidelines with no solid legal basis, and they apply only to listed companies. Article 24 of the Company Law of the People's Republic of China (2023 Revision) states that shareholder meetings, board meetings, and supervisory board meetings may be convened and votes cast by means of electronic communication, unless otherwise provided in the company's articles of association. While this provides general recognition of virtual shareholder meetings, it fails to establish detailed operational rules. Specific implementation procedures, technical standards, and compliance responsibilities remain unclear. This indicates that, despite the practical need and technical readiness for virtual shareholder meetings, there is still a need for clearer legal frameworks to provide stable, legitimate, and effective safeguards. Such frameworks would enable a smooth transition from formal adoption to meaningful implementation.

This article aims to identify these research points and limitations through a literature review, thereby providing a direction for future research efforts to build a systematic, secure, and technologically adaptive framework for virtual shareholder meetings.

### **3. Research in China**

With the rapid development of information technology, corporate governance is undergoing a profound digital transformation. Although the academic literature on virtual shareholder meetings in China is still limited, scholars have paid attention to this topic for a long time, focusing on issues such as their necessity, system establishment, and legal effect. The study of electronic shareholders' meetings in China can be divided into three stages: from 2000 to 2010, from 2010 to 2020, and from 2020 to now.

#### **3.1 Preliminary Exploration of Digital Governance**

In early studies (2000-2010), the early surge in Internet technology inspired pioneering research, drove scholars to advocate for innovation, and led to the initial blueprint for digital corporate governance. Fang Shaokun and Jiang Yichun first introduced the concept of "corporate digitalization". They systematically explained its application in three areas, including electronic information services, virtual shareholder meetings, and the electronic exercise of shareholder rights. Their work also addressed key legal issues such as the legal effect of electronic signatures, liability in the transmission of documents, and the mechanisms for electronic voting rights. From a comparative law perspective, they further offered preliminary insights for China's legislative path in the field of corporate digitalization<sup>[1]</sup>. Ye Lin and Liu Fuhua highlighted the value of virtual shareholder meetings in protecting minority shareholders, reducing participation costs, and overcoming the shortcomings of the agency system. They proposed practical institutional designs, such as "separate voting with consolidated counting" and clearer rules on information disclosure. At the same time, they put forward a highly controversial but innovative view, which is that controlling shareholders should be prohibited from exercising voting rights through online channels. This reflected their pursuit of "substantive fairness"<sup>[2]</sup>. Huang Tao acknowledged the positive role of online voting in protecting minority shareholders and improving corporate governance, while also noting that it is not a panacea. Online voting cannot fundamentally resolve the problem of "rational apathy", and its effectiveness depends on supporting institutions and the broader environment.

Ultimately, the success of online voting requires the joint development of technology, rules, and law<sup>[3]</sup>. Wang Zongzheng proposed that China establish a hybrid voting system, combining electronic and written forms. He suggested that mandatory rules should be tailored to different company types, which would better protect shareholder rights and enable corporate governance to function more effectively<sup>[4]</sup>.

### **3.2 Legislative Improvement and Institutional Framework**

In the second stage (2010-2020), while the number of relevant publications declined after 2010, the research itself deepened significantly. Scholars' focus shifted to the legislative level. Wang Yanming and Zhang Tong argued for the electronic reform of shareholder meetings through modern information technology. Drawing on international experience, they proposed that the legitimacy of virtual shareholder meetings should be established in China's Company Law, together with supporting systems such as online voting and information disclosure. These reforms, they argued, would lower participation costs, improve efficiency, and enable shareholder meetings to fully perform their decision-making role<sup>[5]</sup>. Zhao Jinlong and Wu Rong directly identified the core problem, pointing out that the current weakness of China's system lies in the lack of higher-level legal support in the Company Law. Relying only on regulations from the securities regulator and stock exchanges has led to weak authority and fragmented rules<sup>[6]</sup>. Similarly, Wang Zongzheng noted that while China's practice of "Internet +" shareholder meetings is ahead of the law, the legal framework remains far behind. He argued that patchwork regulations are not enough, and that fundamental amendments to the Company Law are required<sup>[7]</sup>.

### **3.3 Technological Empowerment and New Company Law**

The period after 2020 comes to a new phase in research, driven by the convergence of emerging technologies, the pandemic, and the revised Company Law in China. Gao Da observed that the root problem for listed companies today is that traditional offline meetings no longer fit the reality of highly dispersed shareholders, and that existing rules contain gaps. He suggested that introducing online meeting formats and providing judicial remedies would ensure shareholders' right to participate is effectively protected, both technically and legally<sup>[8]</sup>. Chen Jingshan focused on the equality of shareholders in virtual meetings. He argued that protections should be strengthened in three respects: technology, procedure, and rights, and that foreign experience should be used to address possible defects in meeting resolutions. In this way, virtual shareholder meetings in China could improve efficiency while also safeguarding fairness for all shareholders<sup>[9]</sup>. Tian Shaoshuai pointed out that although the Company Law in China (2023 Revision) recognized electronic communication for the first time at the statutory level, its provisions are overly general and lack practical guidance. He argued that a more systematic framework is required. On the procedural side, this includes clear rules on shareholder identity verification and electronic notice disclosure. On the substantive side, it requires clarification of the legal consequences when flaws in online voting render a resolution invalid or subject to cancellation<sup>[10]</sup>.

### **3.4 Summary**

In summary, existing research outlines a clear progression from assessing the value of technology to designing concrete institutional frameworks, with a broad consensus that the digitalization of shareholder meetings is an inevitable trend. While the trend is clear, China's Company Law and related regulations remain underdeveloped. Their provisions are overly general, lack practical guidance, and depend on lower-level rules that carry limited legal authority. Consequently, establishing a more comprehensive legal framework is crucial to ensure effective oversight, genuinely protect minority shareholders, and enhance corporate efficiency.

## **4. Research in Other Countries**

Studies on virtual shareholders meetings in other countries show a clear progression through different stages, along with a diversity of research topics. They primarily focus on four dimensions:

the value and essence of virtual shareholder meetings, comparative legal framework analysis, practical risk and institutional safeguards, and the catalytic effect of emergent events supported by empirical evidence.

#### **4.1 Value and Essence**

Firstly, in reviewing the institutional evolution and practical experience of virtual shareholders meetings, scholars outside China focus on the value and essence of virtual shareholder meetings, examining their democratic value and fundamental role in corporate governance. In early research, Daniel A. Birnhak demonstrated the conflict between "efficiency and convenience" and "accountability and substantive rights" to argue that, in the realm of corporate governance, particularly in the relationship between shareholders and management, values based on trust, transparency, and direct accountability hold far greater decisive power than the efficiency and convenience offered by technology. Consequently, although online meetings are instrumentally superior, they are widely rejected on a value level, preventing them from becoming the future norm<sup>[11]</sup>. Elizabeth Boros argued that electronic technology can enhance the traditional physical gathering, increase shareholder participation and provide an auditable trail of voting. However, both fully virtual meetings and the written consent procedure risk being detrimental to retail shareholders because they remove the face-to-face accountability of management and the element of deliberation. Consequently, virtual meetings should not entirely replace physical meetings unless an electronic equivalent can be devised which effectively replicates the interaction and accountability mechanisms of physical gatherings<sup>[12]</sup>. Lisa A. Fontenot pointed out that proponents argued the virtual model enhances values of efficiency and instrumental utility, while opponents emphasized its potential to undermine values of democratic accountability, such as diminishing face-to-face questioning between shareholders and management and creating risks of corporate filtering of questions, thereby eroding trust. Lisa A. Fontenot did not simply draw a definitive conclusion but instead, by presenting this debate, highlights that the value of virtual shareholder meetings is not inherent but is constructed and negotiated through interactions of different stakeholders. This provides a critical framework of value conflict analysis for corporate decision-making<sup>[13]</sup>. Aabir Shoaib contended that electronic voting constitutes a crucial legal safeguard under the Indian Companies Act, 2013, established to address the practical challenges of geographical dispersion of shareholders and the high costs of participation. The statutory mandate for large companies to set up an online voting facility reflects the legislature's view of electronic participation as a vital tool for realizing shareholders' voting rights and promoting corporate democracy<sup>[14]</sup>.

#### **4.2 Legal Frameworks and Regulations**

Secondly, they center on legal frameworks and regulations, systematically comparing and analyzing the rules across different countries and regions, with a focus on how the law provides the basis and guidelines for electronic shareholder meetings. Elizabeth Boros focused on the Australian corporate law system and points out that the lack of consistent company law concepts in legislation and case law makes it hard for courts to deal with conflicts between company constitutions and legislative policies. This affects the legality of virtual shareholder meetings, and she called for clearer laws<sup>[15]</sup>. Anatoli van der Krans argued that although Delaware pioneered the legislation of virtual shareholder meetings, the practical effect was that shareholders' rights were not sufficiently safeguarded. Problems such as ignored questions and poor communication with the board arose, stemming largely from the vague definition of "reasonable measures" in the statute and the board's unilateral authority to make the decision. These factors created concerns about the dilution of rights, which in turn led to negative publicity and cold feet among corporations, thereby hindering the widespread adoption of virtual meetings<sup>[16]</sup>. Lisa M. Fairfax analyzed different state statutory models, including Delaware, Colorado, Massachusetts, New York, Maryland, Illinois, highlighting the key differences in their procedural requirements, the power granted to the board of directors, and the mechanisms for obtaining shareholder consent<sup>[17]</sup>. James L. Proctor, Jr. conducted a systematic typological study of the laws governing "electronic notice" across all 50 U.S. states, classifying them into five legislative models: full authorization, partial authorization, ambiguous

authorization, direct adoption of Securities and Exchange Commission rules, and complete prohibition of electronic notice. He noted that this lack of legislative uniformity creates complex legal choice-of-law issues for companies operating across state lines. In this context, the Internal Affairs Doctrine generally applies the law of the state where a corporation is incorporated, thereby providing legal certainty for multistate corporations and significantly reducing compliance risks and uncertainties<sup>[18]</sup>.

### **4.3 Practical Risks and Institutional Safeguards**

Thirdly, research has focused on practical risks and institutional safeguards. These studies identify the specific risks arising from digitalization and propose institutional or technical solutions to protect shareholders' rights. To address the issue of weakened shareholder rights in virtual meetings, Anatoli van der Krans proposed specific institutional innovations, including the introduction of an independent "Shareholders Rights Manager" and the establishment of a bulletin board. These measures aim to enhance the supervision of the meeting process and improve communication among shareholders<sup>[16]</sup>. Mohd-Sulaiman and Hingun identified key legal risks for companies using social media to engage with shareholders, ranging from violations of fair disclosure due to inconsistent information across platforms and distorted messages caused by format limits, to procedural irregularities in proxy solicitation and compromised vote integrity from weak identity verification. They further noted that companies could be held liable for executives' personal posts, citing cases involving the CEOs of Netflix and Tesla. To mitigate these risks, the authors advise firms to implement clear social media policies, designate official channels, and establish mechanisms for content review and error correction<sup>[19]</sup>. Miriam Schwartz-Ziv's research revealed that virtual-only shareholder meetings enhance accessibility but also pose a risk of diminishing shareholders' voice, as firms may exploit technical features such as selectively addressing questions and muting functions to restrict shareholders' opportunity to raise questions and engage in interaction. This is particularly evident when there is disagreement between shareholders and management. To strengthen meeting transparency and shareholder participation, Miriam Schwartz-Ziv advocated for four key measures, including mandating the public release of meeting audio recordings or transcripts to ensure accountability, fully disclosing all questions submitted by shareholders and the question selection mechanism to prevent cherry-picking, disclosing the number of shareholders in attendance to reflect actual participation, and simplifying the question submission process on non-Broadridge platforms to foster competition and safeguard equitable shareholder engagement<sup>[20]</sup>.

### **4.4 Emergence and Evaluation**

Finally, some research has concentrated on how unexpected events act as a catalyst, using natural experiments like the COVID-19 pandemic to study the adoption of virtual shareholder meetings to initiate evaluations of their long-term impact. The COVID-19 pandemic in 2020 marked a turning point for the development of virtual shareholders' meetings. Research by Goran Koevski, Borka Tushevska Gavrilovik, and Darko Spasevski observed that while the pandemic significantly accelerated the global adoption of virtual shareholder meeting, the progress varied considerably across regions. For instance, regulatory encouragement in the United States led to the proportion of online annual meetings among Russell 3000 companies jumping from 7.5% to 54%. Similarly, several EU countries enacted emergency laws mandating real-time interactive features to protect shareholder rights. In contrast, although North Macedonia officially permitted virtual meetings, most companies there continued to rely primarily on voting by correspondence due to insufficient technical and legal support. These highlight significant gaps in preparedness and implementation outcomes among different regions<sup>[21]</sup>. Through empirical and theoretical analysis, Nili and Shaner acknowledged that the COVID-19 pandemic served as a catalyst for the widespread adoption of virtual shareholder meetings but emphasize that such formats should not be regarded merely as a temporary response to the pandemic. Instead, they should be seen as an inevitable trend in the modernization and democratization of corporate governance<sup>[22]</sup>. Francois Brochet, Roman Chychyla, and Fabrizio Ferri conducted their research against the backdrop of the COVID-19 pandemic and,

through extensive empirical data, systematically evaluated the practical consequences of virtual shareholder meeting. The study concluded that virtual shareholder meeting did not significantly undermine shareholder rights, suggesting that critics' concerns may have been overstated. The reduction in related activities reflected more of a corporate emphasis on meeting efficiency rather than a deliberate attempt to evade oversight<sup>[23]</sup>.

#### 4.5 Summary

In short, research on virtual shareholder meetings outside of China has a clear history and many discussions. Overall, these studies show three main things. First, this research is closely tied to real events. Secondly, the main debate is about balancing efficiency with fairness. They affirm the benefits of virtual shareholder meeting in reducing costs, expanding participation, and enhancing transparency. They also highlight persistent concerns regarding the protection of substantive shareholder rights, the lack of uniform legal standards, and risks in information disclosure. Finally, there is a prevailing consensus that digitalization is an irreversible trend, but its sound development depends on the combined support of legal frameworks and technological safeguards.

#### 5. Conclusion

Research in this field in China is distinctive yet has apparent shortcomings. It is characterized by a strong problem-oriented focus and legislative appeal, with a clear evolution centered on achieving fairness and efficiency in shareholder participation through digitalization. However, the studies are largely confined to theoretical discussions, exhibiting a tendency to prioritize theory over empirical evidence and focus on parts rather than the whole. Compared to research in other countries, empirical studies in China are relatively insufficient and have not yet been systematically conducted. There is also insufficient in-depth analysis integrating technical risks with legal consequences, rendering some recommendations somewhat idealized. Studies in other countries demonstrate distinct strengths in empirical depth, micro-level institutional analysis, and the protection of shareholder rights. Building upon their early start and diverse research themes, they offer a wealth of practical experience and concrete solutions, with the COVID-19 pandemic further highlighting their real-world urgency. However, these studies still exhibit shortcomings in constructing systematic theoretical frameworks, the breadth of cross-jurisdictional comparisons, and foresight regarding future technological challenges.

Research on virtual shareholder meetings in China and other countries, due to the differences in their development stages and practical backgrounds, shows a complementary academic situation. Foreign studies offer more practical insights due to broader experience. Chinese research emphasizes legal adaptation and minority shareholder protection through Company Law revisions, but its practical application remains unproven. All scholars globally agree that virtual shareholder meetings are an inevitable trend in corporate governance and focus on the balance between efficiency and fairness. They all recognize that technology is a double-edged sword, which can not only reduce participation costs and enhance decision-making efficiency, but also may exacerbate information asymmetry and rights inequality among shareholders. However, current research in this field has two main problems that future studies can concentrate on. Firstly, there is not enough empirical studies. For instance, both Chinese and international literature mention the importance of shareholder experience, very few studies explore it through firsthand data like questionnaires or interviews. Even many studies use surveys and real cases, but overall, they are mainly based on logical argumentation. Empirical analysis is still lacking. This leaves many conclusions as theories without solid proof of how online meetings affect shareholder actions and company governance. Secondly, both literature lacks interdisciplinary integration. Most studies are only using the view of corporate law and related laws. They don't include views from technology or behavior science. Scholars largely hold an oversimplified view of technology, treating it as a compliant tool rather than a source of systemic risk. Research lacks future focus, and studies have not sufficiently explored new risks that technologies like artificial intelligence might create for corporate governance.

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