Information Technology Impact on Corporate Governance: A Literature Review

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Abstract: Corporate governance refers to the system of rules, practices, and processes by which companies are directed and controlled. Information technology (IT) has become an integral part of modern business operations, and its impact on corporate governance has been a subject of interest for researchers and practitioners alike. This literature review aims to provide an overview of the existing research on the impact of IT on corporate governance.

Keywords: Corporate governance; IT; Literature review

1. Introduction

Corporate governance has become an increasingly important topic in recent years, primarily due to the number of corporate scandals that have led to a decline in shareholder equity, a reduction in investor interest and major bank failures in some cases. (Bagais & Aljaaidi, 2020). In recent years it can be found that information technology impacts on companies is researched and analysed by researchers practically and frequently in kinds of aspects. Cloud computing, mobile Internet and some other innovated IT are greatly affecting the production, operation, and business model of enterprises from various aspects. Along with the development and maturity for Internet technology, applications for new IT will further enhance information sharing within enterprises, alleviate the problem of information island, and provide the possibility for the subversive reform of corporate governance. Therefore, this literature review is mainly to sort out and analyze the previous problems of corporate governance from the perspective of information technology application, explore the limitations and gaps of previous research, and analyze the significance and impact of information technology application on corporate governance.

2. Literature Reviews

2.1 Corporate Governance

Corporate governance is a set of mechanisms, procedures, systems and relationships that different parties implement to control and manage a company or enterprises (Levillain & Segrestin, 2019). In business environment corporate governance means managing company rules, practices and process systems. By this view, the model of corporate governance for a particular company is the distribution of rights and obligations among all participants in the organization. Corporate governance makes sure that stakeholders in the company or enterprise follow suitable and transparent management processes and ensures that the interests of all stakeholders, including employees, loaners, shareholders, suppliers, communities, etc., are secured. Corporate governance refers to how to ensure the returns of the investment from the investors shall be fair. A good corporate governance system will ensure a clear boundary between the shareholders and management levels. The corporate governance is not the daily management totally. It can be a system that includes the company rules, procedures, practices that the ways of controlling and managing the company for different levels of organization (Situ, Tilt, & Seet, 2020).

2.2 IT Impacts on Corporate Governance

The use of IT in a company is divided into many stages, and the use of IT often leads to the change of enterprise organization and the reengineering of business processes. This paper analyzes the application of information technology in a company, analyzes the use of IT in a corporation, and analyses the use of IT in a corporation. For example, in accounting business, throughout the development of each stage, accounting computerization is the change of accounting from 0 to 1, but in essence, only the computer acts as the tool of traditional accounting, only the change of accounting information processing means (Xue, 1997); The subsequent ERP system is the advance of accounting from 1 to n, which enables enterprises to realize a wider range of business and financial connections (Zhang et al., 2005). However, under the ERP system, finance is still a decentralized management mode in the organization and only bears the role of record (Sun, 2002). The emerging management mode of financial sharing service center overcomes the barriers of time and space, aggregates the originally closed and scattered finance into one point, and realizes financial information sharing through process and information system reengineering (Schulman et al., 1999).

Gradually, with the development of information technology, the IT function provides the possibility to realize the strategic change thought of the organization (McDonald and Teschler, 2007; Robinson et al., 2005). Gradually, some domestic and foreign enterprises began to try to establish their own information systems, and scholars also began to explore the influence of information systems in the actual operation in the company's production and operation, organisation and management. The study found that public organizations such as national governments and more than 70% of the international Fortune 500 companies have established information systems. Information systems integrate resources across multiple levels of an organization to reduce repeated information processing and increase the sharing methods of data, knowledge, information, and experiences within the organization (Wang et al, 2007), thereby enhancing organizational value by saving costs and enhancing service quality (Richter and Bruehl, 2017). Specifically, the implementation of information systems in enterprises includes the establishment of reimbursement system, bill system, financial system, bank-enterprise direct connection system, performance management system, credit investigation system, employee self-service system, logistics system and internal control system (Yao et al., 2012), which then provides professional and standardized management services for enterprises. But so far, the research on information system is not enough, and the existing research can be roughly divided into three aspects: determinants of the establishment of information system, the operation process and operation results of information system. First of all, scholars often use qualitative research methods to explore the success factors of information system establishment (Richter and Bruhl, 2017). For example, through case studies of multinational companies such as Procter & Gamble (Howard and Mari, 2010) and Ericsson (Lindvall and Iveroth, 2011), it is concluded that the key factors for successful business process reengineering include enterprise environment, organizational structure, and information technology (Mansar and Reijers, 2007). Secondly, in terms of the operation process of the information system, existing studies have shown that compared with the traditional management mode, the information system mode is more autonomous, and because it is an independent operator, it will take clear responsibility for the behavioral results of the center (Schulz et al., 2009). Finally, in terms of the operational effect of the information system, Ren et al. (2008) found that the sharing center may have the risk of failure in the implementation process, and the cultural differences and strategic objectives of the organization should be paid more attention to as establishing information systems (Frey et al., 2008).

2.3 Informatization and Corporate Governance

McAfee and Brynjolfsson (2012) pointed out that enterprise informatization can effectively improve the accuracy and effectiveness of enterprise capital allocation decisions. Informatization can help enterprises optimize resource allocation, improve production efficiency, strengthen the self-supervision behavior of the management, adjust the possible irrational decision-making in the decision-making process, avoid the behavior of manipulation, and further improve the level of corporate governance. The analysis of Grove and Clouse et al (2018) found that the application of IT will improve the profitability for corporations, provide more valuable judgment, and help to discover new business opportunities. If the management wants to increase the level of corporate governance through IT, it needs to pay attention to business performance and KPI to gain competitive advantage, which in turn requires higher requirements for senior executives and improves corporate governance. Qi and Xiao (2020) studied the reform of enterprise management in the information age and found that enterprise informatization can promote the transformation of enterprise goals and the innovation of governance structure, thus changing the internal management mode of enterprises. Qi and Cao et al. (2020) found through empirical research on A-share listed companies that enterprises with high informatization degree have higher governance level. Information-based enterprises effectively improve the level of corporate governance by reducing information asymmetry and the irrational degree of managers' decision-making, which further promotes the development of enterprise informatization and improves the efficiency of corporate governance. Liu Zheng and Yao Yuxiu et al. (2020) used micro-enterprise information to test the affecting of enterprise informatization on organizational empowerment and its core mechanism empirically. The study finds that, driven by informatization, the cost of information management is reduced, and the agency cost is also reduced, thus promoting decentralization reform. Therefore, corporations shall pay attention to the distribution law and transfer process of internal special knowledge, improve the adaptability of the organization, and cope with the impact of informatization, so as to ensure that the transmission of internal and external information will not be distorted or lost, and thus improve the corporate governance ability.

3. Discussion and Conclusion

In the above reviews, it is summarised that the definition and research analysis of kinds of aspects of corporate governance theory, influencing factors of corporate governance, information technology and corporate governance in the existing literature. This not only provides a solid foundation for future research work, but also provides a basis for detailed analysis of related issues in these aspects in the future.

In the research on the influencing factors of corporate governance, The analysis logic of the existing literature is to try to find that some internal factors (such as board mechanism, board of supervisors mechanism, equity structure, executive compensation system, etc.) and some external factors (such as government policies, analysts, institutional investors, media, etc.) have the ability or motivation to constrain the behavior of the company. That is to say, these supervisory subjects have a supervisory effect on corporate earnings, so as to produce corporate governance effect. However, a few studies have analyzed and discussed how information technology will change the company's internal and external supervision cost and efficiency from the perspective of information technology application, and then how it will change the company's governance internally and externally.

To sum up, the existing literature has shortcomings in discussing the internal mechanism of the effect of information technology on corporate governance. Therefore, the relationship and mechanism between information technology and corporate governance can be explored in the future. By studying the action path of information technology to improve corporate governance by improving internal and external factors of corporate governance, it will be allocated an important position in promoting uses of IT to improve corporate governance and improve the level of enterprise performance.

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