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www.aijbess.comTHE STUDY OF BUSINESS MODEL INNOVATION AND
INFORMATION DISCLOSURE IMPROVEMENTMao Xinyin ^{1*}, Noorul Azwin Md Nasir²,¹ Faculty of Entrepreneurship and Business, Universiti Malaysia Kelantan, MalaysiaEmail: vivian777_7@163.com² Faculty of Entrepreneurship and Business, Universiti Malaysia Kelantan, MalaysiaEmail: azwin@umk.edu.my

* Corresponding Author

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Abstract:

Abstract: Despite improvements in the quality of information disclosure in China, there remains room for further enhancement. This study focuses on companies listed on the Science and Technology Innovation Board (STAR Market), with a specific emphasis on corporate business model innovation and information disclosure mechanisms. The aim is to propose recommendations for improvement to facilitate the long-term development of STAR Market-listed companies. Through these suggestions, the intention is to elevate information disclosure standards, thereby fostering transparency, investor confidence, and market efficiency. This study holds significant importance as it addresses a critical aspect of China's financial market development. By focusing on the STAR Market, a platform for innovative enterprises, the research aims to support the government's broader agenda of promoting technological innovation and nurturing a dynamic capital market. Improving information disclosure practices can attract more domestic and international investors, thereby promoting capital formation and supporting the growth of innovative enterprises. Additionally, enhancing transparency can facilitate better corporate governance practices and reduce market information asymmetry. Despite its significance, this study has certain limitations. Firstly, its findings and recommendations may not be universally applicable to all STAR Market-listed companies due to the unique characteristics and challenges of each company. Secondly, the effectiveness of the proposed recommendations may depend on various external factors, including regulatory changes, market conditions, and the willingness of companies to adopt these recommendations.

Keywords:

Information Disclosure; Business Model; Listed Companies

Introduction

In the current phase of economic development, innovation stands out as the primary driving force for enterprise advancement. China's "14th Five-Year Plan" underscores the pivotal role of innovation in the nation's overall modernization agenda. As a result, an increasing number of enterprises are prioritizing innovation, leading to continual optimization of business models.

Nevertheless, the significant costs, high risks, and lengthy cycles associated with technological innovation demand substantial financial support. Small and medium-sized enterprises (SMEs) in China have long grappled with financing difficulties. To enhance the guiding and catalyzing role of the capital market in fostering innovation, President Xi Jinping announced the establishment of the Science and Technology Innovation Board (STAR Market) with a registration-based IPO system during the inaugural China International Import Expo on November 5, 2018. Following this, the China Securities Regulatory Commission (CSRC) solicited opinions from various stakeholders, leading to the official launch of the STAR Market on July 22, 2019, introducing a new segment to China's capital market. The registration-based system of the STAR Market, focusing on information disclosure, presents fresh opportunities for improving the quality of China's capital market information disclosure system.

Enhanced information disclosure facilitates the decisive role of the market in resource allocation, thereby improving resource allocation efficiency. This, in turn, effectively addresses the financing challenges encountered by private technology-driven enterprises, enabling the capital market to better serve the real economy. While previous academic research predominantly focused on information disclosure issues of companies listed on traditional boards, there's a need to delve further into the information disclosure system of the STAR Market. Our study, centered on STAR Market-listed companies, aims to focus on optimizing both enterprise business model innovation and information disclosure systems. By providing insights into how other STAR Market-listed companies can enhance their information disclosure practices to foster long-term development, we aim to drive further advancements and improvements in information disclosure practices.

Literature Review

Business Model and Business Model Innovation

In the current stage of economic development, innovation undoubtedly serves as the primary driving force for enterprise advancement. According to Chesbrough and Rosenbloom (2002), the business model plays a crucial role in capturing value from innovation. Teece (2010) further emphasizes the close relationship between the business model, business strategy, and innovation. Additionally, Zott and Amit (2010) discuss the importance of designing business models from an activity system perspective. Furthermore, Osterwalder et al. (2005) clarify the origins, current state, and potential future directions of the business model. Johnson et al. (2008) underscore the importance of reimagining the business model and offer relevant guidance. Therefore, based on the findings of these studies, continuous optimization of the business model is crucial for the long-term development of enterprises.

However, the significant costs, high risks, and lengthy cycles associated with technological innovation require substantial financial support. Small and medium-sized enterprises (SMEs) in China have long faced financing difficulties (see Zott, Amit, & Massa, 2009). To enhance the guiding and catalyzing role of the capital market in promoting innovation, President Xi Jinping announced the establishment of the Science and Technology Innovation Board (STAR

Market) with a registration-based IPO system during the inaugural China International Import Expo on November 5, 2018. According to the research by Zott, Amit, and Massa (2011), the registration-based system of the STAR Market establishes a stock issuance and listing system with information disclosure as its core, bringing new opportunities for China's capital market information disclosure system to transition to high quality. High-quality information disclosure facilitates the decisive role of the market in resource allocation, thereby enhancing resource allocation efficiency. This effectively addresses the financing challenges faced by private technology-driven enterprises, enabling the capital market to better serve the real economy. Although previous academic research has primarily focused on information disclosure issues of companies listed on traditional boards, there is a need to further explore the information disclosure system of the STAR Market (refer to Chesbrough, 2010). Our study will focus on STAR Market-listed companies, particularly on enterprise business model innovation and information disclosure system improvement (refer to Demil & Lecocq, 2010), aiming to promote further development and improvement of information disclosure practices.

Quality of Information Disclosure

Information disclosure quality has long been a significant research topic in the field of financial accounting. Over the past few decades, scholars have conducted extensive studies on information disclosure quality, exploring its impact on capital markets, the role of corporate governance mechanisms, and its correlation with firm performance. Lang and Lundholm (1993) found a significant correlation between the level of corporate disclosure and analysts' ratings, highlighting the importance of information disclosure for investor decision-making. Botosan (1997) demonstrated a negative correlation between the level of information disclosure and the cost of equity capital, revealing the impact of information disclosure on corporate capital costs. Additionally, Healy and Palepu (2001) provided a comprehensive review of information asymmetry, corporate disclosure, and their relationship with capital markets, offering an important theoretical framework for research on information disclosure quality. Overall, research on information disclosure quality provides valuable insights into understanding the motivations behind corporate disclosure behavior, its impact on capital markets, and the importance of corporate governance.

Research Methods and Design

This study employs a case study approach to analyze the relationship between business model innovation and information disclosure. This study primarily conducts case studies using secondary data sources, including literature, news articles, newspapers, websites, and other relevant materials. Additionally, annual reports from Haier Biomedical and Haier Smart Home during different periods are utilized as important reference materials. Since both companies are publicly listed, their information disclosure is relatively comprehensive, with ample data available from literature, annual reports, and other sources, which is sufficient for the analysis in this study.

Similarities and Differences Between Haier Biomedical and Haier Smart Home

Haier Bio focuses more on investing in core technologies, particularly in the field of IoT, integrating low-temperature storage with IoT management systems to enable real-time interaction among people, machines, and samples in biobanks. The company has successfully secured its position in the low-temperature storage equipment market and implemented an effective IoT high-end differentiation strategy overseas, opening up the high-end market abroad. On the other hand, Haier Smart Home primarily serves households, offering home appliance products and additional services. In contrast, Haier Bio's main clientele includes

hospitals, pharmaceutical companies, and other medical-related institutions. Thus, while Haier Smart Home provides smart home solutions for customers, Haier Bio offers solutions for biomedical low-temperature storage and comprehensive IoT scenarios catering to medical institutions.

Information Disclosure

Industry Information Disclosure

Haier Bio disclosed comprehensive industry information before and after its IPO, including its main business, industry development status, comparison between domestic and international markets, and the application of new technologies. The company pointed out the gap between the domestic biosafety solution market and foreign markets, but expected growth rates to surpass the global average. Additionally, the company identified opportunities arising from the integration of new information technologies with the biotechnology industry. In contrast, Haier Smart Home's industry disclosure mainly focused on sales data and channels, lacking comprehensive industry coverage.

Corporate Governance Disclosure

In corporate governance disclosure, Haier Bio focused on issues such as company operations, related transactions, corporate independence, and equity structure. The company detailed its distribution management, related transactions, and shareholder meeting situations, demonstrating the basic status of corporate governance and promptly addressing any issues. In comparison, Haier Smart Home had relatively limited content in corporate governance disclosure, mainly concentrating on shareholder meetings and changes in board and supervisor personnel.

Financial Information Disclosure

Haier Bio disclosed financial information including the implementation of new revenue standards and the advancement of its IoT strategy, explaining in detail the impact of accounting policy changes on financial data to enhance stakeholders' understanding of the company's operational status. Haier Smart Home also disclosed significant accounting policies and estimates, updating financial data changes resulting from accounting policy changes.

Core Technology Disclosure

Haier Bio provided comprehensive disclosure of its core technologies, including research and development investment, ongoing projects, research personnel, and associated risks. The company emphasized continued investment in core technologies and provided risk warnings regarding research and development. Such disclosures are crucial for positioning on the Science and Technology Innovation Board.

Project Research	Haier Biomedical		Haier Smart Home	
	2019	2020	2019	2020
Current Period Expensed Research and Development Expenditure	121,361,166,49	150,719,18,87	6,266,936,518	6,860,161,572

Current Period Capitalized Research and Development Expenditure			444,081,451	35,861,728
Total Research and Development Expenditure(%)	121,361,166,49	150,719,187,87	6,711,017,969	7,220,023,300
Percentage of Total Research and Development Expenditure to Revenue(%)	11.99	10.75	3.34	3.44
Number of Research and Development Personnel in the Company	277	400	16679	18014
Proportion of Research and Development Personnel to Total Workforce in the Company(%)	25.65	27.91	16.72	18.14

Table 1 Comparison of Research and Development Expenditure between Haier Biomedical and Haier Smart Home for the Years 2019-2020.

Firstly, we can observe the research and development expenditures incurred by both companies during the current periods in 2019 and 2020, categorized into current period expenses and capitalized expenses. In all four aspects, Haier Smart Home's expenditures surpass those of Haier Biomedical, indicating potentially greater investment in technological research and development.

Secondly, the proportion of total research and development expenditure to revenue demonstrates the companies' overall commitment to R&D. Although Haier Biomedical's R&D expenditure as a percentage of revenue was slightly higher than that of Haier Smart Home in 2019 and 2020, both companies maintained relatively stable levels, indicating their sustained investment in research and development.

Furthermore, the number of research and development personnel and their proportion within the total workforce offer insights into the scale and importance of the companies' R&D teams. In both respects, Haier Smart Home also demonstrates higher figures compared to Haier Biomedical, indicating a greater allocation of resources and manpower to R&D.

The Impact of Business Model on Information Disclosure

The business model is closely related to information disclosure, as different business models imply different strategic layouts and management modes, leading to variations in disclosed content (Chesbrough & Rosenbloom, 2002). Haier Biology, listed on the Sci-Tech Innovation

Board, primarily engages in the development, production, and sales of biomedicine low-temperature storage equipment. It discloses detailed operational information, core technologies, research achievements, and upgrades in operational management capabilities in response to pandemic challenges. Companies should disclose their business models in financial reports to assess management performance and future development prospects. With increasing demand for financial information from stakeholders, disclosure content has become more extensive.

Sci-Tech Innovation Board-listed companies should emphasize technological progress and research in disclosures, detailing this information. Supplementing disclosure through methods like performance briefings enhances information quality and boosts investor confidence. Haier Biology's disclosure practice demonstrates truthfulness, accuracy, completeness, covering various aspects including industry, governance, finance, and technology (Zott, Amit, & Massa, 2009).

Sci-Tech Innovation Board companies operate in emerging tech sectors, where financial fluctuations can significantly impact investors. Hence, highlighting the importance of technology in financial reports addresses investor concerns about technological diversity. Haier Smart Home is a successful business innovation case, with its innovative business model yielding returns. Compared to Haier Biology, Haier Smart Home considers more factors in its annual reports, reflecting its larger scale and broader business scope.

Innovative enterprises, like Haier Biology, should tailor disclosures, increase critical audit matters disclosure, move away from templates to meet investor expectations. Broaden information channels beyond financial reports to platforms like China Securities Journal, Shanghai Securities News.

Conclusion and Recommendations

Through comparing Haier Bio and Haier Smart Home in terms of industry information, corporate governance, financial information, and core technology disclosure, significant disparities in their information disclosure practices can be observed. Firstly, in terms of industry information disclosure, Haier Bio provided detailed descriptions of its main business, industry development status, comparison between domestic and international markets, and the application of new technologies. It also identified the gap between the domestic biosafety solution market and foreign markets, anticipating growth rates to surpass the global average. In contrast, Haier Smart Home's industry disclosure mainly focused on sales data and channels, lacking comprehensive coverage of the industry's overall situation. Secondly, regarding corporate governance disclosure, Haier Bio emphasized issues such as company operations, related transactions, corporate independence, and equity structure. The company detailed its distribution management, related transactions, and shareholder meeting situations, demonstrating the basic status of corporate governance and promptly addressing any issues. On the other hand, Haier Smart Home had relatively limited content in corporate governance disclosure, primarily concentrating on shareholder meetings and changes in board and supervisor personnel.

Thirdly, in financial information disclosure, Haier Bio disclosed financial information including the implementation of new revenue standards and the advancement of its IoT strategy. It explained in detail the impact of accounting policy changes on financial data to enhance stakeholders' understanding of the company's operational status. Similarly, Haier

Smart Home also disclosed significant accounting policies and estimates, updating financial data changes resulting from accounting policy changes. Lastly, regarding core technology disclosure, Haier Bio provided comprehensive disclosure of its core technologies, including research and development investment, ongoing projects, research personnel, and associated risks. The company emphasized continued investment in core technologies and provided risk warnings regarding research and development. Such disclosures are crucial for positioning on the Science and Technology Innovation Board. However, Haier Smart Home's disclosure of core technology was relatively limited, lacking detailed information associated with ongoing projects and research personnel.

In conclusion, Haier Bio's disclosure practices demonstrate a higher level of transparency and detail across various aspects including industry, governance, finance, and technology. Haier Smart Home, on the other hand, has room for improvement in enhancing the depth and comprehensiveness of its disclosure practices, particularly in areas such as industry analysis, corporate governance, and core technology disclosure. By aligning with best practices in information disclosure, both companies can enhance stakeholder trust and better meet investor expectations.

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