# Corporate Financial Fraud and Countermeasures in the Internet Era

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# 인터넷 시대 기업의 재무부정과 대책

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Abstract With the advent of the internet age and the outbreak of COVID-19, many companies have embraced online trade. However, due to the way the cyber economy works, the number of companies engaged in financial fraud by falsifying their transaction amounts and customer numbers has been gradually increasing. The purpose of this study is to analyze financial fraud of companies in the Internet era and to present solutions. Therefore, this study analyzed the financial fraud behavior of Luckin Coffee in China as an example and studied the causes and countermeasures of financial fraud. As a result, it was found that the cause of financial fraud lies in the opacity of cash flows from online transactions. The recommendations proposed by this study is to improve internal control systems in companies, develop risk management system, and establish comprehensive external supervision system

Key Words : Internet age, Financial fraud, Network data, Internal control, External supervision

요 약 인터넷 시대의 도래와 COVID-19의 발생으로 많은 기업들이 온라인 거래를 진행하고 있다. 하지만 사이버경제 가 작동하는 방식 때문에 거래금액과 고객번호 등을 허위로 조작해 재무부정을 벌이는 기업이 점차 늘고 있다. 본 연구 의 목적은 인터넷 시대 기업의 재무부정 행위를 분석하고 해결책을 제시하는 것이다. 이에 본 연구는 중국 루이썽커피 의 재무부정 행태를 예시로 분석하고 재무부정의 원인과 대응방안을 연구했다. 결과적으로 재무부정의 원인은 온라인 거래로 인한 현금흐름의 불투명성에 있다는 것을 발견했다. 본 연구는 기업 내부통제 시스템의 개선, 리스크 관리 시스 템 개발, 종합적인 외부감독 시스템 구축을 제안했다.

주제어 : 인터넷 시대, 재무부정, 네트워크 데이터, 내부 통제, 외부 감독

#### 1. Introduction

After the outbreak of COVID-19, many experts predicted that network development-related industries will emerge to become the big hitting industries of the future. The foundation of the network economy is the internet, especially the sum of the economic activities generated by it. The network economy is an economy that is based on the information industry, which takes knowledge as the core and network information as the support, and adopts the most direct way to narrow the distance between service providers and service targets [1].

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The development of the network economy has caused massive changes in the business models of many enterprises, and the operation model of traditional retail has gradually transformed into a new type of retail operation [2]. Bricks and mortar retail sales used to play a significant role in commercial distribution; however, with the emergence of the internet age, as well as the rapid development in big data analysis, IoT (Internet of Things), and artificial intelligence, the operating state of the traditional retail industry has been changing and innovating constantly, and has formed a new retail industry characterized by information technology [3]. The new retail industry is not only the carrier of commercial distribution, logistics, and financial flow, but it is also an important channel for information flow.

The shift in the ways of doing business in the retail industry as well as the application of information technology has led to several changes to certain financial management activities. Informatization has provided valuable chances for the financial management in big retail enterprises to develop creatively; such enterprises have been able to improve the creativity and quality of their way of financial management [4].

Nevertheless, the development in information technology has not only advantages, but also disadvantages. More and more listed companies have exploited the manipulability of technology used in the network economy, and have inflated their transaction amounts and customer numbers for the purpose of attracting investors for illegitimate profits [5]. Due to the manipulability of the internet, listed companies can falsify their order forms or the digital information from customers. This kind of behavior would greatly decrease the authenticity of the data; however, it is not easy to be noticed in report forms, which makes financial fraud more covert [6].

This paper is based on fraud triangulation theory and GONE Theory, and applies a case study and financial analysis to examine the motives behind the Luckin Coffee incident. The paper ends with a conclusion and some recommendations.

The novelty of this paper is that it analyzes a new financial fraud mode among enterprises in the internet age, and it proposes a theoretical foundation towards consummating corporate governance and internal control structures and improving corporate management and control systems in order to facilitate normative and healthy development in these kinds of enterprises.

# 2. Theoretical Background and Motivation

#### 2.1 Fraud Triangulation Theory

W. Steve Albrecht, the founder of the American Association of Certified Fraud Auditors, conducted an in-depth study of fraud triangulation theory and formed the fraud triangulation theory that is widely used now. Albrecht proposed that three elements—pressure, opportunity, and excuse interact with each other to form a closed and complete fraud triangle [7].

The lack of legal awareness among senior leaders along with their low moral standards caused weak internal control in the corporation, and corporate cheats had found reasons to justify their behavior [8]. Even though Luckin Coffee kept raising money because of the high pressure from competitors, multiple financing did not help get rid of its financial trouble. Rather, the capital turnover in this company was not completed, which caused massive pressure. The online sales mode of Luckin Coffee saw the use of new retail technology, and there were no cashiers in offline stores. All orders had to be made through an app, which caused a great obstacle for auditors. The accounting firm was not able to testify the real order quantity of Luckin Coffee; what the accountants audited were fake data provided by the company, which provided the opportunity for Luckin Coffee to commit financial fraud.

#### 2.2 GONE Theory

GONE Theory, also known as the four-factor theory, was proposed by G. Jack Bologna, Robert J. Lindquist, and Joseph T. Wells in 1993. The key idea of this theory is that the motivation of corporate fraud is based on four elements: Greed, Opportunity, Need, and Exposure (GONE). The interaction among these four elements determines the risk degree of enterprise financial fraud [9].

The poor behavior of the management layer and the directors caused the element of greed; the concealment of fake online orders and the low level of supervision generated the element of opportunity; the element of motivation was caused by the need to avoid being caught by a supervisory agency and the slump in its share price; and the element of exposure was caused by the high difficulty of being punished after financial fraud was exposed[10]. The whole environment around Luckin Coffee can satisfy the four elements of GONE Theory, and under the interaction of these elements, financial fraud was conducted.

# 3. Financial Analysis of Luckin Coffee

#### 3.1 Introduction to Luckin Coffee

The first Luckin Coffee store opened in Beijing's Galaxy Soho in October 2017. After that, it started trial operations in 13 cities in China, including Beijing, Shanghai, and Tianjin. During the trial operations, 3 million orders werefulfilled, 5 million cups of coffee were sold, and the number of served customers was over 130 million. As of the end of March 2019, 2,370 stores had opened in 28 cities across China, with plans to significantly increase the number of stores in 2019. On May 17, 2017, Luckin Coffee was listed on NASDAQ, and had raised \$695 million. On August 14, 2019, Luckin's first financial report after IPO stated that the total revenue exceeded ¥900 million, and 5.9 million new trading users were added. On November 13, 2019, Luckin Coffee announced its financial results, claiming a revenue of ¥1,541.6 billion in Q3, a year-on-year increase of 540.2%; the net loss was ¥531.9 million, up 9.7% from a year earlier, but narrowed from a net loss of ¥680 million in Q2.

On January 31, 2020, Muddy Waters, a firm known for its short-selling bets, said it had received an 89-page anonymous short-selling report alleging that Luckin Coffee (NASDAQ: LK), a Chinese online coffee brand, had falsified data. The report read: "After Luckin's \$645 million IPO, the company began fudging financial and operating data in the third quarter of 2019, which has evolved into a hoax." On June 27, Luckin Coffee said in a statement that the company would cease trading on the NASDAQ on June 29 and proceed with delisting. On February 5, 2021, Luckin Coffee announced on its website that the company had filed for bankruptcy protection in New York and was in negotiations with interested parties to restructure the company's financial obligations.

#### 3.2 Luckin Coffee Financial Analysis

As shown in Fig. 1, in Q2 and Q3 of 2019, Luckin Coffee's total assets suddenly increased significantly compared to Q1. As shown in Fig. 2, Luckin Coffee's operating revenue in Q2 and Q3 of 2019 showed a trend of rapid growth, but its operating profit was always negative, and there obvious trend of negative was no profit This phenomenon had narrowing. to make people doubtful whether there were really inflated monetary funds in Luckin Coffee [11].



Fig. 1. Assets and liabilities of Luckin Coffee in 2019

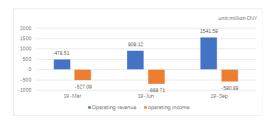


Fig. 2. Earnings statement of Luckin Coffee in 2019

## 4. Reasons Behind the Financial Fraud

For Luckin Coffee, going to the United States to obtain financing and occupying the market was the biggest pressure. Going public meant that the company could have broader financing channels, which was more conducive to the promotion of the company's brand. However, the premature listing and rapid expansion had caused a huge funding gap [12]. Moreover, due to the first free cup offer and a large number of coupons, the subsidy amount required by the company was too large, and the company was losing money increasingly, making it difficult to obtain financing. The reasons for the financial fraud of Luckin Coffee can be summarized as follows [13].

(1) A good environment for counterfeiting under the network economy. Luckin Coffee had its own independent app and WeChat applet, so customers could place orders online at any time. The company took advantage of this to artificially increase the number of online orders and ordered goods, thus exaggerating revenue data. This method of inflating data in the context of the internet can be used to invisibly inflate data many times over without being easily detected.

(2) Weak internal controls. On April 5, 2020, Luckin Coffee issued an Apology Statement, admitting that its COO Liu Jian and some of his subordinates engaged in improper transactions and falsified financial statements [14]. It claimed the company would deeply reflect on itself and strengthen its internal controls. The internal control system of the company is interlinked, and if there is a problem in one link, it will have a knock-on effect. Luckin Coffee's internal control system was likely to have loopholes in one or many of the links, so that Luckin Coffee's financial fraud could be carried out for three consecutive months without being stopped [15].

(3) The online plus offline marketing model in network economy During the era. the investigation of Luckin Coffee by Muddy Waters, the data collected by Muddy Waters were mainly the original data of the business situation of Luckin Coffee. Muddy Waters also questioned the effectiveness of the internal control of Luckin Coffee's information system because of the "order hopping" behavior of the order numbers of Luckin Coffee's stores. Ernst & Young subsequently uncovered financial fraud in Luckin Coffee through investigation. Unlike Ernst & Young, Muddy Waters never came into contact with the company's accounting documentation such as internal accounting tables or accounting sheets. A survey was completely undertaken by collecting Luckin Coffee's external data, which illustrated the feasibility of data analysis in new retail enterprise auditing.

(4) The concealment of financial fraud in an online marketing model. Through increased sales and profits, reducing the amount of goods orders to increase income, there can be a variety of financial frauds of listed companies operating under the environment of today's network economy. According to their own needs, those companies can tamper with orders or customer data so that the integrity of the data is greatly reduced, but imperceptibly reflected in statements, making financial fraud unable to be found.

### 5. Conclusions and Implications

The financial fraud incident of Luckin Coffee makes us realize that we have to be alert to the cause of frequent financial fraud events being due to the defects of corporate governance structures and the loopholes in internal control systems. We have to address the internal control and outer supervision of the company, especially the supervision of online data. Luckin Coffee incurred financial fraud due to its early listing and the loopholes in its sales model. In order to effectively avoid the occurrence of financial statement data fraud, we should put forward some measures to avoid problems in the use of funds so that the movement direction of funds will move healthily forward.

According to the financial fraud phenomenon of Luckin Coffee, this paper puts forward the following recommendations.

First, improve the internal control system. Companies needs to strengthen their internal control systems, which is not only an important means to improve the quality of a company, but also an important link to improve the risk prevention ability of a company so as to make appropriate use of the online plus offline business model [16].

Second, explore risk management audits. Internal auditors, as a functional department within a company, know more about a company than external auditors, and can identify and evaluate a company's risks more comprehensively and accurately [17]. Therefore, an internal audit should use risk-oriented and risk management audit approaches to prevent, check, and report management fraud. The online + offline business model is a good combination in the current network economy. The memory storage capacity of the internet should be used to record and supervise every order, to avoid false orders.

Third, establish a full range of external supervision. Incidents of listed companies using fictitious transactions and inflated sales revenues to conduct financial fraud happen repeatedly under prohibition, which has exposed loopholes in our supervision of the authenticity of income and revenue recognition[18]. Thus, China Regulation Securities Commission should increase their scope of inspections.

The findings of this study have to be seen in light of some limitations.

Firstly, the number of samples analyzed and counted is not sufficient, which may lead to inaccurate research results. We hope to add more research objects in future research and expand the number of research samples.

Secondly, Luckin coffee is a Chinese enterprise. The motivation analysis of enterprise financial fraud in the network era may not be applicable to enterprises in other countries. We hope to add the analysis and improvement papers of enterprises in other countries to the future research.

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