

In the background of the Mobile Internet ,Innovation of audit mode in retail enterprises——with Luckin Coffee as an example

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Abstract : In the mobile Internet era, the business model of new retail enterprises has changed greatly, so the audit mode needs to be innovated to adapt to the development of the times and improve the audit quality. Luckin Coffee has achieved rapid expansion relying on Internet technology, but the unsustainability of its business model leads to financial fraud by its management. In the mobile Internet era, the new retail enterprises ,such as Luckin Coffee ,are more suitable to adopt the data-based audit mode. In the audit process, the business model, original sales data, information system and transaction cycle are the key audit contents, and the key audit technologies such as field investigation, information technology and data analysis are adopted to realize the verification of financial information of new retail enterprises^[1].

Key Words: Mobile internet; New-retail; Audit mode

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1 Introduction

The development of mobile Internet has caused great changes in the operation mode of traditional retail industry. With the advent of the Internet era, the business forms of the physical retail industry are constantly changing, forming a new retail industry characterized by information technology. The innovation and reconstruction of traditional retail business model is the inevitable requirement of the

development of modern science and technology for the evolution of business model. The change of retail business model and the application of information technology make the financial management activities of retail enterprises also have corresponding changes, but relatively speaking, the reform of audit mode is slightly backward.

Luckin coffee was successfully listed on NASDAQ in the United States only 18 months after its establishment, setting a record for the fastest listing of Chinese start-up companies. Luckin coffee claims to build a new retail model based on Internet technology by combining online and offline. In February 2020, muddy water company released an investigation report on Luckin coffee, which disclosed that Luckin coffee had financial fraud. In April 2020, Luckin coffee publicly admitted that it had 2.2 billion yuan of financial fraud. Since then, the stock price of Luckin coffee fell sharply. Ernst & young, as the audit institution that undertakes the IPO audit of Luckin coffee, has also been criticized by the capital market. In the era of mobile Internet, enterprises like Luckin coffee that use information technology to retail will inevitably change their financial management activities due to the change of their business model. What links may these enterprises engage in financial fraud and what are the ways of financial fraud? How will the audit mode of similar enterprises be innovated, and what changes will be made to the corresponding audit procedures and methods? The answers to these questions will help CPAs adopt more appropriate audit mode in the era of mobile Internet, improve their audit ability, reduce the risk of financial fraud in commercial enterprises, and ensure the healthy development of China's capital market.

2 New retail business model in mobile Internet Era

2.1 The current business model of new retail enterprises

Business model is the sum of the goods and services provided by the enterprise and its application mode, which guides the organizational strategy and operation mode of the enterprise^[2]. Traditional retail enterprises purchase goods first, and then display various products for consumers to experience and purchase. The operators of traditional retail enterprises usually judge the next purchase preference according to the results of consumers' purchase after the purchase behavior. In the era of mobile Internet, retail business enterprises adopt another new business model. After consumers place orders online, retailers allocate goods and entrust offline logistics to deliver them to consumers or allow consumers to pick up goods from offline stores, realizing the integration of online and offline supply chain. At the same time, retail enterprises can use big data, cloud computing and other information technologies to promote sales according to consumers' purchase habits and preferences, so as to improve the probability of consumers' repurchase, and obtain consumer information feedback before and after the occurrence of consumer behavior.

2.2 The choice of audit mode for new retail enterprises

At present, China's new retail enterprises emerge in an endless stream, the market competition is extremely fierce, retail enterprises in the early stage of establishment need to constantly launch subsidies, price reduction and other activities in exchange for market share, and maintain debt operation for a period of time. Therefore, in the process of operation, they usually need to constantly carry out various financing activities to maintain a large amount of cash expenditure. New retail enterprises with a large number of customer traffic and high customer retention rate can easily convert the flow into profit, which has a good development prospect. Therefore, it can obtain more financial support. The flow data has become a high-risk link of financial fraud. At the same time, in order to cover up the false behavior of customer flow, new retail enterprises may also have the behavior of forging logistics, purchasing and warehousing data, and the forgery of relevant information of new retail enterprises all shows that

the information system of new retail enterprises has loopholes. Therefore, for new retail enterprises, the focus of audit activities is also on the audit of original sales data and information system.

In the era of mobile Internet, in the face of the rapid expansion of data information, data audit mode began to appear. The data audit mode takes the internal control of information system and electronic data as the breakthrough point, and emphasizes the verification of the effectiveness of internal control of information system and the authenticity of electronic data^[3]. Data based audit mode focuses more on the verification of the effectiveness of the internal control of the original data and information system. Therefore, in the Internet era, the data audit mode is more suitable for the current business model of new retail enterprises. New retail enterprises operate online and offline, and the consumption data is huge and mainly for individual consumers. It is necessary to establish a perfect internal information system to ensure the normal operation of enterprises. Therefore, for the new retail enterprises, it is more appropriate to adopt the data audit mode.

3 The application of data audit mode in new retail enterprises

3.1 An overview of data based audit model for new retail enterprises

Audit mode is also known as the evidence collection mode of audit evidence. Audit evidence is the basis of CPA's audit opinion, and audit mode is the logical starting point of CPA's audit work. Audit mode determines the working mode and thinking logic of CPA. Data based audit mode is based on the original data and the internal control test of information system to sort out, analyze, transform and verify the collected data to achieve the audit objectives. The audit process of data-based audit model in the audit implementation stage, the data is collected, filtered and transformed, the analysis intermediate table and audit model are established, and then the data analysis and extended evidence collection are conducted, and finally the audit opinions are formed.

3.2 Key audit techniques of data based audit model for new retail enterprises

This paper thinks that when using the data type audit mode to audit the new retail enterprise, we should use more key audit techniques such as field investigation,

information technology, data analysis and so on.

3.2.1 Application of field investigation method

In the risk oriented audit mode, CPA also needs to conduct on-the-spot investigation. The key link of the field investigation is the inventory, fixed assets and cash. At the same time, the methods of field investigation such as correspondence and analysis procedures are also used. On the other hand, muddy water company takes field investigation as the main method and invests a lot of resources to obtain effective evidence. Muddy Waters LLC has carried out 11,260 hours of follow-up investigation, including the monitoring of store flow, the investigation of upstream and downstream enterprises in the supply chain, and the tracking investigation of the third-party media. It has found that Luckin coffee inflated its average unit price, increased its revenue through transactions with Wang Baiyin's related parties, and falsely increased advertising expenses. In view of the current sales mode of Luckin coffee online and offline, muddy water company's field survey is obviously more efficient.

3.2.2 Application of information technology

Generally speaking, at present, most of the certified public accountants use traditional methods to audit, and the application of information technology in audit is relatively small. In general, the new retail enterprises sell to a single consumer, and the number of sales is large and the unit price of consumption is low. Therefore, at this time, CPA can use big data technology to audit the whole sample of sales revenue. In the audit process, we can use the audit model to determine whether there is abnormal data, we can use crawler software to find the qualified original data, and we can also use clustering analysis algorithm to find abnormal data. In addition, big data technology is also an effective means to verify the authenticity of new retail enterprises in the aspects of inventory and logistics, which is also an effective means to judge whether there is financial fraud.

3.2.3 Application of data analysis

In the risk oriented audit mode, the focus of CPA data analysis is the cross check relationship between financial data, and the authenticity of enterprise financial statements is verified through financial analysis. In the data audit model of retail enterprises, the focus of data analysis is the analysis of original consumption data and the cross check relationship between original consumption data and financial data.

For example, through the analysis of the original consumption data of Luckin coffee and the cross checking relationship between the original consumption data and financial data, we can find that the financial data of Luckin coffee has a high possibility of financial fraud. As the self-investigation of Luckin coffee claims that its financial fraud started in the second quarter of 2019, the analysis time point of this paper for Luckin coffee's financial fraud is also in the second quarter of 2019. Through the analysis, we found that Luckin coffee increased the customer order and unit price. Luckin coffee uses the online ordering method. After the consumer orders, a meal code will appear, which represents the number of customer orders in the store. According to the announcement issued by Muddy Waters LLC, the meal code of Luckin coffee is not arranged in order, but increased randomly. The virtual increase range of customer orders of Luckin coffee store is 34-232, with an average of 106 more customer orders per day. According to the 2019 annual report of Luckin coffee, the average unit price of coffee is 11.2 yuan, while muddy water company claims that the unit price of Luckin coffee investigated by itself is 9.97 yuan. Luckin coffee publicly announced that nearly two-thirds of consumers could accept the price of Luckin coffee at 15 yuan, while muddy water company believed that only one third of consumers could accept the price of 12 yuan. It can be seen from Figure 1 and figure 2 that the average sales volume and average unit price of Luckin coffee store increased in the second quarter and the third quarter of 2019. However, through comparative analysis, it is found that the unit price and sales volume are inversely proportional from the second quarter of 2018 to the first quarter of 2019, while the unit price and sales volume in the second and third quarters of 2019 show a year-on-year increase, which obviously does not conform to the demand law.

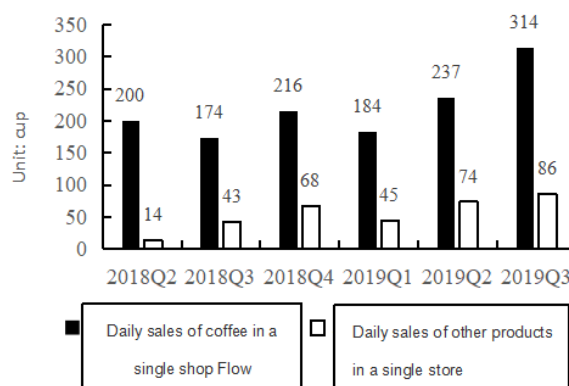


Figure 1. Average sales of Luckin coffee store (data source: wind database)

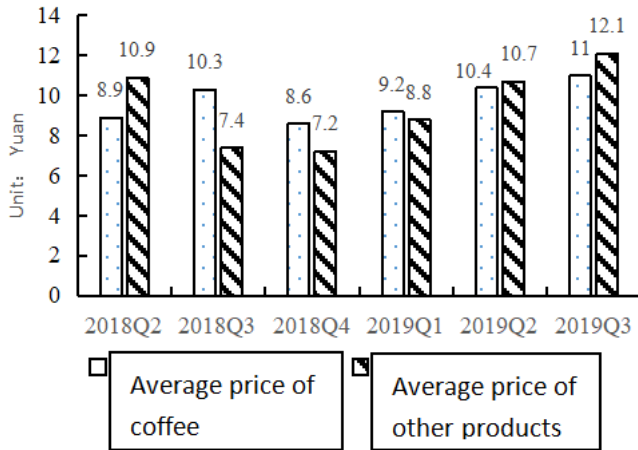


Figure 2. Average unit price of Luckin coffee (data source: wind database)

Fortunately, the operating income of Luckin coffee showed a negative trend from the second quarter to the sixth quarter, but there was no obvious trend of negative profit in the third quarter. Meanwhile, the net cash inflow from operating business of Luckin coffee was also negative during the same period (see Figure 4), and the net cash inflow from financing activities increased significantly in the second quarter of 2019. Combined with the above analysis, the sales volume, unit price and operating income of Luckin coffee in the second and third quarters of 2019 have increased significantly. The overall operating profit loss has little change, the net cash inflow of operating activities has always been negative, and there are contradictions between financial data, which shows that there are financial fraud such as false increase of customer orders and unit price.

4 Research conclusions

This paper discusses the innovation of financial fraud audit mode of new retail enterprises in the mobile Internet era, supplemented by Luckin coffee's financial fraud event, and explains the key to maintain the business model of new retail enterprises, as well as the audit content and key audit technology under the business model^[4]. This paper believes that in the era of mobile Internet, the data audit mode is more suitable for the new retail enterprises represented by Luckin coffee. In the actual audit process, the CPA should

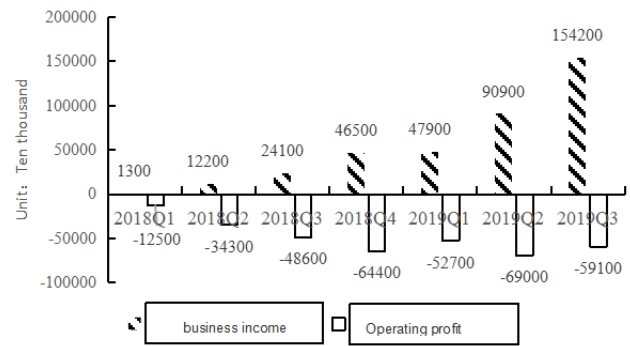


Figure 3. Revenue and profit of Luckin coffee (data source: wind database)

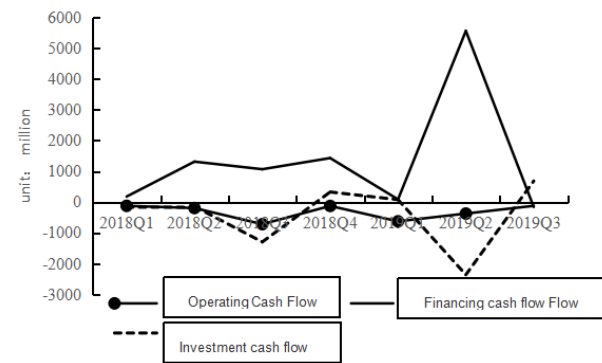


Figure 4. Cash flow of Luckin coffee (data source: wind database) take business model, original sales data, information system as the main audit content, and use the key audit techniques such as field investigation, information technology, data analysis to verify the financial information of new retail enterprises.

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