

Evaluation results and analysis of internal control effectiveness of Haidilao company

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Abstract

the economic recovery after the Xinguan epidemic has brought opportunities as well as challenges to catering enterprises. In this paper, Haidilao, one of the leading enterprises in the catering industry, is selected as the research object. Combined with the relevant theories of internal control, the effectiveness of Haidilao's internal control is evaluated by using the analytic hierarchy process, questionnaire survey and fuzzy comprehensive evaluation method. Through the analysis of the evaluation results, this paper finds that the chain catering enterprises represented by Haidilao have the problems of weak risk awareness and uneven distribution of human resources, and analyzes and reflects on this, hoping to provide reference for the internal control of catering enterprises and play a positive role in promoting the steady development of the catering industry.

Keywords

catering industry; Internal control; Analytic hierarchy process.

1. Introduction

With the deepening of the market system reform and the continuous innovation of the business model, the catering industry, as one of the pillars of the tertiary industry, has shown a thriving development trend. However, the market size fell to 4trillion yuan in 2020 due to the impact of the epidemic, and further fell to 4.3 trillion yuan in 2022, a year-on-year decline of 6.3%. This change not only reveals the vulnerability of the catering industry in responding to emergencies, but also highlights the importance of internal control in the industry.

2. Literature review

Chenhanwen (2008) believes that effective internal control can ensure the rational allocation and utilization of enterprise resources and promote the improvement of enterprise operation efficiency^[1]. Pengyanhua (2018) pointed out that by establishing and implementing effective internal control mechanisms, enterprises can minimize possible losses when risks occur^[2]. Guoxiaoming (2018) pointed out that the cost calculation of catering industry needs to be flexibly adjusted according to its business characteristics^[3].

Wenhuiying (2020) pointed out that the accounting of catering enterprises has its particularity, involving a wide range of contents and methods, so there are certain accounting

difficulties^[4]. Haoxiaoqian (2021) believes that the staff of catering enterprises generally have low education background, lack of high-quality talents and frequent personnel turnover. These factors lead to great deficiencies in the financial management level and internal control of the enterprise, and the phenomenon of employees' favoritism and fraud occurs from time to time^[5]. Zhaoyujie and wuyuhe (2015) pointed out that the change of policy may have a significant impact on the business strategy of catering enterprises, and the food safety problem is directly related to the survival of enterprises^[6].

Researchers at home and abroad have carried out research on the evaluation of the effectiveness of internal control from the perspectives of evaluation criteria, influencing factors and research methods^[7]. In order to combine qualitative and quantitative analysis, scholars usually use mathematical models to conduct quantitative analysis by using analytic hierarchy process^[8], questionnaire method and fuzzy comprehensive evaluation method^[9] on the basis of qualitative analysis. Based on the above scholars' research, this paper comprehensively uses the above three methods to evaluate the effectiveness of the internal control system, which has theoretical and practical significance for the study of the internal control of chain catering enterprises.

3. Internal control effectiveness evaluation index

3.1. Index design

In this paper, the internal environment, risk assessment, control activities, information and communication, and internal supervision are set as the first level indicators. Combined with the actual situation of Haidilao company, according to the content of the first level indicators, they are divided into 17 second level indicators and 37 third level indicators. Finally, a practical indicator system is synthesized, as shown in Table 1.

Table 1 evaluation index system of internal control effectiveness of submarine fishing

Primary	Secondary index	Tertiary index
Internal environment (A)	Organizational structure A1	Mutual restriction and coordination between A11
		Whether the responsibilities are clear A12
	Development strategy A2	Reasonable development strategy A21
		Strategy can be effectively implemented A22
		Adjust strategy according to the current situation A23
	Human resources A3	Human resource structure is sound and reasonable A31
		Effective personnel assessment A32
	Responsibility A4	Actively fulfill social responsibilities A41
	Culture A5	Positive enterprise spirit and culture A51
	Risk identification (B)	Goal setting B1
The goal setting is within the enterprise risk tolerance B12		
Risk identification B2		Establish a complete risk assessment system B21
		The risk can be fully and effectively identified B22
Risk analysis B3		A sound and reasonable risk analysis process B31
		Whether the information source is reliable B3
	The analysis of risk impact degree is accurate B33	

	Risk response B4	The response measures are timely and effective B41
Control activities (C)	Control measures C1	The system settings meet the development needs C11
		Regularly check the implementation of the system C12
		Efficient development approval system of the company C13
	Food quality and safety control C2	Laws and regulations on food quality and safety C21
		Food quality and safety control management system C22
		Effective measures to control food quality and safety C23
	Budget control C3	Effectively control the cost of purchase and inventory C31
		Human resource cost is effectively controlled C32
Information and communication (D)	Information transmission D1	Information can be collected timely and accurately D11
		Whether the information transmission is smooth D12
		Feedback information is tracked in time D13
	Information system D2	Coordinated information technology system D21
		Effectively systems serve the strategic planning D22
		Daily operation management specification D23
Communication D3	Whether the communication is timely and smooth D31	
Internal supervision(E)	Supervision system E1	Whether supervisors are competent and independent E11
		Whether the key evidence is relevant, reliable and timely E12
		A sound internal supervision system has been established E13
		Whether to investigate the major defects found E14
	Effectiveness E2	The rectification plan is implemented effectively E21

Data source: compiled by the author according to Literature

3.2. Construction of evaluation grade

This paper sets the evaluation grade of internal control evaluation index as V, where $v=[v_1, V_2, V_3, V_4, v_5]=[excellent, good, medium, poor, poor]$, and assigns it the value of $v=[100, 80, 60, 40, 20]$

Table 2 classification of internal control evaluation of seabed fishing

Evaluate	Excellent	Good	Medium	Poor	Terrible
Score	(80, 100]	(60,80]	(40,60]	(20,40]	(0,20]
Standard	Excellent design and effective implementation	Reasonable designon and practice	Ineffective implement-at ion	Certain control defects; weak implementation	Weak control defects; poor implementation

3.3. Determination of evaluation weight

Combining with the industry standards of the catering industry, this paper determines the relative importance of the evaluation indexes at all levels, establishes the judgment matrix, calculates the weight with the help of Excel software, and finally carries out the consistency test. This paper selects the secondary indicators of the internal environment as an example, establishes the judgment matrix s, as shown in Table 5, and then calculates the weight. (see Appendix for judgment matrix of other indicators)

Table 3 Judgment matrix of secondary indicators of internal environment

		A1	A2	A3	A4	A5
Organizational structure	A1	1	2	5	6	6
Development strategy	A2	1/2	1	2	2	3
Human resources	A3	1/5	1/2	1	2	2
Social responsibility	A4	1/6	1/2	1/2	1	2
Corporate culture	A5	1/6	1/3	1/2	1/2	1

Data source: compiled by the author according to Literature

4. Effectiveness evaluation of internal control of submarine fishing

According to the statistical results of the questionnaire, the matrix of the first level evaluation index can be calculated. Fuzzy relation matrix corresponding to internal environment a:

$$RA = \begin{bmatrix} 0.4720 & 0.2920 & 0.1560 & 0.0800 & 0.0000 \\ 0.2149 & 0.2732 & 0.3678 & 0.1441 & 0.0000 \\ 0.1667 & 0.3367 & 0.2767 & 0.2200 & 0.0000 \\ 0.2400 & 0.4000 & 0.3400 & 0.0200 & 0.0000 \\ 0.7400 & 0.2200 & 0.0400 & 0.0000 & 0.0000 \end{bmatrix}$$

The evaluation vector of internal environment a is $ba = wa * ra = (0.3722 \ 0.2993 \ 0.2276 \ 0.1008 \ 0.0000)$. Similarly, the evaluation vector of risk assessment B is $bb = (0.14550.3291 \ 0.4507 \ 0.0747 \ 0.0000)$. The evaluation vector of control activity C is $bc = wc * rc$, and the evaluation vector of information communication D is $BD = (0.3857 \ 0.3976 \ 0.2058 \ 0.0109 \ 0.0000)$. The evaluation vector of internal supervision e is $be = we * re = (0.4758 \ 0.2865 \ 0.2195 \ 0.0183 \ 0.0000)$

Finally, the overall fuzzy evaluation matrix R of internal control is obtained.

$$R = \begin{bmatrix} 0.3722 & 0.2993 & 0.2276 & 0.1008 & 0.0000 \\ 0.1455 & 0.3291 & 0.4507 & 0.0747 & 0.0000 \\ 0.3500 & 0.4201 & 0.1979 & 0.0319 & 0.0000 \\ 0.3857 & 0.3976 & 0.2058 & 0.0109 & 0.0000 \\ 0.4758 & 0.2865 & 0.2195 & 0.0183 & 0.0000 \end{bmatrix}$$

Overall evaluation vector $B = W * R$

$$B = (0.3254 \ 0.3304 \ 0.2742 \ 0.0701 \ 0.0000)$$

$$\text{The final score is calculated as } F = V * B. F = V * B = (100 \ 80 \ 60 \ 40 \ 20) * \begin{bmatrix} 0.3254 \\ 0.3304 \\ 0.2742 \\ 0.0701 \\ 0.0000 \end{bmatrix} = 78.228$$

The final score of the internal control effectiveness of Haidilao was 78.23, which was above the average level. This paper believes that the internal control of Haidilao is effective, without obvious omissions, and there is more room for improvement. The score of internal environment was 78.85, the overall performance was regular, and there were some deficiencies; The risk assessment score was 70.91, which was average and had major

deficiencies; The control activity score was 81.76, showing good performance without obvious omissions; The score of information and communication was 83.16, with good performance and no major defects; The score of internal supervision was 84.4, showing good performance without major defects The internal environment and risk assessment scores are relatively low, and there are obvious omissions, which need to be improved

Table 4 evaluation results of internal control effectiveness of seabed fishing

Index	Score	Evaluation
Internal environmen	78.85	Good
Risk identification	70.91	Good
Control activities	81.76	Excellent
Information and communication	83.16	Excellent
Internal supervision	84.40	Excellent
Comprehensive score	78.23	Good

Data source: compiled by the author according to Literature

In the internal environment, corporate culture scored the highest, 94, and human resources scored the lowest, especially the resource structure, which scored only 68.8, which was a major deficiency The scores of organizational structure and social responsibility were 83.12 and 77.2, respectively, and the overall performance was good

In the risk assessment, the scores of goal setting, risk identification, risk analysis and risk response are relatively average, all around 70 points. Whether the goal setting in the goal setting section has the lowest score in the enterprise risk tolerance range needs to be more cautious in goal setting

The overall performance of the control activities was relatively good. The scores of all indicators in the food quality and safety control sector were more than 80, and the budget control score was 77.94, which showed a good overall performance

In addition to the system architecture score of 74.8, the scores of other detailed indicators of information and communication exceeded 80, among which the smoothness of information transmission and communication scored the highest, and the overall performance was excellent

The individual score of internal supervision is the highest, among which the response score to the major defects of internal control is the highest, and the effectiveness score of supervisors is the lowest, which should be paid attention to

References

- [1] Chenhanwen Internal control, pay gap and enterprise value [J]. Journal of Xiamen University, 2019 (2): 60-69

- [2] Liangyumei Analysis on the effectiveness of enterprise internal control [J]. China market, 2017 (29): 181-182
- [3] Pengyanhua Research on enterprise internal control framework from the perspective of financial risk [J]. Business accounting, 2018 (18): 81-83
- [4] Wen Huiying Application of cost accounting in financial management of catering enterprises [J]. Food research and development, 2020 (12): 238
- [5] Guoxiaoming Research on the characteristics of accounting in catering enterprises [J]. Accounting study, 2018 (18): 110-112
- [6] Haoxiaolian Problems and solutions of catering chain operation in Weifang [J]. Business culture, 2021 (18): 44-45
- [7] Zhaoyujie, wuyuhe Reasons and Countermeasures for the difficulty of listing in China's catering industry -- Based on the case study of South Beauty [J]. Business Economics 2015 (7): 92-93
- [8] ZhouXiaoYan Evaluation index system for the effectiveness of internal control in Chinese enterprises [J]. Financial science, 2012, (5).
- [9] Liujunyan, Luo Yafei, liuyongyong Research on the internal control dilemma of chain catering enterprises -- Based on the perspective of natural system theory [J]. Financial and accounting communication, 2021, (22):126-132.
- [10] Carlo Berlingieri.Employee Benefit Plans Require Strong Internal Controls[J]. Compensation & Benefits Review,2015,47(3):134-139.
- [11]Keryn Chalmers and David Hay and Hichem Khelif.Internal control in accounting research: A review[J]. Journal of Accounting Literature,2019,42:80-103.
- [12]Youngsung Kim and David S. T. Matkin. Financial Condition and Internal Control Deficiencies: Evidence From New York Counties[J]. Public Budgeting & Finance,2020, 40(1):45-69.