

## Research on Enterprise Risk Management and Risk-Oriented Internal Audit Based on International Economic Cooperation

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**Abstract:** With the development of economic globalization, enterprises will face various risks in the market competition. As an important part of risk management, internal audit plays an increasingly prominent role in internal control, corporate governance and organizational operation. Internal auditors are closely related to the work of enterprise risk management functional departments when carrying out risk-oriented audit business. How to coordinate and cooperate with them is related to the efficiency and effectiveness of the whole audit business. The risks faced by enterprises are increasing, the reorganization of organizations is becoming more frequent, and the demand for internal audit to participate in risk management, improve governance structure and strengthen internal control is also increasing. Based on international economic cooperation, this paper analyzes the role of risk-oriented internal audit in enterprise risk management, and discusses how the internal audit department coordinates and contacts with the risk management functional departments when carrying out enterprise risk management.

### 1. Introduction

With the economic globalization and the rapid development of science and technology, the increasingly complex internal relations of organizations and the increasingly competitive external market make organizations face more and more uncertain factors, and the risks borne by enterprises also increase [1]. Weak risk awareness and weak risk management are important reasons for major risk events in enterprises. In the environment of increasing competition among enterprises, the role and influence of enterprise risk management have been paid more and more attention. Enterprises must grasp important links and major risks according to their own characteristics and different risk states in different periods, and implement enterprise risk management around the overall business objectives [2]. On the one hand, enterprise management is endowed with market opportunities full of infinite imagination space, on the other hand, it is always facing unpredictable risks [3]. Therefore, as far as the operation and management team is concerned, its eternal mission is to grasp business opportunities and manage risks. The board of directors and the top management of the enterprise generally require the internal audit to reveal the emerging and potential risks in time, put forward prevention and control suggestions, and assume certain responsibilities for the audit risks [4]. In order to enhance the core competitiveness of enterprises, enterprises need to monitor and evaluate all factors affecting the management level and operating performance.

Most enterprises have a certain degree of risk management, but in China, risk management is a relatively weak link in enterprise management. The risks faced by enterprises are increasing, the reorganization of organizations is becoming more frequent, and the demand for internal audit to participate in risk management, improve governance structure and strengthen internal control is also increasing [5]. Risk-oriented internal audit is that the internal auditor of an enterprise tests relevant aspects of risk management, makes professional judgment on the degree of risk and management, and puts forward audit evaluation and suggestions to realize the enterprise operation objectives [6]. Enterprise risk management needs to go through a gradual and continuous improvement process, from the initial simple risk management to the advanced stage of comprehensive risk management. As an institutional arrangement for enterprise internal control and risk management, internal audit

needs to adapt to the situation and constantly adjust its business scope and objectives [7]. The concept of risk-oriented internal audit meets the higher requirements of modern enterprises for internal audit in terms of risk management, internal control and corporate governance [8]. Based on international economic cooperation, this paper analyzes the role of risk-oriented internal audit in enterprise risk management, and discusses how the internal audit department coordinates and contacts with the risk management functional departments when carrying out enterprise risk management.

## 2. The Concept of Risk-Oriented Internal Audit and Enterprise Risk Management

Risk refers to a kind of uncertainty existing in objective things, which may lead to loss or benefit. On the basis of fully identifying risks, internal auditors should test the soundness and effectiveness of the existing internal control of the auditees to determine which risks can not be prevented and controlled under the existing control framework. The specific risk management process applied by an enterprise must be suitable for the enterprise's culture, management style and work objectives [9]. In the process of audit implementation, the management can know the risk information of the enterprise at any time, which can seek the balance point between risk and opportunity. Enterprise risk management can be understood from the perspective of an enterprise as a whole, or from the perspective of a single department or multiple departments. Because risks are absolute, audit resources are limited, and risks may create new opportunities for enterprises, so it is necessary to judge the remaining risks.

Auditors determine the nature, time and scope of substantive testing based on audit risk model. This theoretically solves the arbitrariness of sampling audit based on system and the allocation of audit resources. In enterprise activities, the scale of social relations, as an important factor of social capital, has the most important impact on enterprise performance. The entrepreneurs with large scale of social relations have strong financing ability, and can make their own investment decisions according to market opportunities, so as to improve the success rate of enterprises. The specific process can be shown in Fig. 1. Firstly, the minimum spanning tree is obtained, then the loop is controlled according to the condition, and the edge with the largest weight is partitioned. If two clusters are needed, only one of the longest edges needs to be cut off.

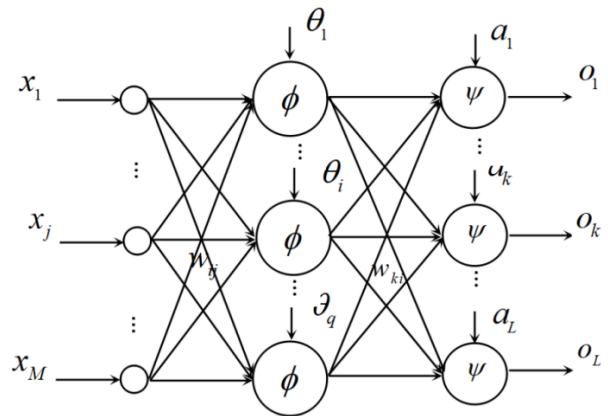


Fig. 1 Spanning tree process

Risk-oriented internal audit is not only based on reducing the audit risk of internal auditors, but also an effective tool for reducing business risk and risk management. Risk-oriented audit based on system theory requires internal auditors not only to check the risk situation of their own enterprises, but also to observe the operation of other enterprises in the same industry and the level of operational risk of the whole market. In order to achieve standardization, representative audit domains and their risk factors should be sorted out and filed to form a database. When conditions permit, internal auditors should make full use of advanced network technology and information processing technology to identify enterprise risks dynamically and in real time. Risk-oriented internal audit is an audit concept with the audit risk model as the audit method and the assessment

and improvement of the risks of the whole organization as the ultimate goal. Risk-oriented internal audit is based on a systematic analysis and evaluation of audit risks, and takes this as a starting point to formulate audit strategies and diversified audit plans suitable for the enterprise's situation. After understanding the internal control procedures of other enterprises, we can have a brand-new understanding of the internal control system of the enterprise and adopt a better internal control system to manage the risks of the enterprise.

### 3. The Role of Risk-oriented Internal Audit in Enterprise Risk Management

#### 3.1 Help Enterprise Management Authorities Understand Risk Information

Risk-oriented internal audit takes risks as the starting point and end point of audit work, and embeds the overall risks of enterprises into the evaluation of audit risks themselves. The internal audit department should construct information channels outside the normal information reporting system for managers, so as to alleviate the contradiction of information asymmetry and improve the timeliness, sufficiency and authenticity of information needed for enterprise decision-making. The principle of the discounted enterprise value income model is that the value of any enterprise asset is equal to its expected future total economic income flow. The main form is the sum of the present value of cash flows. The traditional income model of enterprise value evaluation is:

$$w_{ij}(k+1) = w_{ij}(k) + \eta \delta_i x_j \quad (1)$$

According to the enterprise life cycle theory, when an enterprise is in different stages, the growth rate of the enterprise is different. Only the constant growth rate model is considered here, but it can be extended to the growth model of two-stage or even multi-stage enterprises in different periods. Extending the above discounted income model to the constant growth model is:

$$I_{\omega} \ddot{\delta} = F_r d - K_{\omega} \dot{\delta} - C_{\omega} \delta - K_1 e \delta \quad (2)$$

If the risk measurement is not accurate enough, the risk management is not standard enough, and the internal control is not standard enough. Then even if risk tolerance is set, strict and effective implementation cannot be achieved. Since the establishment and maintenance of social relations require certain emotional and spiritual support, if the enterprise has effective social relations, it is also emotional guarantee for the enterprise activities, thus improving its enterprise performance. For example, Table 1 shows the empirical analysis results of enterprise policies and enterprise strategies.

Table 1 Empirical analysis of corporate policies and corporate strategies

Variable	Scale expansion	International expansion
Enterprise support	0.257	0.291
Enterprise education	0.145	0.135
Enterprise environment	0.124	0.112
Type of economy	0.336	0.256

When the significance level is low, the customer management ability has a relatively large impact on the marketing performance. However, the other two sub-indicators market learning ability and marketing promotion ability have significant impact on marketing performance, but to a lesser extent. For example, Table 2 shows the estimation and significance test of structural parameters of performance indicators.

Table 2 Performance indicator structure parameter estimation and significance test

Path description	Path coefficient
Market learning ability → influence performance	3.46
Marketing ability → marketing performance	3.59
Customer Management Capabilities → Marketing Performance	3.64

On the basis of the existing risk management and internal control of the organization, the remaining risks are evaluated to further improve the risk management and internal control. When certain risks cannot be avoided or large profits can be obtained by taking risks, the auditing department may suggest the auditees to choose risk retention, otherwise, the degree of residual risks shall be further determined. In the current business environment, if an enterprise wants to efficiently manage risks, it must first attach great importance to risk identification and do its best to identify the risks faced by the enterprise. In the process of implementing risk-oriented internal audit, internal auditors first analyze the business strategy of the enterprise and determine strategic risks and major transactions [10]. The main responsibility of the enterprise risk management function department is to identify the entire risk management process, evaluate its adequacy and effectiveness, report to the management and put forward management suggestions.

### **3.2 Help Business Management Authorities Identify and Assess Risks**

In order to change risk management from passive to active, early warning should be used to make decision makers aware of future risks. Before the real occurrence of risk events, the causes of risk should be controlled. The process of internal control evaluation is the process of internal audit. The quality of an enterprise's internal control is directly related to the level of audit risk. On the one hand, the internal audit function plays a governance role in the risk management of the whole group, on the other hand, it maintains and strengthens the balance role of the group in the corporate governance structure of the affiliated enterprises. Pay attention to daily control activities, seize the internal audit supervision and evaluation link, and provide reasonable guarantee for the realization of enterprise objectives. The specific contents and methods of risk-oriented internal audit are helpful to comprehensively identify risks and strengthen and standardize enterprise risk management. When making the annual audit plan, the focus of internal audit should be determined on the basis of risks and management needs and audit resources. The basis for implementing risk-oriented internal audit to manage enterprise risks is to have a perfect internal audit committee structure. By embedding risk management mechanism in daily management, enterprises can timely identify various risks that hinder them from realizing their strategic objectives, and make the value growth, risks and return on investment of enterprises linked.

## **4. Conclusion**

An ideal enterprise risk management framework based on risk-oriented internal audit can effectively control and manage enterprise risks and minimize enterprise risks under existing conditions. In the specific implementation process, the two departments can communicate with each other through centralized discussions and the establishment of a risk information base. However, with the gradual establishment of China's market economy system and the integration of the world economy, Chinese enterprises and western enterprises are facing the same operating environment and risks. Internal auditors can identify and evaluate enterprise risk factors more professionally by learning risk management knowledge, thus designing audit procedures with more emphasis. The focus on organizational strategy and its management has also fundamentally improved the internal audit level and expanded the scope of internal audit. With the integration of Chinese enterprises into the trend of economic globalization, enterprises fully draw on the internal audit theory, technology and methods under the risk management framework to make enterprise management decisions more scientific. As an important part of ensuring effective management of enterprises, internal audit will face severe challenges. Our theoretical, practical, and government should take action and actively explore the basic principles, methods, and operational practices of risk-oriented internal auditing.

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