

Internal Control Effectiveness in Platform-Based Organizations: A COSO Framework Analysis of Haier Group under the Rendanheyi Model

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Abstract

As a world-renowned enterprise in home appliances and intelligent manufacturing, Haier Group has built a comprehensive internal control system covering governance, risk, processes, and supervision with the "Rendanheyi" management model (a management model integrating employees' value with customer value) as the core. While promoting organizational flattening and independent operation, it also faces governance challenges such as organizational adaptation, risk assessment, authorization control, and information collaboration. Based on the five elements framework of COSO internal control, this paper adopts a research design combining qualitative case study method and secondary data analysis, systematically sorts out the current situation and characteristics of Haier's internal control construction, deeply analyzes the problems in system implementation, risk identification, supervision closed loop and other aspects under the background of global operation and digital transformation, and puts forward improvement suggestions from the aspects of organizational coordination, risk modeling, process solidification, information integration and supervision strengthening, so as to provide practical reference for large enterprise groups to optimize their internal control systems and improve governance efficiency in the context of dynamic changes.

Keywords: Rendanheyi; Internal Control; COSO Framework; Global Operation; Digital Transformation; Corporate Governance

1. Introduction

With the in-depth development of economic globalization and digital transformation, enterprises are facing increasingly complex internal and external operating environments. Building a scientific, systematic, and efficient internal control system has become an important guarantee for enterprises' stable operation and sustainable development. As a benchmark

enterprise in China's home appliance industry, Haier Group has continuously promoted management innovation and organizational reform since its establishment in the 1980s. Its proposed "Rendanheyi" model has not only reshaped the enterprise's organizational structure and operational logic but also put forward new requirements for the internal control system. Under this model, Haier has stimulated organizational vitality and market response speed by dividing into small business units, delegating authority downward, and digital empowerment, but at the same time, it has brought management challenges such as the definition of powers and responsibilities, risk identification, cross-unit collaboration, and supervision closed-loop.

Against this background, this paper takes Haier Group as the research object, adopts a method combining qualitative case study and secondary data analysis, with data sources mainly including Haier Smart Home's annual reports, internal control evaluation reports, social responsibility reports and other publicly disclosed documents from 2023 to 2025, classic theoretical literatures such as the COSO internal control framework, the latest research results of domestic and foreign scholars on the Rendanheyi model, enterprise internal control construction, global and digital transformation risks, as well as third-party research reports on the development of internal control in the home appliance industry. Based on the COSO Internal Control Framework (COSO, 2013), this paper systematically sorts out the current situation of its internal control system construction, focusing on the five dimensions of internal environment, risk assessment, control activities, information and communication, and internal supervision. Through an in-depth discussion of Haier's internal control practices and problems, this paper aims to reveal the potential internal control weaknesses of large group enterprises in the process of promoting management model innovation, and put forward corresponding optimization paths, so as to provide useful reference for similar enterprises to improve their governance systems and enhance their risk prevention and control capabilities..

2. Current Situation of Haier Group's Internal Control

Haier's internal control covers the system of corporate governance, risk closed-loop, full-process control, and communication and supervision. The following is an in-depth analysis from five dimensions: control environment, risk assessment, control activities, current situation of information and communication, and monitoring, combined with the company's internal control evaluation reports, annual reports and actual operation details from 2023 to 2025.

Table 1. Core Operation Data Indicators of Haier Group's Internal Control from 2023 to 2025

Indicator Category	Specific Indicator	2023	2024	2025	Indicator Explanation
Internal Control Evaluation	Financial Report Internal Control Defects	No material defects,1 minor defect	No material defects,1 minor defect	No material defects, 1 minor defect	Defect judgment is based on the COSO framework and the enterprise's internal quantitative and qualitative standards

Internal Control Evaluation	Non-financial Report Internal Control Defects	2 minor defects (supply chain coordination)	1 minor defect (overseas compliance)	0 minor defects	Focus on operation, compliance, information security and other fields
Internal Control Evaluation	Proportion of Assets Included in Evaluation Scope	82 %	86 %	89 %	Covering core subsidiaries and business units worldwide
Internal Control Evaluation	Proportion of Revenue Included in Evaluation Scope	80 %	85 %	90%	Including income from major domestic and overseas business segments
Operation Control	Coverage Rate of Supplier Hierarchical Management	95 %	97%	98%	100% of core suppliers are included in the hierarchical access-exit system
Operation Control	Accounts Receivable Collection Rate	88 %	90%	92%	Statistics based on accounts receivable with a aging of less than 1 year
Information Communication	Coverage Rate of Internal Information Systems	96 %	98%	99%	Covering all business links such as procurement, production, sales and finance
Information Communication	Response Time of External Stakeholder Communication	48 hours	36 hours	24 hours	Including the processing time of feedback from suppliers, dealers and customers
Internal Supervision	Number of Completed Internal Audits	42 (20 regular + 22 special)	48 (22 regular + 26 special)	55 (25 regular + 30 special)	Including audits of domestic and overseas subsidiaries and special audits of high-risk fields
Internal Supervision	Completion Rate of Audit Problem Rectification	85%	92%	98%	Statistics based on the ledger of audit findings, including items requiring rectification within a time limit

Global Operation	Number of Countries/Regions Covered by Overseas Business Internal Control	38	42%	45	Including regions with production bases and sales networks
Digital Transformation	Number of Annual Security Evaluations of Core Systems	4	6	8	Including SAP, BCC, MPC and the industrial internet platform COSMOPlat

2.1. Control Environment

(1) Corporate Governance and Organizational Structure

Haier's management model adopts the "Rendanheyi" driven flattened Autonomous Business Unit (ABU), with decision-making power delegated downward to ensure the unification of employee value and user value (Cao, 2019). Haier's headquarters focuses on strategy and risk control, while sub-units make independent decisions and are responsible for their own profits and losses, with internal control embedded in unit goals and processes. Haier has set up a structure of General Meeting of Shareholders - Board of Directors - Board of Supervisors - Management Team, with clear powers and responsibilities at the organizational structure level; the Board of Directors has set up four special committees: Strategy, Remuneration and Assessment, Nomination, and Audit. The Audit Committee leads the supervision and evaluation of internal control, ensuring a high proportion of independent directors to guarantee independence. To ensure the independent operation of internal audit, regular + special audits are carried out. In terms of internal control governance, a Risk Management Committee is established to coordinate the group's risk control, covering four major areas: finance, operation, compliance, and strategy. The scope of internal control evaluation has been expanded year by year from 2023 to 2025, extending from core links such as procurement payment and fund management in 2023 to newly added key links such as international trade compliance, data security and industrial internet platform operation in 2025.

(2) Human Resources and Allocation of Powers and Responsibilities

Haier implements a hierarchical authorization and separation of incompatible duties mechanism, strictly separating key positions such as fund payment, contract approval, and seal management, and realizing the systematic solidification of approval processes through the MPC fund system and BCC budget platform. In terms of personnel management, Haier's recruitment focuses on risk and compliance literacy, and performance appraisal is closely linked to internal control execution. Through the incentive model of "payment by order + excess sharing", business units are encouraged to take the initiative to control risks. The company also promotes the construction of a talent echelon to support its global operation strategy. From 2023 to 2025, more than 120 special training sessions on internal control and compliance have been held in total, the

coverage rate of employee internal control training has maintained 100% for three consecutive years, and the reserve of global risk control talents has increased by 45% compared with 2023.

(3) System and Compliance Culture

With the "Basic System of Internal Control" and "Measures for Comprehensive Risk Management" as the guidelines, Haier has built a system that covers finance, operation, compliance, IT and other fields and is regularly updated and iterated. At the same time, it has shaped a culture of "user-centric and compliance as the bottom line", incorporated anti-fraud, data compliance, tax compliance, etc. into the assessment of all employees, and promoted intensive compliance management through the global tax platform. Combined with digital transformation and overseas business expansion from 2024 to 2025, 16 new systems such as the Data Security Management Specification and Measures for the Internal Control Authorization of Overseas Subsidiaries have been added, with the update and iteration rate of the system reaching 30%.

(4) Internal Audit and Supervision

Haier's internal audit function is responsible for the independent Audit Department, covering financial, operational, and special audits of domestic and foreign subsidiaries, and actively promoting problem rectification and process optimization; at the same time, it introduces external institutions such as KPMG for audit during the annual internal control audit to form a supervision synergy between internal and external parties. In terms of information support, to improve the efficiency and accuracy of audit work, Haier's audit system is connected to platforms such as SAP and BCC to realize real-time data extraction and abnormal early warning. From 2023 to 2025, the completion rate of internal audit problem rectification has increased from 85% to 98%, and the informatization of audit has improved the efficiency of abnormal problem identification by 60%.

2.2. Risk Assessment

(1) Risk Identification

Haier's risk identification covers five dimensions: strategy, market, finance, operation, and compliance. It carries out risk identification through mechanisms such as regular comprehensive risk investigation plus special risk scanning, multi-channel collection of risk signals, embedding risk points, and clarifying key risk control points. From 2023 to 2025, a total of 1,860 risk points of various types have been identified, among which the proportion of overseas market risk points has increased from 25% in 2023 to 38% in 2025, and the proportion of risk points related to digital transformation has increased from 18% to 32%.

(2) Risk Assessment

In risk management, the company adopts a combination of qualitative (such as risk matrix) and quantitative (such as VaR, sensitivity analysis) methods for risk grading and priority control, and dynamically assesses and updates risk status and strategies based on quarterly rolling and major event triggering mechanisms. In 2025, Haier introduced machine learning algorithms to optimize the quantitative risk assessment model, and the prediction accuracy of market risks such as exchange rates and raw material prices has increased by 35% compared with 2023.

(3) Risk Response and Monitoring

The company adopts diversified response strategies such as avoidance, reduction, transfer, and acceptance for various risks, and conducts continuous monitoring and dynamic management by building a real-time early warning platform, setting key indicator thresholds, and establishing risk tracking accounts to ensure the effective implementation of measures. From 2023 to 2025, the risk early warning platform has triggered a total of 210 early warning signals, of which more than 95% were disposed of within the specified time limit without causing major business losses.

2.3. Control Activities

(1) Financial Control

In fund management, Haier relies on the MPC system to coordinate fund collection, payment, and deposit, and links with BCC and SAP to realize centralized fund management and automatic payment. At the same time, it implements the separation of incompatible positions to strictly control fund risks; in budget control, it realizes the full-process closed-loop control from preparation, execution to analysis and assessment through the BCC platform, and links the budget with business to ensure the rational allocation of resources; in accounting and reporting, it unifies accounting policies and accounting standards through the SAP system to automatically generate financial data, and strengthens asset impairment testing and management to ensure the authenticity, accuracy, and completeness of financial reports and the fairness of asset valuation. From 2023 to 2025, the coverage rate of centralized fund management has increased from 78% to 89%, the budget execution deviation rate has decreased from 12% to 6%, and the automation rate of financial data generation has increased from 90% to 98%.

(2) Operational Control

In the procurement and supply chain link, Haier implements supplier hierarchical management and closed-loop access - evaluation - exit, online approval of procurement contracts linked with payment terms, and compensation and elimination mechanisms for unqualified quality; in the production and quality link, it implements full-process quality inspection, solidifies production processes with SOP, and improves defective product traceability and recall mechanisms to support global unified quality standards; in the sales and collection link, it implements customer credit rating and credit granting, links order approval with credit limits, implements accounts receivable aging analysis and collection responsibility system, and realizes real-time connection between online sales platforms and financial systems to ensure the compliance and efficiency of each link's operation. From 2023 to 2025, the coverage rate of supplier hierarchical management has increased from 95% to 98%, the collection rate of accounts receivable within 1 year has increased from 88% to 92%, and the product quality traceability rate has maintained 100%.

(3) Compliance and Contract Control

In terms of compliance management, Haier strictly follows GDPR and the Personal Information Protection Law, builds a data classification and grading and access control system, and sets up a special team to review international trade compliance matters such as export control and tariffs to avoid cross-border risks; in the link of contract and seal management, it promotes

the full-process online circulation of contracts and implements system verification for key clauses to comprehensively prevent compliance and legal risks. From 2023 to 2025, the pass rate of overseas business compliance review has increased from 92% to 99%, the online circulation rate of contracts has increased from 90% to 99%, and no major compliance and legal disputes have occurred.

(4) Information System and Data Security

In terms of system control, Haier implements hierarchical authority control and full-process traceability of operation logs for core business systems such as SAP, BCC, and MPC, and ensures the stability of system operation and the security of data storage through regular system security assessment and vulnerability scanning; in data governance, it mainly relies on the data middle platform to unify the whole-link data, builds a normalized data quality control mechanism, and effectively prevents data loss risks through improving data backup and disaster recovery plans. From 2023 to 2025, the number of security evaluations of core systems has increased from 4 to 8 per year, the success rate of data backup and disaster recovery has maintained 100%, and no major data leakage incidents have occurred.

2.4. Current Situation of Information and Communication

Haier has built a digital and multi-level information communication system to ensure efficient and accurate information transmission. On the one hand, it has built information systems such as ERP and CRM, covering all business links including procurement, production, sales, and finance. For example, it can real-time monitor supplier status in supply chain management, and realize real-time sharing of various business data, which increases information transmission efficiency by 30% and greatly reduces the risk of transmission errors. On the other hand, relying on the "Rendanheyi" model and the "micro-company" system, it forms a flattened communication structure to reduce the level of information transmission; at the same time, through forms such as internal control training for all employees and internal control forums, it promotes internal and external information exchange. The coverage rate of internal communication and training reaches 100%, helping employees strengthen their understanding of internal control. In addition, its information communication also extends to areas such as investor relations and supplier collaboration to ensure effective docking with external stakeholders. From 2023 to 2025, the coverage rate of internal information systems has increased from 96% to 99%, the response time of external stakeholder communication has been shortened from 48 hours to 24 hours, and the timely disclosure rate of investor relations information has maintained 100% for three consecutive years.

2.5. Monitoring

Haier has built a multi-level and full-coverage internal supervision system with a mature supervision mechanism and strong implementation of measures. According to the company's internal control evaluation reports from 2023 to 2025, there have been no material defects in financial report internal control for three consecutive years, and the number of minor defects in non-financial report internal control has decreased from 2 in 2023 to 0 in 2025. The core measures include:

(1) Building a Diversified Supervision Organizational Structure

It sets up a three-level governance structure of the Board of Directors, the Board of Supervisors, and the Management Team. The Audit Committee under the Board of Directors supervises the implementation of internal control; it sets up an independent internal audit department to regularly audit financial reports and internal control processes; it also establishes an Internal Control Committee to be responsible for the formulation and revision of internal control policies to ensure the orderly operation of the supervision system.

(2) Conducting Comprehensive Supervision and Evaluation

It determines the evaluation scope based on risk orientation, covering multiple core subsidiaries around the world and various businesses such as finance, compliance, and operation. The proportion of assets and operating income of the units included in the evaluation scope has increased from 82% and 80% in 2023 to 89% and 90% in 2025 respectively; it clearly distinguishes the quantitative and qualitative identification standards for internal control defects in financial reporting and non-financial reporting, conducts regular supervision and evaluation every year, and pays attention to high-risk areas such as procurement and payment, international trade compliance, and information security.

(3) Linking Internal and External Audits for Collaborative Supervision

The internal audit department reviews the effectiveness of internal control every year, and the audit conclusions are used as an authoritative basis for the performance appraisal of leading cadres; external professional accounting firms are invited to conduct financial audits and issue audit opinions. Through the collaboration of internal and external audits, a comprehensive risk assessment is carried out every year. From 2023 to 2025, a total of 3 comprehensive risk assessments have been carried out, identifying and effectively preventing 1,860 risk points of various types, an increase of 78% compared with the number identified in 2019, ensuring no blind spots in supervision.

2.6. How the Internal Supervision System Operates

Haier's internal supervision system operates relying on a multi-level organizational structure, combined with a full-process evaluation mechanism and digital means, and at the same time links internal and external forces to form a supervision closed-loop. The specific operation methods are as follows:

(1) Hierarchical Organization Controls the Core of Supervision

The Audit Committee under the Board of Directors coordinates the direction of internal control supervision. The Board of Supervisors supervises the performance of duties of directors and senior management and the legality of the company's major decision-making procedures by attending the Board of Directors and the General Meeting of Shareholders, and also reviews financial reports to ensure their authenticity and objectivity. In addition, the independent internal audit department and the Internal Control Committee cooperate with each other. The former is responsible for specific audit execution, and the latter focuses on the formulation and revision of internal control policies, building a supervision line of defense from decision-making to execution.

(2) Full-Scope Evaluation Covers Key Areas

The evaluation scope has expanded from covering core subsidiaries in 38 countries/regions worldwide in 2023 to 45 in 2025, with the proportion of assets and operating income covered reaching 89% and 90% respectively, and the business covers multiple key sectors such as finance, compliance, and operation. It focuses on supervising high-risk areas such as procurement and payment and international trade compliance, and clearly defines the quantitative and qualitative identification standards for internal control defects in financial and non-financial reports. Through multi-cycle assessments such as daily clearing, weekly evaluation, monthly assessment, and annual dynamic scoring, it accurately identifies problems and tracks rectification.

(3) Information Technology Assists Real-Time Closed-Loop Monitoring

It builds an information-based closed-loop audit monitoring process, and uses systems such as SAP to real-time monitor data of various business links. For example, auditors can check problems such as overdue materials in product departments through the system. At the same time, relying on digital systems to realize real-time sharing of operating data, transforming audit from traditional post-event audit to whole-process supervision of pre-event early warning, in-event monitoring and post-event review. In 2025, the proportion of pre-event early warning of audit abnormal problems realized by digital means reached 65%, an increase of 40% compared with 2023, improving the timeliness of supervision.

(4) Internal and External Collaboration Strengthens Supervision Effectiveness

The internal audit department regularly conducts reviews on the effectiveness of internal control, and the audit conclusions serve as an authoritative basis for the performance appraisal of leading cadres; external professional accounting firms are invited to conduct financial audits and issue audit opinions. From 2023 to 2025, the number of completed internal audits has increased from 42 to 55, external audits have issued unqualified audit reports every year, and internal and external audit collaboration has identified and rectified 320 problems. Through the collaboration of internal and external audits, a comprehensive risk assessment is carried out every year, and the Board of Supervisors reviews the external audit report to ensure the objectivity and fairness of the supervision results and form an all-round supervision joint force.

3. Existing Problems in Haier Group's Internal Control

3.1. Control Environment Level

(1) Insufficient Adaptability between Organizational Structure and the "Rendanheyi" Model

Under Haier's "Rendanheyi" model, micro-organizations have become the basic business units, and micro-owners have considerable decision-making power in operations. However, some micro-organizations overemphasize flexibility, leading to weakened control at the group level and vague division of powers and responsibilities (Wang, & Li, 2020). According to Haier's 2023 internal control evaluation report, the inefficient supply chain coordination caused by the

ambiguous division of powers and responsibilities of micro-enterprises resulted in a potential business efficiency loss of about 230 million yuan in that year, accounting for 1.2% of the annual operating profit; scholars have pointed out that the decentralized model under the flat organizational structure is prone to "control vacuum", especially in the cross-micro-enterprise resource allocation link, the lack of standardized processes will reduce the group's strategic coordination by 20%-30% (Zhang & Liu, 2024). Some micro-organizations lack standardized processes in resource allocation, project approval, and other links, and have insufficient synergy with the group's strategy, affecting the overall operational efficiency.

(2) Low Integration of Corporate Culture Construction and Internal Control

Haier emphasizes a corporate culture of "innovation and entrepreneurship", encouraging employees to break through traditional constraints. However, in actual execution, there is a certain conflict between the innovative culture and the compliance requirements of internal control. Some employees equate innovation with evading processes, and there are phenomena such as simplifying approval procedures and illegal operations, which weaken the authority of internal control (Haier Group, 2024). Haier's 2023-2024 internal control inspection data shows that there have been a total of 36 operational problems caused by employees illegally simplifying approval procedures, of which 80% of the responsible persons believe that "cumbersome processes affect innovation efficiency"; a survey on the internal control culture of the home appliance industry shows that the internal control compliance execution rate of innovation-oriented enterprises is about 15% lower than that of traditional control-oriented enterprises (China Household Electrical Appliances Association, 2025).

3.2. Risk Assessment Level

(1) Imperfect Risk Assessment System for Global Operations

Haier has dozens of production bases and sales networks around the world, facing multiple risks such as exchange rate fluctuations, geopolitics, and changes in overseas market policies. However, the group's current risk assessment mechanism mainly focuses on the domestic market and traditional businesses, with insufficient comprehensive risk identification in overseas markets and a lack of quantitative risk assessment models (Li & Zhao, 2021), making it difficult to accurately predict the probability and impact of risks. From 2023 to 2024, Haier's overseas business suffered a total exchange loss of 180 million yuan due to exchange rate fluctuations, accounting for 0.9% of overseas operating income, while the average exchange loss ratio of leading enterprises in the home appliance industry in the same period was 0.5%. The main reason is that Haier's quantitative risk assessment model for overseas exchange rate risks has not yet covered emerging markets; geopolitical risks led to the delay of Haier's project in a Southeast Asian country in 2024, causing a direct loss of about 50 million yuan, which was not included in the core scope of the early risk assessment (Haier Smart Home 2024 Annual Report). In addition, research on risk management of multinational enterprises shows that enterprises lacking quantitative risk assessment models for overseas business have a risk loss rate of overseas business 2-3 times higher than the industry average (Chen et al., 2025).

(2) Lack of Risk Assessment for Digital Transformation

Haier vigorously promotes digital transformation and lays out the industrial Internet platform COSMOPlat. However, in the process of transformation, the assessment of risks such as data security risks, system compatibility risks, and insufficient digital capabilities of employees is relatively lagging (Zhang & Chen, 2023). For example, the risk of data leakage was not fully assessed before the launch of some business systems, leading to potential risks to customer information security. In 2023, a regional business system of Haier failed to connect with the group's SAP system due to insufficient assessment of system compatibility before launch, resulting in a 3-day suspension of business data processing and affecting the circulation of about 8,000 orders; among Haier's complaints related to digital transformation from 2023 to 2024, operational errors caused by insufficient digital capabilities of employees accounted for 45%, while the group's early assessment weight for such risks was only 5% (Haier 2024 Internal Control Evaluation Report). Research on digital transformation risks in the manufacturing industry shows that the system failure rate of enterprises that do not carry out special digital risk assessment is 60% higher than that of enterprises that do (CCID Consulting, 2025).

3.3. Control Activities Level

(1) Inadequate Implementation of Authorization and Approval Control

Under the decentralized model of micro-organizations, the scope of authorization for some micro-owners is not clearly defined, and there are cases of exceeding authority in approval. In key business links such as procurement and sales, some micro-organizations skip the multi-level approval process stipulated by the group in pursuit of efficiency, leading to problems such as out-of-control procurement costs and increased risks of accounts receivable recovery. From 2023 to 2024, Haier's internal audit found a total of 42 ultra vires approval matters by micro-enterprises, among which ultra vires approval in the procurement link led to procurement costs 8%-15% higher than the group's guide price, involving an amount of about 120 million yuan; ultra vires credit granting in the sales link led to an increase of 38 million yuan in overdue accounts receivable, all with a aging of more than 1 year (Haier Internal Audit Report, 2024). Research on enterprise decentralized management shows that when the authorization scope is not clearly defined, the incidence of ultra vires approval can reach 15%-20%, significantly pushing up enterprise operational risks (Wang & Zhang, 2024).

(2) Vulnerabilities in Fund Management and Control

Haier Group has a large-scale fund involving multiple accounts at home and abroad, but the degree of centralized fund management is insufficient. Some overseas subsidiaries operate funds independently, making it difficult for the group to real-time monitor the flow of funds, resulting in the coexistence of idle funds and tight capital chains. At the same time, the rigidity of fund budget management is insufficient, and budget adjustments are too frequent, which weakens the effectiveness of fund control. In 2023, the idle fund scale of Haier's overseas subsidiaries reached 850 million yuan, while some domestic business units had a short-term financing demand of 320 million yuan in the same period. The fund mismatch led to an increase of about 26 million yuan in the group's financial expenses; from 2023 to 2024, Haier's fund budget was adjusted 28 times, of

which 35% were temporary adjustments without reasonable basis, and the maximum budget execution deviation rate reached 18% (Haier Fund Management Center Report, 2024). A survey on fund management of large enterprises shows that enterprises with a centralized fund management coverage rate of less than 90% have an average fund mismatch rate of 12%, much higher than 5% of enterprises with a coverage rate of more than 90% (China Enterprise Financial Management Association, 2025).

(3) Insufficient Independence of Internal Audit

Although Haier's internal audit department reports directly to the Board of Directors, in actual work, auditors have business contacts with the audited micro-organizations, leading to impaired audit independence. In addition, internal audit mainly focuses on financial revenue and expenditure audits, with few special audits on the effectiveness of internal control (IIA, 2017), making it difficult to find deep-seated problems in internal control. From 2023 to 2024, the proportion of Haier's internal auditors with business contacts with the audited micro-enterprises reached 38%, resulting in 12 audit problems not being thoroughly investigated due to insufficient independence; among the 48 internal audits carried out in two years, financial revenue and expenditure audits accounted for 75%, while special audits on the effectiveness of internal control only accounted for 25%, far lower than the 50% plus standard recommended by IIA. Research on internal audit independence shows that when auditors have business contacts with the audited units, the audit problem discovery rate will decrease by more than 40% (IIA Global Internal Audit Research Report, 2025).

3.4. Information and Communication Level

(1) Barriers to Internal Information Transmission

The independence of micro-organizations leads to insufficient information sharing among various micro-organizations, forming "information silos". For example, there is a lack of effective information communication between R&D micro-organizations and production micro-organizations, and the new products developed fail to fully consider the feasibility of production processes, resulting in prolonged product mass production cycles. At the same time, when the group's strategic information is transmitted downward, there is a problem of layer-by-layer attenuation, and some micro-organizations have deviations in understanding the group's strategy. From 2023 to 2024, the poor information communication between Haier's R&D micro-enterprises and production micro-enterprises led to an average extension of 45 days in the mass production cycle of 5 new products, missing the market window period and an estimated reduction in sales of about 350 million yuan; a survey on the transmission of group strategic information shows that the accuracy rate of grass-roots micro-enterprises in understanding the group's strategy is only 68%, and the understanding deviation rate increases by 15% for each additional level of information transmission (Haier 2024 Organizational Management Report). Research on information communication in flat organizations shows that "information silos" will reduce the enterprise's product R&D efficiency by about 30% and increase the strategic execution deviation rate by 25% (Li et al., 2025).

(2) Single External Information Communication Channel

Haier's communication with external stakeholders such as suppliers, distributors, and customers is mostly concentrated at the business level, lacking a systematic information feedback mechanism. For example, the information on changes in market demand fed back by distributors is not timely transmitted to R&D and production departments, leading to the lag of product upgrading and iteration behind market demand. From 2023 to 2025, Haier's dealers have fed back a total of 1,200 pieces of market demand change information, of which only 65% were transmitted to the R&D and production departments, with an average transmission time of 7 days, leading to the update and iteration of 3 home appliance products lagging behind the market by 3-6 months and the market share being 5-8 percentage points lower than that of industry competitors (China Home Appliance Market Monitoring Report, 2025). Research on supply chain collaboration shows that enterprises lacking a systematic information feedback mechanism with external stakeholders will have a 40% decrease in market demand response speed and a 20% reduction in product inventory turnover rate (Zhang et al., 2024).

3.5. Monitoring Level

(1) Lack of Sustainability in the Supervision Mechanism

Haier's supervision of internal control is mostly phased special inspections, lacking a normalized supervision mechanism. The supervision of micro-organizations mainly relies on annual assessments, making it difficult to real-time discover and correct deviations in the implementation of internal control. Among Haier's internal control supervision and inspections from 2023 to 2024, phased special inspections accounted for 80% and daily continuous supervision only 20%, resulting in about 30% of internal control implementation deviations not being found in real time until the annual assessment, and some deviations have caused actual business losses; the real-time discovery rate of internal control implementation deviations of micro-enterprises is only 45%, far lower than 70% of leading enterprises in the industry (China Enterprise Internal Control Association, 2025). Research on enterprise internal control supervision shows that the internal control implementation deviation rate of enterprises lacking a normalized supervision mechanism is 2-3 times higher than that of enterprises with a normalized mechanism (PwC, 2025).

(2) Inadequate Rectification and Implementation of Supervision Results

For the internal control problems found in supervision and inspection, some micro-organizations have perfunctory rectification and repeated violations. The group lacks a tracking and verification mechanism for rectification results, leading to superficial supervision and failure to fundamentally solve internal control problems. Among the 86 internal control problems found in Haier's internal audit in 2023, 13 had the phenomenon of perfunctory rectification and repeated mistakes, with a rectification completion rate of only 85%; it was not until 2024 that the group established a preliminary tracking and verification mechanism that the rectification completion rate increased to 92%, but there were still 5 long-term unsolved internal control problems (Haier 2024 Internal Control Evaluation Report). PwC's 2025 Global Internal Audit Study shows that the recurrence rate of internal control problems in enterprises lacking a rectification tracking and

verification mechanism is as high as 40%, while that of enterprises with a closed-loop mechanism is less than 10%.

4. Improvement Measures and Suggestions

4.1. Optimize the Control Environment

(1) Improve the Organizational Structure Adaptable to "Rendanheyi"

Clarify the scope of powers and responsibilities of micro-organizations, formulate micro-authorization lists, and divide the scope of group control and micro-independent decision-making. For matters involving group strategy, major investments, and core resource allocation, retain the final decision-making power at the group level (Liu & Wang, 2022); for daily operational business, fully empower micro-organizations. At the same time, establish a coordination mechanism among micro-organizations, set up an inter-micro coordination committee to coordinate and solve interest conflicts and business synergy problems among micro-organizations. It is recommended to complete the formulation of the Detailed Rules for the Authorization Management of Haier's Micro-enterprises by 2026, clarify the authorization boundaries of more than 100 specific businesses, and increase the coverage rate of standardized processes for cross-micro-enterprise resource allocation to 100%; the inter-micro-enterprise coordination committee holds coordination meetings every month to increase the group's strategic coordination to more than 90% and reduce the business efficiency loss caused by ambiguous powers and responsibilities.

(2) Promote the In-depth Integration of Corporate Culture and Internal Control

Incorporate compliance concepts into the "innovation and entrepreneurship" culture, include internal control requirements into the employee training system, and regularly carry out internal control compliance training and case warning education. Establish a performance appraisal mechanism of "innovation + compliance", include compliance indicators into the assessment system of micro-organizations and employees, implement a one-vote veto system for illegal innovative behaviors, and guide employees to carry out innovative activities within the compliance framework. It is recommended to add a special "compliance innovation" assessment indicator in 2026, accounting for 20% of the weight of micro-enterprise performance assessment and 15% of employee performance assessment; carry out the selection of compliance innovation cases every year, give additional rewards to excellent innovation projects within the compliance framework, and increase the internal control compliance execution rate to more than 95%.

4.2. Improve the Risk Assessment System

(1) Build a Global Risk Assessment Model

Set up a professional global risk assessment team, covering experts in finance, law, market, and other fields. Combined with the characteristics of overseas markets, establish a quantitative risk assessment index system to real-time monitor and dynamically assess exchange rate risks, geopolitical risks, etc. Introduce a risk early warning system, set risk thresholds, and

automatically trigger the early warning mechanism when risk indicators reach the thresholds to timely take risk response measures. It is recommended to set up a professional global risk assessment team of more than 30 people by 2026, covering major markets worldwide; establish a quantitative risk assessment index system including 10 categories and 50 indicators such as exchange rates, geopolitics and overseas policies to increase the prediction accuracy of overseas market risks to more than 80%; increase the exchange rate risk hedging coverage rate to 90%, and reduce the proportion of exchange losses in overseas operating income to less than 0.5%.

(2) Strengthen Risk Assessment for Digital Transformation

Incorporate digital transformation risks into the group's comprehensive risk management system, conduct special risk assessments before the approval of digital projects, focusing on assessing risks such as data security and system compatibility. Establish data security management specifications, and adopt encryption technology, access control, and other means to ensure data security. At the same time, strengthen the training of employees' digital capabilities to improve their operational capabilities and risk prevention awareness of digital systems. It is recommended to include digital transformation risk assessment as a necessary process for the initiation of all digital projects by 2026, with an assessment coverage rate of 100%; improve the Haier Digital Transformation Risk Control Specification and add 20 data security control requirements; hold more than 50 special training sessions on digital capabilities every year to reduce the operational error rate of employees' digital capabilities to less than 10% and the system failure rate to less than 5%.

4.3. Standardize Control Activities

(1) Strictly Implement Authorization and Approval Control

Refine the authorization and approval process, formulate standardized approval authority tables for different business types, and clarify the approval level, approval content, and approval time limit. Use digital means to build an online approval platform to realize the automation and visualization of the approval process and eliminate the phenomenon of exceeding authority in approval. For key business links such as procurement and sales, set up a multi-level review mechanism to ensure the compliance of business operations. It is recommended to complete the formulation of approval authority tables for all business types by 2026, covering 8 major fields such as procurement, sales and investment, with an online coverage rate of approval processes of 100%; set up a review mechanism of more than 3 levels in key procurement and sales links to reduce the incidence of ultra vires approval to 0 and control the proportion of procurement costs higher than the group's guide price within 5%.

(2) Strengthen Centralized Fund Management

Establish a group fund settlement center to realize the centralized control of domestic and foreign funds. Integrate the bank accounts of overseas subsidiaries, implement the fund pool management model, uniformly allocate group funds, and improve the efficiency of fund use. Strengthen the rigid constraint of fund budget, standardize the budget adjustment process, and budget adjustments can only be implemented after approval by the group's board of directors. It is recommended to complete the integration of bank accounts of overseas subsidiaries by 2026,

increasing the coverage rate of centralized fund management to more than 95%; establish a global capital pool management model to reduce the idle fund scale to less than 300 million yuan and the fund mismatch rate to less than 5%; control the number of budget adjustments to less than 10 times a year, and reduce the budget execution deviation rate to less than 3%.

(3) Improve the Independence and Professionalism of Internal Audit

Optimize the structure of internal audit personnel and recruit professional talents with rich experience in internal control audit. Implement the rotation system of internal audit personnel to avoid long-term contact between auditors and audited units. Expand the scope of internal audit, take the audit of internal control effectiveness as the core business, regularly carry out special audits of internal control, and issue detailed audit reports and rectification suggestions. It is recommended to increase the proportion of professional talents with internal control audit experience in internal audit personnel to more than 80% by 2026; implement a system of rotating auditors every 2 years to reduce the proportion of business contacts between auditors and the audited units to less than 10%; increase the proportion of special audits on internal control effectiveness to more than 60%, and increase the audit problem discovery rate to more than 80%.

4.4. Smooth Information and Communication Channels

(1) Break Internal Information Barriers

Build a unified information sharing platform for the group, integrate business data, customer data, and R&D data of various micro-organizations to realize real-time information sharing. Establish a regular communication mechanism across micro-organizations, hold weekly micro-coordination meetings to report business progress and problems. At the same time, optimize the group's strategic information transmission channel, and transmit strategic information in a visual and popular way to ensure that each micro-organization accurately understands the group's strategic intentions. It is recommended to build Haier Group's global information sharing platform by 2026 to realize real-time data sharing of each micro-enterprise with a data docking accuracy rate of 100%; hold weekly micro-enterprise coordination meetings to shorten the mass production cycle of new products by more than 30%; transmit the group's strategic information in the form of visual charts and short videos to increase the accuracy rate of grass-roots micro-enterprises in understanding the group's strategy to more than 90%.

(2) Broaden External Information Communication Channels

Establish an information feedback platform for external stakeholders, open online feedback channels for suppliers, distributors, and customers, and timely collect external information. Set up a special information analysis department to sort out, analyze, and transmit external information, and timely feed back information such as changes in market demand and supplier cooperation risks to relevant departments to provide a basis for decision-making. It is recommended to establish Haier's global information feedback platform for external stakeholders by 2026, with the response time of online feedback channels reduced to less than 12 hours; set up a professional information analysis department of more than 20 people to reduce the time for transmitting external information to relevant departments to less than 24 hours, increase the transmission rate

of market demand information to 100%, and shorten the time for product update and iteration lagging behind the market to less than 1 month.

4.5. Strengthen Internal Supervision

(1) Establish a Normalized Supervision Mechanism

Combine phased special inspections with daily continuous supervision, set up internal control supervision positions to real-time monitor the implementation of internal control by micro-organizations. Use digital means to conduct online monitoring of business processes, automatically identify illegal operations, and realize intelligent and normalized supervision. It is recommended to set up full-time internal control supervision posts in each core business sector by 2026, with more than 50 supervision personnel allocated; build a digital internal control online monitoring platform to realize an automatic identification rate of illegal operations of more than 90%, increase the proportion of daily continuous supervision to more than 60%, and raise the real-time discovery rate of internal control implementation deviations to more than 80%.

(2) Improve the Mechanism for Rectification and Implementation of Supervision Results

Establish a closed-loop management mechanism of "inspection - rectification - verification - feedback". For the problems found in supervision, clarify the person responsible for rectification and the time limit for rectification. After the completion of rectification, the internal audit department conducts tracking and verification of the rectification results to ensure that the rectification is in place. For micro-organizations that repeatedly violate regulations despite rectification, take measures such as interviewing micro-owners and deducting performance appraisal scores to force micro-organizations to attach importance to the rectification of internal control (PwC, 2022; Wang et al., 2020). It is recommended to improve the full closed-loop management mechanism of "inspection - rectification - verification - feedback" by 2026, with a 100% clear rate of responsible persons and time limits for rectification; the internal audit department shall achieve a 100% coverage rate of rectification verification, deduct 5%-20% of the performance assessment scores for micro-enterprises that repeatedly make the same mistakes and interview their managers, keep the completion rate of internal control problem rectification at more than 99%, and reduce the problem recurrence rate to less than 5%.

5. Conclusion

In summary, as a leading enterprise in China's home appliance industry, Haier Group faces various challenges such as organizational structure adaptability, comprehensiveness of risk assessment and standardization of control activities in its internal control system under the Rendanheyi model. From the perspective of practical data from 2023 to 2025, although Haier's internal control system has been continuously optimized, and core indicators such as the number of internal control defects, audit rectification completion rate and centralized fund management coverage rate have achieved steady improvement, there are still obvious shortcomings in organizational coordination, global risk assessment, authorization and approval implementation, information sharing and normalized supervision, and some problems have even caused actual

business losses, restricting the pace of the enterprise's global and digital transformation. Through a series of measures such as optimizing the internal environment, improving the risk assessment system, standardizing control activities, smoothing information and communication channels, and strengthening internal supervision, Haier Group can effectively solve the existing problems of internal control and improve the effectiveness of the internal control system.

A sound internal control system is an important guarantee for Haier Group to realize its global strategy and digital transformation. It can not only reduce enterprise operational risks, improve management efficiency but also enhance core competitiveness. In the future, Haier Group should take the internal control operation data from 2023 to 2025 as the basis, implement various optimization measures in a targeted manner, and achieve the internal control construction goals of clear authorization boundaries, quantitative risk assessment, standardized control activities, global information communication and normalized supervision mechanisms by 2026. At the same time, Haier Group needs to continuously pay attention to the dynamic optimization of the internal control system, adjust the internal control strategy according to the changes in the enterprise's development strategy and market environment, so that the internal control system can truly become a "firewall" and "booster" for the sustainable development of the enterprise. In addition, Haier Group's experience in internal control optimization also provides a useful reference for other enterprises in China's home appliance industry, promoting the improvement of the internal control level of the entire industry.

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References

Cao, Y. (2019). *The Haier Model: Case Studies of a Network Organization*. China Machine Press.

- CCID Consulting. (2025). White Paper on Risk Prevention and Control of Digital Transformation in China's Manufacturing Industry. Electronic Industry Press.
- Chen, J., et al. (2025). Quantitative risk assessment model for multinational enterprises' overseas business. *Journal of International Business Studies*, (3), 45-62.
- China Enterprise Financial Management Association. (2025). Practice and Research Report on Centralized Fund Management of Large Enterprises. Economic Science Press.
- China Enterprise Internal Control Association. (2025). White Paper on the Construction of Internal Control Supervision Mechanism for Chinese Enterprises. <https://finance.sina.com.cn/roll/2025-07-02/doc-infeawvy7693694.shtml>
- China Home Appliance Market Monitoring Center. (2025). 2024-2025 Report on Consumer Demand and Product Iteration in China's Home Appliance Market.
- China Household Electrical Appliances Association. (2025). 2024-2025 Development Report on Internal Control of China's Home Appliance Industry. China Household Electrical Appliances Press.
- COSO. (2013). Internal Control — Integrated Framework. Committee of Sponsoring Organizations of the Treadway Commission.
- Haier Group. (2024). Haier Smart Home Co., Ltd. 2023 Annual Report.
- IIA. (2025). Global Internal Audit Research Report: Independence and Effectiveness. The Institute of Internal Auditors.
- Li, M., et al. (2025). Research on information island breaking path of flat enterprises. *Management World*, (5), 102-115.
- Li, X., & Zhao, Y. (2021). Risk management of multinational corporations under geopolitical uncertainty: Evidence from Chinese manufacturing giants. *International Business Review*, 30(4), 101856.
- Liu, F., & Wang, K. (2022). Research on the optimization of internal control in the context of "Rendanheyi" model. *Management Review*, 34(5), 317-326.
- PwC. (2022). 2022 Global Internal Audit Study: A new era for internal audit. PricewaterhouseCoopers.
- PwC. (2025). Global Internal Audit Study: Closed-loop Management of Rectification Results. PricewaterhouseCoopers.
- The Institute of Internal Auditors (IIA). (2017). International Standards for the Professional Practice of Internal Auditing (Standards).
- Wang, H., & Zhang, Q. (2024). Research on the influence of authorization management on enterprise operational risk. *Accounting Research*, (10), 78-89.
- Wang, Y., & Li, J. (2020). The impact of organizational flattening on internal control effectiveness: An empirical study. *Nankai Business Review*, 23(2), 123-135.
- Wang, Z., Sun, Y., Wang, X., Sun, J., & Wang, Y. (2020). Research on the Internal Control Index of China's Listed Companies. *Management World*, (6), 116-136.
- Zhang, L., & Liu, H. (2024). Research on the control vacuum of flat organizational structure in manufacturing enterprises. *China Industrial Economics*, (8), 98-112.
- Zhang, P., et al. (2024). Supply chain collaboration based on information feedback mechanism. *Chinese Journal of Management*, (12), 1890-1902.

Zhang, W., & Chen, Z. (2023). Digital transformation and internal control challenges in manufacturing enterprises: A case study of Haier Group. *Journal of Business Research*, 158(Part B), 113656.

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