8

Integrity and Transparency

A Trustworthy Company

8.1 Corporate Governance.....163
8.2 Risk Management.....166
8.3 Information Security.....177
8.4 Ethical Management.....182
8.5 Quality Management.....186
8.6 Customer Relationship Management.....190

Superior Customer Service

Nanya Technology supports customers in early-stage product development and verification by providing parameter measurement services on customer platforms, enabling early detection and resolution of compatibility issues before mass production. In 2024, Nanya Technology completed a total of 1,032 measurement service cases and 27 joint qualification service cases.

140 Suppliers

Nanya Technology improved information security management for its supply chain by selecting 140 suppliers for audits, an increase of 164% compared to last year.

TOP 5%

Nanya Technology ranked in the top 5% among listed companies in the 11th (2024) Corporate Governance Evaluation.

Complying with regulations and ethical norms, Nanya Technology consistently strengthens its corporate governance and risk management mechanism through comprehensive education and training programs. These efforts help cultivate business ethics among all employees, drive mutual benefits across industry, and position Nanya Technology as the most trusted company.

Strategy and Performance of Material Topics

◆ Exceeded goals ◆ Achieved ◆ Not achieved

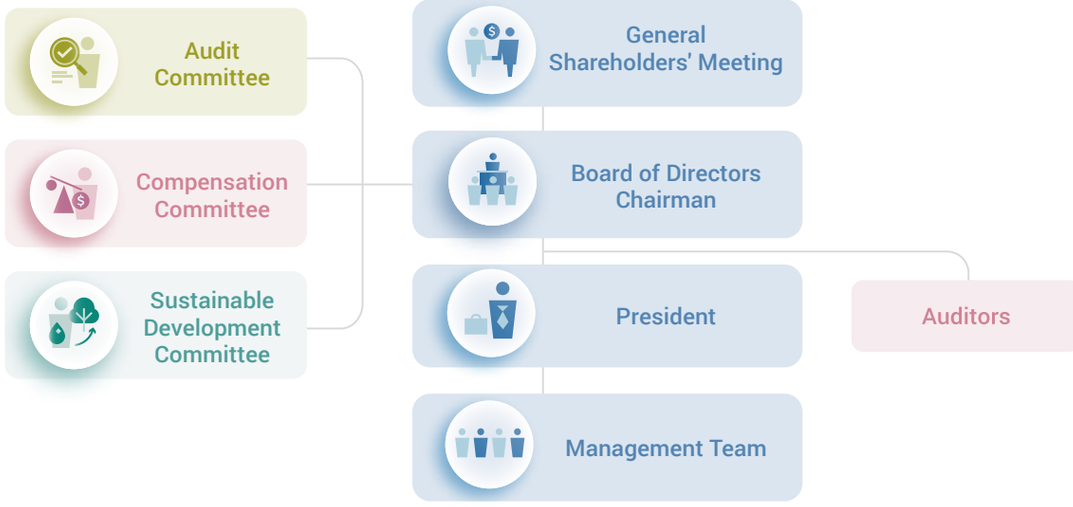
Material Topics and Strategy	2024 Goals	2024 Performance and Goal Achievement	2025 Goals
Risk Management • Risk Management: Establishing effective risk mitigation mechanisms and procedures. • Loss Control: Conducting operational stress tests and reducing operating costs. • Effectiveness: Engaging all employees in risk management training and conducting regular operational risk drills.	Conduct 4 regular quarterly meetings and report to the Board of Directors twice	◆ Conducted 4 regular quarterly meetings and reported to the Board of Directors twice	Conduct 4 regular quarterly meetings and report to the Board of Directors twice
	Contingency plan completion rate: 55 items	◆ 72 items	Contingency plan completion rate: 64 items
	Stress testing: Conduct 7 aspects annually	◆ 9 aspects	Stress testing: Conduct 7 aspects annually
	Education and training: 100% of all employees engaged	◆ 100%	Education and training: 100% of all employees engaged
Ethical Management • Focus on both internal and external operations: Conducting regular internal education, training, and awareness campaigns, extending initiatives to external stakeholders, ensuring sufficient reporting channels and protective measures to foster a culture of workplace ethics and legal compliance.	Material violations of regulations: 0 cases	◆ 0 cases	Material violations of regulations: 0 cases
	Corruption: 0 cases	◆ 1 cases[Note 1]	Corruption: 0 cases
	Employee labor ethics training completion rate: 100%	◆ 100%	Employee labor ethics training completion rate: 100%
	Employee antitrust training completion rate: 100%	◆ 100%	Employee antitrust training completion rate: 100%
	Workplace violation: 0 cases	◆ 1 cases[Note 2]	Workplace violation: 0 cases
	Violation of trade secrets: 0 cases	◆ 0 cases	Violation of trade secrets: 0 cases
Customer Service • Design and Testing: Utilizing global engineering support services to resolve issues with customer design and testing. • Production and Sales: Implementing rigorous quality control and improving delivery efficiency. • Customer Complaint Procedure: Promptly resolving customer issues through customer compliant management system.	Customer satisfaction score: over 91 points	◆ 95.7 points	Customer satisfaction score: over 91 points
	Customer platform parameter measurement services: 940 cases	◆ 1,032 cases	Customer platform parameter measurement services: 950 cases
	Customer product joint qualification services: 25 cases	◆ 27	Customer product joint qualification services: 25 cases
	Customer technical sharing and training sessions: 94 sessions	◆ 96 sessions	Customer technical sharing and training sessions: 96 sessions

Note 1: For the Company's anti-corruption measures, please refer to page 183 of this report.

Note 2: For details on the handling measures of the 1 workplace violation cases, please refer to page 62 of this report.

8.1 Corporate Governance

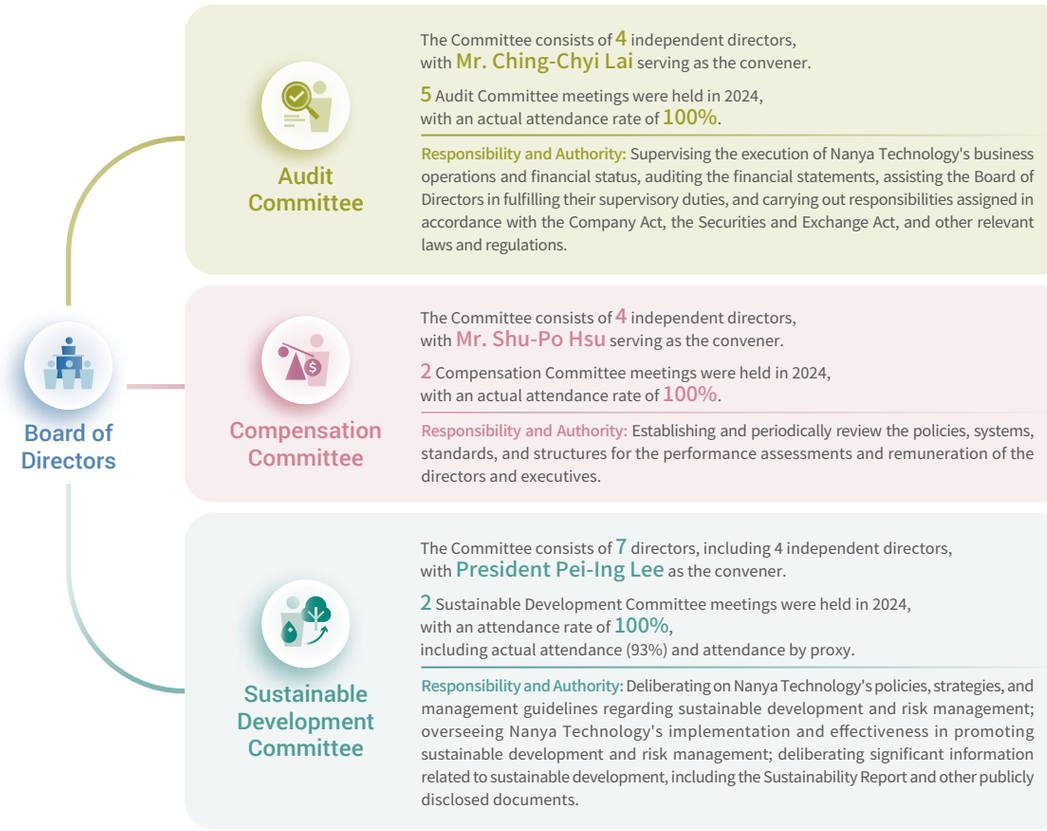
Nanya Technology believes that we can strengthen our operations and ensure the rights of shareholders through sound and efficient corporate governance mechanisms. In 2025, Nanya Technology was ranked in the top 5% of listed companies in the 11th (2024) Corporate Governance Evaluation for the seventh time, affirming the Company's continued commitment to corporate governance.



1. Operations of Board of Directors and Functional Committees

The operations of Nanya Technology's Board of Directors are carried out in accordance with applicable regulations and resolutions of shareholders' meeting. The Board members possess professional knowledge, skills, and literacy required for performing their duties. They shall adhere to the principle of sustainable management in order to maximize value for shareholders. The Board of Directors' primary responsibilities include ensuring the transparency of the Company's information, compliance with laws and regulations, appointment of the Chief Executive Officer, formulation of profit distribution proposals, and supervision and guidance of company operations. Nanya Technology has established its Articles of Incorporation as the basis for corporate governance and operations. In accordance with the Company Act, any changes to the Articles must be approved by a shareholders' resolution before taking effect in order to protect shareholders' rights. Following the provisions in the Articles of Incorporation, Nanya Technology has purchased liability insurance for board members to cover legal compensation responsibilities arising from the performance of their duties, allowing board members to focus on fulfilling their responsibilities. To establish a sound board governance system, strengthen supervision functions, and enhance management capabilities, Nanya Technology has formulated the Rules of Meetings of the Board of Directors, which outlines provisions for the conduct of Board meetings. In addition, the Company's Corporate Governance Principles stipulate that directors should maintain an annual Board meeting attendance rate of at least 80%, which is also included in the board performance evaluation. A total of 6 Board meetings were held in 2024, with directors achieving an actual attendance rate of 100%.

To enhance supervisory functions and strengthen management mechanisms for the Board of Directors, Nanya Technology has established the Audit Committee, Compensation Committee, and Sustainable Development Committee under the Board of Directors. Each functional committee is accountable to the Board and submits relevant proposals to the Board for resolution.

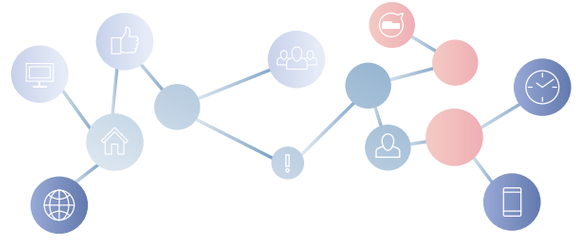


Management of Conflicts of Interest

Nanya Technology has incorporated provisions for avoiding conflicts of interest into the Rules of Meetings of the Board of Directors, as well as the charters of the Audit Committee, Compensation Committee, and Sustainable Development Committee, and within our Ethical Corporate Management Principles. Directors, managers, and stakeholders attending or participating in Board or committee meetings must disclose the material details of any interests they or the legal entities they represent may have in order to prevent a conflict of interest arise with any agenda item. If such a conflict poses a risk of harming the Company's interests, they shall refrain from participating in discussions or voting on the matter and must recuse themselves accordingly. They are also prohibited from voting on behalf of other directors, thereby safeguarding the independence of the Board of Directors' oversight. Furthermore, Nanya Technology has established a Code of Ethics for Directors and Managers, requiring relevant personnel to uphold ethical standards in the performance of their duties and to avoid personal interests or potential conflicts that could compromise the Company's overall interests, thereby preventing actions that may harm the interests of the Company or its shareholders. For information about directors' concurrent positions, cross-shareholdings between the Company and other stakeholders, as well as details about major shareholders and related parties, please refer to the "B. Corporate Governance Report" and "C. Capital and Shares - List of Major Shareholders" sections of our 2024 Annual Report and the information on "Related Party Transactions" notes in the consolidated financial statements.

Nomination and Election of Directors

Nanya Technology has established fair, just, and transparent Rules for the Election of Directors and encourages shareholders to participate in the nominations and elections of directors. Key considerations for director selection should include not only professional expertise, background experience, diversity, and independence, but also the ability to monitor the Company's ESG-related material topics. Besides the Board of Directors, shareholders who hold more than 1% of Nanya Technology's total issued shares may submit a list of director candidates to us. The Board will check the independence qualifications of independent director candidates before including them in the candidate list. In addition, Nanya Technology's Articles of Incorporation stipulates that the Board of Directors shall consist of 9 to 12 members, including at least 3 independent directors, with a 3-year term. Nanya Technology has also established regulations for evaluating the performance of the Board of Directors and conducts regular annual evaluations. The evaluation results serve as a reference for the nomination and re-election of directors.



Board Diversity

Nanya Technology's Corporate Governance Principles stipulate that the composition of the Board of Directors shall reflect diversity, with no restrictions based on gender, race, or nationality. The current Board of Directors consists of 12 members from diverse professional backgrounds, including 4 independent directors and 1 female director, accounting for 33% and 8% respectively. Among the independent directors, one holds a Certified Public Accountant license, and no independent director concurrently serves as an independent director of more than 3 other public companies. There are 8 directors who are not employees of Nanya Technology, accounting for 67%, and the Chairman also does not serve as a Nanya Technology executive, with clear division of duties. As of the end of June 2025, 1 director is aged 51-60, 5 directors are aged 61-70, and the remaining directors are aged over 70. In addition, the average term of service of the directors is 10.5 years. The academic and professional backgrounds of the Board members are aligned with the Company's material ESG topics, encompassing R&D innovation, risk management, climate strategy, and green product development. Relevant information about the directors can be found in the "B. Corporate Governance Report" section in our 2024 Annual Report.

Board Diversity Implementation

Continuous Learning for Board Members

To enhance the competencies of the directors, Nanya Technology arranges at least 6 hours of training courses for the directors every year. In 2024, the directors received a total of 96 hours of training courses, with an average of 8 hours per director. The courses cover a diverse range of subjects including economics, corporate governance, risk management, ESG sustainable governance, climate change, sustainable finance, green finance, nature-related financial disclosures, insider trading prevention, AI-related topics, and legal regulations. For details on training courses provided to directors, please refer to pages 52~54 of our 2024 Annual Report.

In addition to diverse professional backgrounds, our directors have experience as senior executives, government officials, or public representatives, equipping them with a wide range of abilities required to perform their duties as directors. In 2025, Nanya Technology will continue to arrange training courses for directors on sustainable development, corporate governance, and risk management, aligning with emerging trends in sustainability issues and corporate governance to enhance the overall competencies of the Board.

Performance Evaluation of the Board of Directors

To implement corporate governance, enhance the Board of Directors' functions, and improve operational efficiency through performance goals, Nanya Technology has established the Performance Evaluation of the Board of Directors, incorporating corporate sustainability indicators such as *legal compliance*, *corporate governance*, *risk management*, and *sustainable development* into the self-evaluation criteria. The Board of Directors and functional committees undergo performance evaluations annually. The relevant data thereof can be used as a reference for director remuneration and nomination for re-appointment. In 2024, performance evaluations were conducted for the overall Board of Directors, individual directors, as well as the Audit, Compensation, and Sustainable Development Committees. According to the evaluation results, all were rated as *excellent*. The results were reported to the Board of Directors on December 18, 2024. For the implementation of performance evaluations in 2024, please refer to pages 25~26 of our 2024 Annual Report.

2. Remuneration of Directors and Senior Executives

Nanya Technology's independent directors receive a fixed monthly remuneration, as well as transportation allowances based on attendance at Board meetings or functional committees; they do not receive any variable remuneration. Other directors only receive transportation allowances based on attendance and are not granted any additional remuneration. No director receives director's remuneration.

The remuneration of Nanya Technology's managers comprises monthly salaries and various bonus schemes, pension plans, and evaluation systems. All components are approved by the Compensation Committee and subsequently submitted to the Board of Directors for resolution prior to implementation. Members of the Compensation Committee are all independent directors and provide external remuneration recommendations. The committee members meet at least twice a year to ensure the reasonableness and competitiveness of remuneration.

Salary adjustments, bonuses, and other remuneration for senior executives at Nanya Technology are determined based on the Company's operational performance as well as personal contributions and achievements. Consideration is also given to economic, environmental, and social impacts, along with other corporate governance indicators aligned with sustainable development. The Human Resources Department drafts recommendations based on industry salary benchmarks, which are reported to and reviewed by the Compensation Committee before being submitted to the Board of Directors for resolution and implementation. Remunerations of the President and Vice President are determined in accordance with Company policy. Fixed remuneration consists of monthly salary, diligence incentives, year-end bonuses, monthly pension contributions (under both the new and old pension systems) in line with Nanya Technology's Retirement Policy, and employee welfare funds. Variable remuneration includes special incentives, performance-based bonuses, and employee bonuses granted on special occasions, aligned with the Company's retention measures and business performance.

Taiwan

In 2024, the highest-paid employee at Nanya Technology received approximately **11.83** times the median total compensation of all other employees.

In 2024, the increase in total compensation of the highest-paid employee was **3.16** times greater than the increase in the median total compensation of all other employees, compared to 2023.

In Addition to Annual Performance Assessments, Senior Managers Undergo 360-Degree and Sustainable Development Evaluations Across the Following Aspects:

- Economic Performance
- Comprehensive Customer Service
- Ethical Management
- Sustainable Supplier Management
- Sustainable Management Mechanism
- R&D and Innovation
- Occupational Health and Safety
- GHG Management and Energy Management Under Climate Change
- Resource Recycling
- Environmentally Friendly Products
- Employee Growth and Career Development
- Talent Retention and Employee Care
- Risk Management

Shares Held by Senior Executives

March 31, 2025

Title	Name	Shares	Title	Name	Shares
President	Pei-Ing Lee	1,265,098	Assistant Vice President	Mark Mao	0
Executive Vice President	Lin-Chin Su	480,601	Assistant Vice President	Jeff Lin	250,027
Vice President	Joseph Wu	250,000	Assistant Vice President	Rex Chen	26,000
Vice President	Rex Chuang	450,000	Assistant Vice President	Chuan-Jen Chang	163,048
Vice President	Yau-Ming Chen	0	Assistant Vice President	Wooder Yang	0

8.2 Risk Management

To strengthen functions of the Board of Directors and its risk management mechanisms, Nanya Technology has established a Sustainable Development Committee under the Board of Directors to oversee risk management operations, environmental protection, social responsibility, corporate governance and other actions to help Nanya Technology achieve sustainable operation goals. Per the Sustainable Development Committee Charter, the committee requires at least 3 members, with more than half being independent directors. Currently, the committee consists of 4 independent directors and 3 directors, all 7 possessing expertise in crisis handling and risk management across various areas.

Nanya Technology has established its Risk Management Regulations approved by the Board of Directors. The risk management policies aim to effectively identify, analytically evaluate, actively manage, and continuously monitor various risks, while raising risk awareness among all employees. The goal is to raise risk awareness among all employees, maintain risks within acceptable levels, and ensure that risk management is comprehensive, effective, and optimized for maximum benefit.

1. Missions and Commitments

Risk Management Missions

We establish and maintain an effective risk management system, continuously improving it to reduce operating costs, ensure stable profitability, create a quality work environment, and achieve the goal of sustainable business operations.

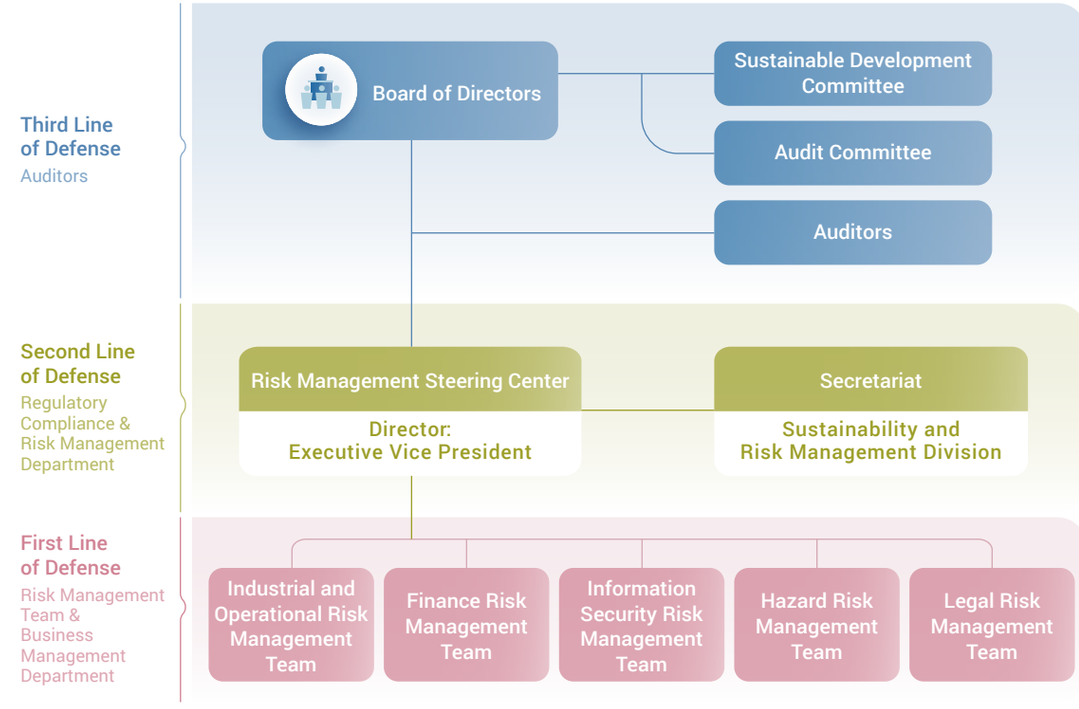
Risk Management Commitments

- All employees shall adhere to their commitments and managers in particular should lead by example and fulfill their supervisory responsibilities.
- We shall ensure that all employees receive adequate training and have the skills for performing various risk management tasks to ensure the Company's normal operations.
- We shall provide necessary resources to maintain the effective operations of risk management mechanisms and continue to implement improvement measures to reduce risks.
- We shall strengthen communication with stakeholders, raise risk awareness among all employees, and thoroughly implement our risk management policy.

2. Organization and Operations

The Board of Directors serves as the highest decision-making and supervisory body for risk management, responsible for establishing Nanya Technology's risk management policies and related regulations. It oversees the implementation and effective operation of the risk management system. The Sustainable Development Committee reviews the Company's risk management policies, strategies, and management approaches, and supervises the execution of risk management initiatives and implementation plans to ensure the achievement of risk management objectives. The Sustainable Development Committee meets at least twice a year and reports the operations of risk management measures or major risk items to the Board of Directors in a timely manner.

In order to ensure smooth and effective risk management operations, Nanya Technology has established a three-line defense mechanism as shown in the organizational chart below.



Nanya Technology established the Risk Management Steering Center in accordance with its Risk Management Regulations. Led by the Executive Vice President as Director and composed of department heads from across the Company, the Center promotes and oversees the implementation progress and overall risk control efforts of all risk management teams. The Risk Management Steering Center convenes quarterly meetings to review the performance of each risk management team and evaluate their business continuity plans, ensuring they are appropriate, relevant, and effectively implemented. Moreover, to align with the Company's operational strategies, the Center has established five risk management teams: industrial and operational, finance, information security, hazard, and legal. Each risk management team is composed of dedicated personnel appointed by various business management departments. Besides assisting these departments with gathering information on risks from both internal and external environments and performing daily risk monitoring, each risk management team also tracks and assesses the risk level of various risk factors, implements improvement measures, and reports the implementation results of risk management measures to the Center.

Nanya Technology established the Sustainability and Risk Management Division, a dedicated risk management organization, to implement risk management and operations. The Division's main task is to assist the Risk Management Steering Center in formulating management approaches, planning and implementing relevant activities, and supervising the operations of each risk management team to ensure proper risk control.

The Auditors annually check the status of risk management policy implementation and high-risk items, providing improvement suggestions when needed and following up on improvement results. They regularly report audit findings and the progress of improvement measures to the Audit Committee, effectively managing both existing or potential company risks. To verify the proper implementation of Nanya Technology's risk management system, the Company commissions a third party to conduct external audits every two years. The verification was commissioned to AFNOR, an international certification company for the French standardization, and was completed in May 2025, resulting in the issuance of a valid statement of alignment with the guidelines and principles of ISO 31000.

Responsibilities of the Risk Management Steering Center

3. Risk Management System

Nanya Technology's risk management system identifies and analyzes the risks that the Company faces. It sets appropriate risk appetite and control procedures, and monitors all risks and compliance with risk appetite limits. Through the risk management system, Nanya Technology identifies potential risks and opportunities, effectively managing them to ensure smooth business operations. This approach helps create value for shareholders, employees, customers, and the society, contributing to Nanya Technology's achievement of sustainable development goals.

Nanya Technology integrates its long-term business strategic goals with Enterprise Risk Management (ERM), incorporating the mechanisms and rationale of the ISO 31000 guidelines, to establish its risk management policies and procedures as guiding principles. Each year, Nanya Technology reviews risk items that have external impacts, are newly identified or increasingly significant, may pose long-term potential impacts, or exhibit notable and tangible characteristics. Nanya Technology lists these risk items as emerging risks for the next 3-5 years and continuously tracks them. Through long-term planning and promotion, the Company builds risk awareness among all employees, embedding it into each department's daily operations to ensure the Company's normal operations.

4. Risk Appetite and Management Principles for Major Risk Categories

When analyzing risk ratings, various business management departments evaluate the characteristics and impact levels of identified risk factors, determine appropriate quantitative or qualitative measurement indicators, assess risk levels, and define risk appetite and tolerance limits. Based on the above requirements, the Sustainability and Risk Management Division consolidates relevant information and reports it to the Risk Management Steering Center for resolution. The approved decisions then serve as the foundation for daily risk control and management. The Risk Management Steering Center reviews risks and implements relevant measures on this basis to ensure that various business strategies comply with the principles for managing risk appetite.

Determine Risk Appetite

- **Risk Management Steering Center**: Determine company-level risk appetite and tolerance
- **Business Management Departments**: Determine risk appetite and tolerance

Risk Control and Management

- **Risk Management Steering Center**: Supervise risk management activities to ensure compliance with risk appetite
- **Business Management Departments**: Manage and respond to risks based on risk appetite

Risk appetite and corresponding management principles

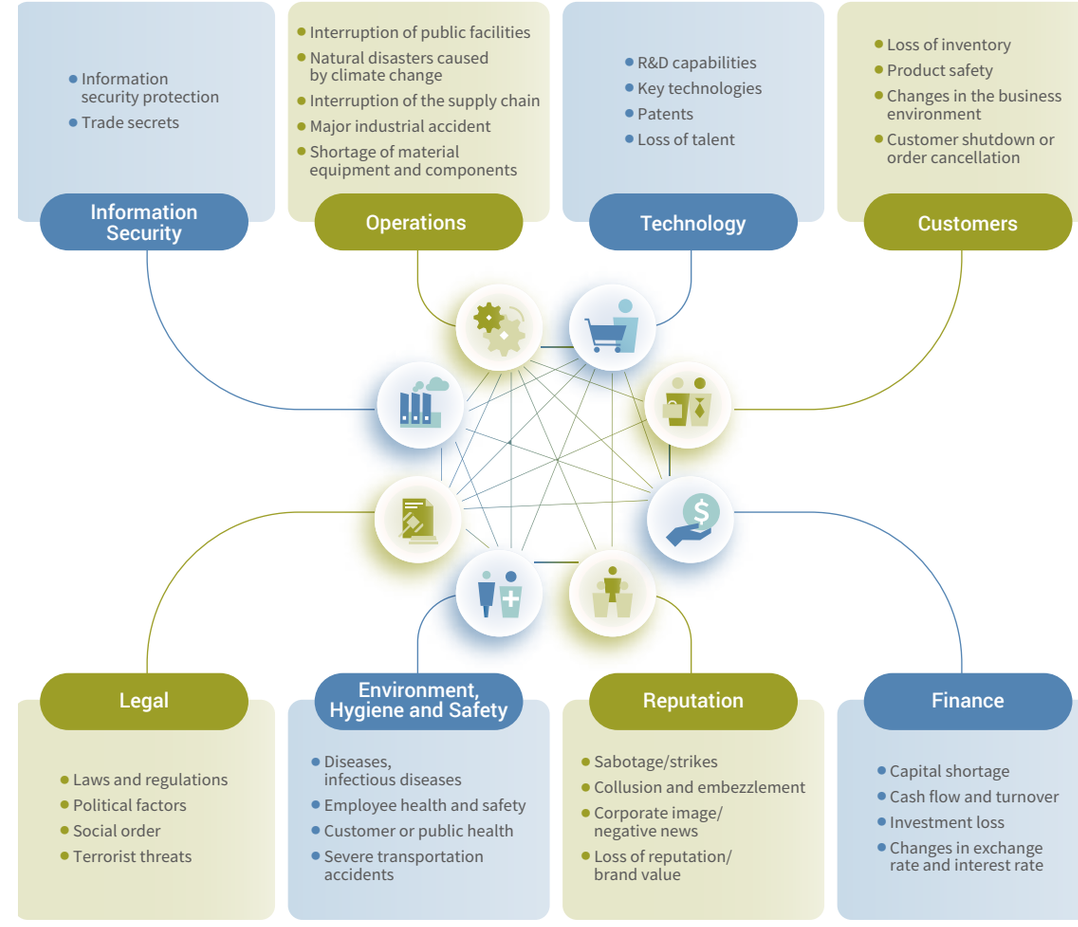
High Risk Appetite	I L M	A disciplined risk-taking approach tends to be adopted to maximize possible benefits.
Medium Risk Appetite	A C E G H J K O Q S T	The balance between positive benefits and negative costs needs to be constantly evaluated when making decisions.
Low Risk Appetite	B D F N P R	Risks that require active avoidance or related actions to minimize or eliminate the likelihood of occurrence.

Risk appetites for 20 major risk categories

A. Damage of Material Facilities, Equipment, and Components
B. Interruption of Public Facilities
C. Natural Disasters and Severe Weather
D. Disruption of Supply Chain Systems
E. Severe Transportation Accidents
F. Major Industrial Accidents
G. Interruption of Communications
H. IT System Losses
I. Loss of Inventory and Stocks
J. R&D Capabilities
K. Resource Shortage
L. Customer Shutdown or Order Cancellation
M. Finance
N. Personnel Losses
O. Sabotage, Strikes, Thefts, and Smuggling
P. Collusion and Embezzlemen
Q. Diseases and Infectious Diseases
R. Violation of Laws and Regulations
S. Information Security
T. Loss of Corporate Image, Reputation, and Brand Value

5. Relevance of Risk Factors

In accordance with Nanya Technology's risk management system, we identify potential risks, threats, and operational impact factors from both internal and external environments across areas such as company operations, technology, customers, finance, reputation, environment, hygiene, and safety, legal issues, and information security. We conduct an analysis to identify the risk factors with the highest correlation. Through quarterly meetings, we regularly review related prevention and improvement measures, enhancing our standard operating procedures. Additionally, we regularly conduct emergency response drills to ensure effective risk control and minimize potential damage.



6. Emergency Response Mechanisms and Measures

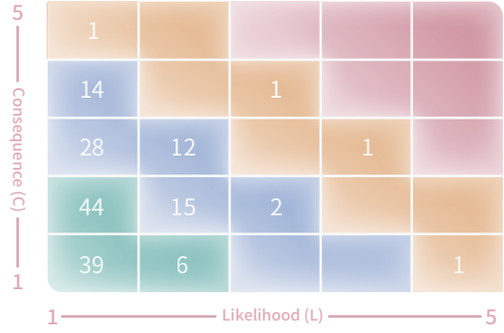
Nanya Technology adheres to the principles, framework, and mindset of ISO 22301, implementing them into our emergency response mechanisms and measures. We also comply with ISO 9001, ISO 14001, ISO 50001, ISO 27001, and ISO 45001, with all certifications successfully completed. To reduce risks and hazards from emergencies, Nanya Technology has established complete operating standards and methods for handling emergent non-conforming incidents. These cover manufacturing, supply chain and storage, information security, human resources, and other areas. This approach allows us to immediately take response measures when emergencies occur, reduce impacts, and quickly recover to ensure normal operations that meet customer demands. For example, Nany Technology has established specific handling steps and improvement measures for raw material shortages, events affecting more than 10% of production (such as earthquakes, typhoons, gas leaks, fires, labor shortages), utility system failures, automation system malfunctions, issues with subcontractor capacity, and significant post-sale product returns from customers.

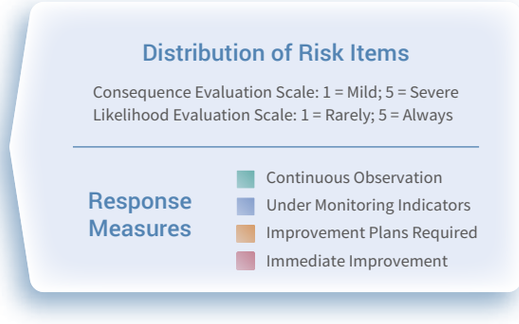
Additionally, for emergency response to personnel safety incidents such as fires, gas leaks, liquid spills, unusual odors, earthquakes, and radiation leaks, all response measures, reporting procedures, command systems, and handling processes comply with relevant environment, hygiene and safety regulations. Nanya Technology conducts at least one factory-wide emergency evacuation drill and two fire drills each year to ensure the effectiveness of its emergency response measures.

7. Risk Identification and Stress Testing

Risk Identification Results

Each year, Nanya Technology identifies risk items proposed by the Risk Management Steering Center and takes appropriate measures based on risk levels. In 2024, a total of 164 risk items were proposed. The risk profile and distribution of items after identification are shown below. According to the statistics, there were 0 items requiring immediate improvement, 4 items needing improvement plans, 71 items requiring monitoring indicators, and 89 items needing continuous observation.





Risk Response Measures

After risk identification, 1 operational item and 3 information security items were found to require improvement plans. As for the 1 operational risk, system optimization is required in response to regulatory changes to ensure compliance with the regulations. The 3 information security risks include potential cyberattacks or damage to FAB machines, artificial Intelligence (AI)-driven cyberattacks, and Business Email Compromise (BEC). Each risk management team has already developed and is continuously implementing corresponding response measures, along with establishing appropriate handling mechanisms.

Risk Item

In response to regulatory changes, system optimization is required to ensure compliance with the regulations

Factors for Assessment ● Likelihood ● Consequence ● Geographical location

Risk Description

The Air Pollution Control and Emissions Standards for the Semiconductor Industry were tightened on May 4, 2023. Existing processes must ensure that VOCs concentrations ≤14ppm and acidic pollutants ≤0.5ppm for each exhaust pipe. External testing shows some current levels exceed or are approaching these limits.

Mitigation Measures

- Improvement plans have already been evaluated and submitted to the Environmental Protection Department as required. Currently there are no concerns about penalties affecting production.
- To address potential risks of future emissions exceeding regulatory limits, we have planned facility improvements including CDO inorganic acid enhancement for acid exhaust, VOCs enhancement for acid exhaust, and the installation of continuous VOCs monitoring equipment on acid/alkaline exhaust pipes. These improvements are scheduled for completion by December 2025 to meet regulatory standards.

Potential cyberattacks or damage to FAB machines

Factors for Assessment ● Likelihood ● Consequence ● Business relevance

Risk Description

With Industry 4.0 and smart manufacturing advancement, semiconductor fabrication (FAB) machines increasingly rely on network connections for remote monitoring and automated production, making machines potential targets for attacks. Potential risks include:

- Ransomware Attacks: Attackers can infiltrate machine management systems (like SCADA and MES), potentially encrypting critical production data and halting production.
- Remote Equipment Control Breaches: Hackers could exploit network vulnerabilities or weak passwords to control machines, causing abnormal operation or malicious parameter changes that affect product quality and production safety.

Mitigation Measures

To mitigate potential attacks on FAB machines, the Company has established a robust security posture by cataloging assets and network topology, implementing vulnerability management, and continuously building monitoring and response mechanisms across all facilities.

Risk Item

AI-Driven Cyberattacks

Factors for Assessment ● Likelihood ● Consequence ● Business relevance

Risk Description

As AI technology advances, hackers are using AI to automate attacks, increasing precision and scale of attacks with risks including:

- AI-Enhanced Phishing: AI can analyze corporate social networks and historical email content to automatically generate highly convincing fraudulent emails, increasing the likelihood victims will click malicious links or download attachments.
- AI-Driven Penetration Testing and Automated Attacks: Hackers can use AI to automatically scan corporate network vulnerabilities and intelligently adjust attack strategies, improving success rates and reducing company response time.
- Adversarial AI Attacks: Using AI technology to deceive corporate defense mechanisms, such as misleading intrusion detection systems (IDS/IPS) or AI defense models, making malicious behavior difficult to detect.

Mitigation Measures

To counter AI-driven cyberattacks, the Company employs multi-layered defense mechanisms (such as firewalls, intrusion detection, endpoint security), ensures regular system and software updates, and has implemented AI threat detection and incident response to reduce information security risks.

Business Email Compromise (BEC)

Factors for Assessment ● Likelihood ● Consequence ● Business relevance

Risk Description

Business Email Compromise (BEC) attacks typically use social engineering and phishing to infiltrate corporate email accounts, resulting in financial losses or sensitive information leaks. Common risks include:

- Whaling Attack: Attackers impersonate senior executives, requesting finance staff or partners to execute urgent money transfers, causing financial losses.
- Supply Chain Fraud: Hackers infiltrate supplier or partner email systems to send fake invoices or change payment account details, leading companies to make payments to hackers' accounts.
- Credential Leaks and Account Takeovers (ATO): Attackers use leaked account passwords to log into corporate email systems, impersonating internal employees or external partners for fraud or intelligence theft.

Mitigation Measures

- To prevent BEC attacks, Nanya Technology continuously strengthens employee information security education to raise awareness and enhances email protection systems to reduce the impact of malicious emails on the Company.
- Deploying AI technology to detect abnormal email behavior for early detection of BEC attacks.

2024 Major Response Measures Taken by Various Risk Management Team

Risk Category	Major Response Measures
Operational Risk	● Supply Chain: Trump 2.0 US-China trade war, Russia-Ukraine war, Israel-Palestine conflict and other geopolitical risks could cause supply chain disruption. Nanya Technology promptly investigated suppliers and materials in affected regions, identified alternative suppliers for potentially risky items, and increased safety stock levels accordingly. ● Electricity: Nanya Technology conducts annual emergency response drills simulating different power restriction scenarios and continues to track the power development plans and stability measures of the government and Taiwan Power Company (Taipower) to assess risks and respond promptly. Following the lightning strike on August 13, 2024, which caused abnormalities in Taipower's power supply, Nanya Technology actively coordinated with Taipower to install *transmission line lightning arresters* on the Company's 161kV feeder towers. The installation was completed in January 2025.
Information Security Risk	● External Website Information Security Protection: To reduce risks of company website hacking and page tampering, Nanya Technology has implemented stronger access controls, red team assessments, and automated webpage integrity check mechanisms to ensure website security and stability. ● DDoS Attack Prevention: To reduce the risk of website paralysis from DDoS attacks, Nanya Technology has partnered with network providers for traffic cleaning, and strengthened network infrastructure, abnormal detection systems, response mechanisms, and automated defense rules to ensure business continuity.
Financial Risk	DRAM products are primarily sold in USD. Nanya Technology established an offshore subsidiary at the end of 2018 to reduce the impact of exchange rate fluctuations on the parent company's USD position. We will continue to regularly review and manage our USD position through the following methods: ● Converting USD cash to TWD, maintaining minimum USD cash positions; ● Evaluating forward exchange sales to reduce the exchange rate risk of accounts receivable; ● Evaluating increasing USD liabilities to offset accounts receivable exchange rate risk, maintaining reasonable net USD positions to reduce the impact of TWD appreciation/depreciation on profits and losses.

Risk Category	Major Response Measures
Hazard Risk	• Management System Risk Control: Through implementation of Environmental, Safety and Hygiene (ESH) management systems (ISO45001 & ISO14001), the Company continuously identifies potential HSE risks in operations. Low-risk items are monitored through indicators, while medium- and high-risk items are subject to tracking and improvement plans. Incidents are treated as unacceptable risks, requiring related departments to analyze root causes and apply the findings across the organization to facilitate a comprehensive review and prevent recurrence. • Construction Safety Management: Construction projects are high-risk and prone to major occupational accidents. Safety management of Nanya Technology's 5A new FAB expansion project is a key focus of the annual risk management plan. To eliminate or reduce the risk of major occupational accidents during construction, the safety and health department assigns personnel to conduct daily inspections and audits at construction sites, coordinates with related departmental project audits, and strengthens management systems. It also participates in monthly coordination meetings for each expansion site to provide safety management guidance to subcontractors, review identified issues, and require fundamental improvements. • Fire Hazard Detection and Improvement: Following the fire incident at Nan Ya Plastics' Linkou plant on April 7, 2024, the Company conducted a review on fire prevention and firefighting capabilities across existing buildings. While compliant with legal design and regulations, some protection gaps were identified. Automatic firefighting improvements were made to the idle machine storage area on CUB 2F and the SB-2 rooftop solar panel equipment room. Nanya Technology continues to identify areas that require enhanced fire protection measures to reduce fire risks and protect company operations, employee safety, and financial assets.
Legal Risk	• Climate Change Legal Compliance: As climate change regulations are still lacking supplementary laws and implementation rules, Nanya Technology is unable to reasonably assess the future financial impacts. Regarding the carbon fee regulation effective in 2025, emissions exceeding the applicable thresholds will incur a carbon fee, potentially leading to increased operating costs. Nanya Technology has set energy self-resilience as a strategic goal and is further reviewing procurement strategies and carbon reduction targets. The Company is evaluating the transition to low-carbon process equipment to promote low-carbon manufacturing and is planning to enhance energy independence through renewable energy and improved energy efficiency. Current regulatory and policy changes have no significant physical risks to Nanya Technology's business or finances. • Intellectual Property Protection: Nanya Technology has developed IP management strategies, strengthened patent portfolio, and incorporated trade secret protection into new employee training sessions to ensure confidentiality obligations. For information security, the Company has established security management regulations to protect data security and customer privacy rights. We also conduct training programs to enhance employee awareness of protecting Company confidential information and ensuring regulatory compliance, effectively mitigating the risk of information leakage. As of now, no major business risks have been identified. • Antitrust Legal Compliance: Nanya Technology works with international legal experts to regularly collect information on global antitrust regulations and enforcement, and conducts comprehensive antitrust compliance programs for all employees. Currently, only one Brazilian antitrust lawsuit is undergoing settlement, with the terms having no material impact on the Company's operations.

Sensitivity Analysis and Stress Testing

Nanya Technology conducts sensitivity analysis and stress testing every year on critical risk aspects, including financial risks (such as exchange rates) and non-financial risks (such as water resources, power supply, market conditions, operational strategy, construction occupational accidents, production disruptions, legal compliance, and information security).

Our sensitivity analysis and stress testing results are as follows:

Financial Risk	Sensitivity Analysis or Stress Testing
Exchange Rate	• DRAM products are primarily sold in USD. To reduce the impact of exchange rate fluctuations on profits and losses, Nanya Technology established an offshore subsidiary at the end of 2018 to reduce the impact of exchange rates on the parent company's USD position. • Assuming the exchange rate appreciates from 32.78 (end of 2024) to 32.25 (end of 2025) by 0.53, the estimated potential exchange loss would be about NT$140 million. • The exchange loss is a book value loss, not a cash outflow. The currently estimated exchange loss has a minimal impact on Nanya Technology's net worth. We will continue to monitor exchange rate trends and take responsive measures.

Non-Financial Risks	Sensitivity Analysis or Stress Testing
Water Resources	• We reviewed internal and external water supplies and storage systems, and simulated various water restriction scenarios. The Company can draw from backup wells supplying 5,500 CMD, a 43,000-ton reservoir, and 3,600 CMD from the Chang Gung Golf Course well. Under total raw water shutdown, the factory can continue operating normally for 21 days. With the addition of 2,000 CMD from the Taishan Factory's tap water supply, overall supply will be sufficient. • We simulated Phase 1, 2, and 3 water restrictions. None of the scenarios involving raw water supply being "five days on, two days off," "four days on, three days off," "three days on, four days off," and "two days on, five days off" affect production.
Operations	Power Supply: • Power interruptions severely impact the manufacturing in Nanya Technology. Critical production systems and equipment are connected to the on-site DUPS system and emergency generators to avoid effects from sudden power dips or planned power restrictions from Taipower. • After we examine internal and external power supply systems, simulations show that when Taipower reduces supply by 5%, 10%, 15%, or 20% of contracted capacity, our factories can maintain normal production with support from on-site emergency generators and DUPS. However, a complete external power outage would cause production losses. Based on the revenue of NT$34.1 billion in 2024, the impact would be approximately NT$2.8 billion per month in operating losses.

Non-Financial Risks	Sensitivity Analysis or Stress Testing
Market	Average Price and Sales Volume: ● Nanya Technology regularly analyzes the sensitivity of sales volume and selling price to ensure business targets are achievable and to develop response strategies and plans. ● The 2025 analysis shows the following findings: 1. Prices are expected to increase by 1% compared to 2024, with EPS variations projected to range from -7% to +24% on an annual basis 2. Sales volume is expected to increase by 41% compared to 2024, with EPS variations projected to range from +28% to +53% on an annual basis
Operational Strategy	Profit and Loss Forecast Sensitivity: ● When formulating sales and production strategies, profit and loss sensitivity analysis is conducted. This analysis shows the profit and loss impact for each defined sales and production portfolio under target pricing, with variations of 90%, 110%, and 120% of selling price. These insights support the selection of the most advantageous sales and production strategy.
Occupational Accidents During Expansion	● Risk assessment stress testing was conducted for an assumed fatal occupational accident involving a construction subcontractor at the 5A FAB expansion site. ● Assessment Results: 1. If an occupational accident results in the death of one construction subcontractor, it may lead to partial work suspension at the site and compensation costs estimated between NT$4 million and NT$20 million. The impact on construction progress and operations is expected to be limited. 2. In the event of a large-scale labor safety incident at the site, such as the collapse of large-area formwork concrete resulting in multiple casualties, a full suspension of work for approximately 2 months may be required to implement improvements, leading to an estimated production capacity loss of around NT$1.7 billion. 3. Other negative impacts on the Company's operations, including potential harm to corporate image, may arise. ● Risk Control Approaches: 1. To mitigate impacts related to labor inspections, Formosa Plastics Group, victims, and corporate image, risks can be transferred by outsourcing construction management to a general subcontractor designated as the accountable party for labor safety. 2. To address potential impacts from production capacity loss, labor safety management and supervision at construction sites should be reinforced to prevent occupational accidents and minimize associated risks.

Non-Financial Risks	Sensitivity Analysis or Stress Testing
Production Disruption	Environmental Anomalies: ● Risk assessment stress testing for an assumed insufficient water production capacity in the hydrogen fluoride/organic wastewater MBR membrane system in 3rd FAB. ● Assessment Results: 1. If MBR membrane blockage reduces water flow and results in insufficient processing capacity, it may lead to wastewater tank overflow, causing environmental abnormalities or even production shutdowns. 2. If the blockage is severe and requires process reduction/suspension of wastewater discharge, production may face significant disruptions. The replacement of related hardware and restoration could take 2 months, resulting in an estimated production loss of NT$7.08 billion. 3. If environmental anomalies occur and are reported by the media, it may lead to negative impacts, such as damage to corporate image and reduced orders. ● Risk Control Approaches: 1. Strengthening equipment warranty: During the purchase of new MBR membranes, warranty terms and conditions must be included to guarantee processing efficiency and reduce the risk of anomalies. 2. Conducting regular system equipment maintenance checks and controlling the quality and volume of source water. 3. Strengthening liquid level control and source water volume adjustment to reduce the risk of tank overflow. Additionally, the Company must ensure that the special flow direction of backup discharge pipes complies with regulations and that pipeline equipment functions properly.
Legal Compliance	Adherence to US Antitrust Regulations: ● Conducting risk assessment stress testing for potential violations of US antitrust regulations. ● Assessment Results: 1. If the profit from sales of server memory modules to the US region is US$2.55 million, assuming victims determine their damage based on our actual profit. 2. For criminal fines, the Company could be fined up to US$100 million; for civil compensation, damages could be tripled based on actual profits as punitive damages, amounting to approximately US$7.65 million. The total financial impact would be approximately NT$3.5 billion. 3. Other negative impacts with varying degrees of severity, including potential harm to the corporate image and stock price, may arise. ● Risk Control Approaches: 1. For impacts related to investigation cooperation, litigation costs, corporate image and finances: The Company evaluates all available internal evidence to determine whether pursuing a quick settlement would offer a more advantageous negotiating position and ultimately result in more favorable terms. The primary objectives of this evaluation are to strategically seek an early exit from ongoing litigation or to significantly reduce potential liability, all while diligently controlling litigation costs to effectively mitigate associated financial and operational risks. 2. For impacts related to executives and employees violating the law: Legal compliance trainings are provided to employees/high-risk personnel and regular internal audits are conducted to ensure the effective implementation of the compliance program. Directors and supervisors liability insurance will also be secured to transfer associated risks.

Non-Financial Risks	Sensitivity Analysis or Stress Testing
Information Security	Business Email Compromise: ● Assessment Results: 1. If personnel fall victim to BEC fraud and make related payments, single payments could exceed NT$10 million and reach up to NT$100 million, causing significant impact. 2. If personal identification information is stolen, it may lead to identity theft, while confidential information, such as intellectual property rights and trade secrets, may be inadvertently exposed, resulting in potential legal litigation risks. ● Risk Control Approaches: 1. Working with legal and information security teams to establish clear BEC prevention policies, continuously monitoring the latest cybersecurity trends, and adjusting protection strategies as needed. 2. Strengthening BEC protection education and training for high-risk unit managers and employees, improving employees' ability to identify suspicious emails, and conducting regular simulated BEC attack drills to test employee responses and the effectiveness of existing protective measures. 3. These measures effectively mitigate the risks of BEC attacks, ensuring the protection of corporate financial assets and trade secrets, as well as maintaining our reputation.

8. Emerging Risks

Nanya Technology constantly monitors trends in the economic environment, identifies long-term risks and opportunities, and adjusts business strategies to achieve sustainable operational goals and long-term performance. Various risk management teams and managers at all levels collect relevant information from home and abroad to assess potential risk items for the Company's long-term operations. Through questionnaires or ratings conducted during executive meetings, emerging risk topics with the highest potential impact are identified. These discussions help review impact mitigation strategies and develop response plans, serving as crucial references for future business strategies.

Emerging Risk Assessment Process

In 2024, emerging risk events were collected from various department heads, and four major risks were identified by executives. Nanya Technology has developed response strategies and continues to refine them to mitigate related impacts.

Emerging Risk I

Hackers using AI technology may increase cybersecurity risks, impacting corporate operations

Technology

Risk Description

- With the popularity of AI technology, hackers' attacks are faster and more intelligent, increasing the possibility of hacker attacks on Nanya Technology.
- Hackers may use AI technology to target company systems and supply chains, launching automated attacks precisely through the internet. If not discovered and addressed early, it will lead to serious hacking incidents.
- Risks such as system service interruptions and trade secret leaks caused by hacker attacks and intrusions will impact the Company's operations and competitiveness.

Impact

- If information security defense mechanisms cannot promptly respond to AI automated attacks, defenses may fail, allowing hackers to invade the company network, obtain sensitive data, and implement encryption ransomware or cause system paralysis, resulting in operational losses.
- If hackers use AI-generated social engineering attacks, it may increase the risk of employees being deceived, thereby invading the company network and affecting operations.
- If hackers use AI tools to automatically analyze supply chain security and infiltrate through weaker links, it may disrupt supply chain operations.

Mitigation Measures

- Combination of AI information security technology to enhance detection and defense capabilities against hackers' AI automated attacks, and to ensure the effectiveness of security protection mechanisms against such emerging attacks.
- Ongoing implementation of vulnerability patching procedures for information security protection systems to ensure timely updates and avoid exploitation by hackers.
- Enhancing employee information security education, deepening the ability to identify AI-generated fraud methods, and deploying advanced mail filtering technology to reduce the impact of social engineering on businesses.
- Boosting supply chain security to ensure partners have appropriate information security measures and avoid being used as an attack springboard.
- Using red team assessments to simulate hacker attack methods, verifying the integrity and effectiveness of information security protection systems, and assessing the Company's response and handling capabilities for security incidents.

Emerging Risk II

Chinese memory manufacturers' significant expansion and Chinese government subsidy policies impact Nanya Technology's business development

Economic

Risk Description

- To break through high-tech chip technology bans imposed by the US and European countries on China, the Chinese government is eager to accelerate the improvement of semiconductor enterprise technology and independent manufacturing capabilities. It supports local semiconductor manufacturers to improve their technical level and provides policy subsidies, which has a significant impact on market competition.
- According to reports, China's DRAM giant ChangXin Memory Technologies (CXMT) may receive direct or indirect subsidies from the Chinese government, making its costs competitive. Its sales have increased significantly in recent years, with capacity expected to reach 300K pcs by the end of 2025, which may impact our development in Mainland China.
- CXMT began mass production of DDR5 in December 2024. Since its products overlap with ours, the sales strategy for expanding the Chinese market will be more challenging.

Impact

- The Chinese government's subsidies and incentive policies reduce cost pressure for CXMT, intensifying competition and affecting Nanya Technology's sales share and profit margins in the Chinese market.
- Subsidy measures from China's National Big Fund* are equivalent to national intervention in business operations, creating unfair competition in terms of customers, finance, taxes, and human resources. (*Big Fund: China Integrated Circuit Industry Investment Fund)
- CXMT's expansion increases the supply of DDR4 and DDR5, directly affecting memory price trends and impacting our profitability.
- Chinese memory manufacturers are investing significant resources to accelerate technology advancements, threatening the competitiveness of our products.

Mitigation Measures

- Adopting differentiation strategies in the Chinese market, such as product differentiation and application market differentiation, to create advantages.
- Consolidating market demand that CXMT cannot supply (such as LPDDR3) and actively developing customized products.
- Focusing on securing export market demands from Chinese customers.
- Actively seeking non-Chinese market sales capabilities, increasing sales channels in European, Indian, and Southeast Asian markets to reduce dependence on the Chinese market and avoid regional risks.
- Negotiating long-term supply contracts with key customers to maintain stable sales channels.
- Continuing to develop new technologies and new products to enhance our technological and cost competitiveness, thereby strengthening customer confidence in Nanya Technology.

Emerging Risk III

Semiconductor industry's competition for talent and the impact of low birth rates may lead to a shortage of key talent in the future

Societal

Risk Description

- Due to factors such as geopolitical influences and AI-stimulated demand, the semiconductor industry has become a highly valued critical industry worldwide in recent years. Taiwan and major countries around the world are committed to expanding fabs, leading to intense global talent competition. Along with Taiwan's booming technology industry, post-pandemic service industry prosperity, and intensifying low birth rates, the supply of talent cannot meet demand, impacting the overall industry's competitiveness.

Impact

- Semiconductor-related technical talent is scarce and difficult to cultivate. Insufficient recruitment or loss of existing talent will seriously affect the Company's product and process technology research, development, and improvement, thereby impacting the Company's medium- and long-term competitiveness.
- Nanya Technology's new fab is under construction, and a large number of recruitments are expected within five years. If staffing is insufficient, it will impact on the mass production schedule of our new fab, thereby limiting operational growth.

Mitigation Measures

- Establishing a key talent pool and implement various key talent development and retention measures.
- Expanding the scope of industry-academia collaboration to include the high school level and establish long-term internship cooperation platforms with esteemed local universities to build a long-term and stable source of talent.
- Keeping track of talent trends across industry, government, academia, and research; supporting and advocating relevant talent development initiatives while enhancing corporate image and strengthening employer branding to attract talent.
- Encouraging female and foreign talent to join the semiconductor industry, increasing promotion and recruitment ratios.
- Adjusting recruitment methods in alignment with the mass production schedule of new fabs, organizing medium- to large-scale, intensive recruitment activities either independently or through outsourcing.

Emerging Risk IV

The expansion of new fabs may pose risks to biodiversity and disrupt ecosystem balance

Environmental

Risk Description

- Since June 2022, Nanya Technology has begun construction to expand new fabs. Although the expansion area is the reconstruction of an old site, not new land development, the construction process may still impact surrounding biodiversity and ecosystems. Emissions from operational activities will also cause negative impacts such as climate change and ecosystem imbalance, including water resource shortage, extreme weather disasters, and more.

Impact

- Nanya Technology is located in a foothill area. During new fab construction, noise or dust may affect local animals and plants, causing biodiversity imbalance.
- Wastewater and waste generated during construction, if discharged or disposed of directly in surrounding waters, will impact the basin ecosystem.
- Ecosystem imbalance causing water shortage may affect water resource supplies for operations.
- A damaged ecosystem leads to a poor working environment and thus a higher turnover rate, which increases operational costs. It may also cause negative perceptions among community residents, creating reputation and trust risks.

Mitigation Measures

- Constantly concerning about the ecological status in the operational area, Nanya Technology commissions external environmental ecological monitoring annually, with quarterly monitoring surveys. During construction periods, this changes to monthly monitoring. In addition to air quality and wastewater monitoring, it also includes surveys of terrestrial plants, mammals, birds, reptiles, amphibians, and butterflies.
- Publishing the Biodiversity and No Deforestation Policy and introduced the Locate, Evaluate, Assess, Prepare (LEAP) methodology from the Task Force on Nature-Related Financial Disclosures (TNFD) to establish Nanya Technology's natural dependence and impact, risk and opportunity identification process, and constructing relevant response measures and disaster warning mechanisms. The TCFD Report and TNFD Report are published and disclosed to stakeholders, with ongoing communication conducted with external stakeholders through regular meeting platforms.
- Assessing nature and climate-related risks and opportunities, implementing wastewater classification treatment in the production process with multiple recycling and reuse to reduce the impact of water resource shortages, and establishing water resource response mechanisms and management indicators.
- Prohibiting the discharge of wastewater and waste generated during construction period into natural basins. Monthly water quality monitoring surveys are also conducted to ensure that local water quality is not impacted by construction and operations.

9. Building a Comprehensive Risk Culture to Strengthen Risk Awareness and Business Resilience

To build a comprehensive risk management culture, Nanya Technology uses the Sustainable Development Committee under the Board of Directors to review risk management policies, strategies, and management guidelines. The Committee oversees Nanya Technology's promotion of risk management matters and implementation plans. Based on the scope, organization, responsibilities, and risk management procedures defined in the Risk Management Regulations, the Company comprehensively implements various risk management operations. In 2024, the Committee convened 2 meetings to review risk management implementation and operational matters. The Risk Management Steering Center is responsible for building risk awareness within the management level, as well as reviewing risk management implementation performance and emerging risks each year. Nanya Technology also includes risk management results as a performance evaluation item for the management level (president, assistant vice presidents and above). Through goal management of senior executives, risk management practices are promoted to comprehensively strengthen the Company's risk awareness.

Innovation Proposal Rewards and Product Risk Management

Nanya Technology offers a variety of reward systems to encourage employees to submit innovative proposals that identify and improve potential risks. Proposals are evaluated based on expected benefits, creativity, application scope, completeness, and quality contribution, with monetary rewards given accordingly. Additionally, in accordance with the New Product Development and Verification Process, Nanya Technology integrates risk considerations into the design and development stages of new products. We use Failure Mode and Effects Analysis (FMEA) techniques to identify all possible potential risks and develop mitigation measures, ensuring that risks are minimized before new products enter mass production.

Year	2021	2022	2023	2024
Number of Employee-Submitted Improvement Proposals and Their Benefits				
Number of Proposals	207	212	193	163
Proposal (Case-Closing) Bonus (in NT$ Thousand)	412	507	422	549
Proposal Benefits (in NT$ Thousand)	882,517	756,744	755,784	366,233
Number of Proposals by Risk Category				
Process and Equipment Risks	61	68	60	34
Production Capacity and Quality Risks	85	41	37	35
ESH Risks	26	16	3	8
Other Risks	35	87	93	86
Total	207	212	193	163

Unit: NT$ Thousand

To encourage employees to report issues promptly, Nanya Technology has established 24-hour reporting hotlines, information security hotlines, whistleblowing hotlines, and reporting mailboxes, facilitating the swift identification and management of risks. The Company also internalizes risk management culture through promotional efforts such as TV walls, posters, and computer desktops, making it an integral part of every employee's daily work.

Utilize Evaluations and Financial Rewards to Promote Risk Management

Nanya Technology includes risk management awareness in quarterly and year-end performance evaluations. This serves as a critical foundation for performance scores, promotions, various bonuses, and stock options, ensuring the effective implementation of risk management measures. Incentives are tied to key company risks; for example, to mitigate hazard risks, a zero workplace injury bonus system encourages managers and employees to adopt preventive measures and avoid accidents. When annual goals are met, people receive rewards.

Regular Risk Training to Raise Awareness

Nanya Technology not only arranges all board members to annually participate in corporate governance and regulatory compliance courses from government-approved institutions, but also provides specialized training on risk management frameworks and practical operations. This ensures that board members possess the professional competencies required to effectively oversee the company's risk management activities. The Company also develops risk management training materials, updated annually based on promotional status and results. Employees are required to review these materials and participate in training through the Company's internal computer system.

In 2024, Nanya Technology completed risk management training for 100% of employees, totaling 1,832 hours. This helps employees understand how risk management works and incorporate risk awareness into their daily work.

Risk Culture Promotional Activities

To strengthen risk awareness, Nanya Technology holds various ad-hoc risk management activities as needed. For example, in 2024, Nanya Technology launched the Information Security Month Initiative, featuring activities such as Online Quizzes with Prizes, Information Security Golden Melody Award - Zero Trust Song Contest, Information Security Seminars, Mandatory Reading of Information Security Guidelines, and Email URL Identification Training. These efforts aim to build consensus on information security protection and foster a culture where everyone contributes to prevention and continuous improvement. Additionally, to enhance the understanding of risk management practices among various risk management teams and business management departments, Nanya Technology held a Risk Management Workshop in September 2024. External consultants provided guidance and practical exercises to enhance awareness of diverse risks, strengthen response measures, and support the timely implementation of mitigation measures.

8.3 Information Security

To protect shareholders' and customers' best interests, Nanya Technology actively implements information security-related procedures and protection systems. Over the past 7 years, we have invested over NT$1 billion in information security. An information Security Committee is also established and personally supervised by the President to optimize our information security management and ensure adherence to relevant legal requirements continuously. Working alongside all employees and supply chain partners, we collectively ensure the confidentiality, integrity and availability of our information assets. Our goal is not only to safeguard the rights of our customers, shareholders, employees and suppliers, but also to fulfill our corporate social responsibility.

Information Security Policy

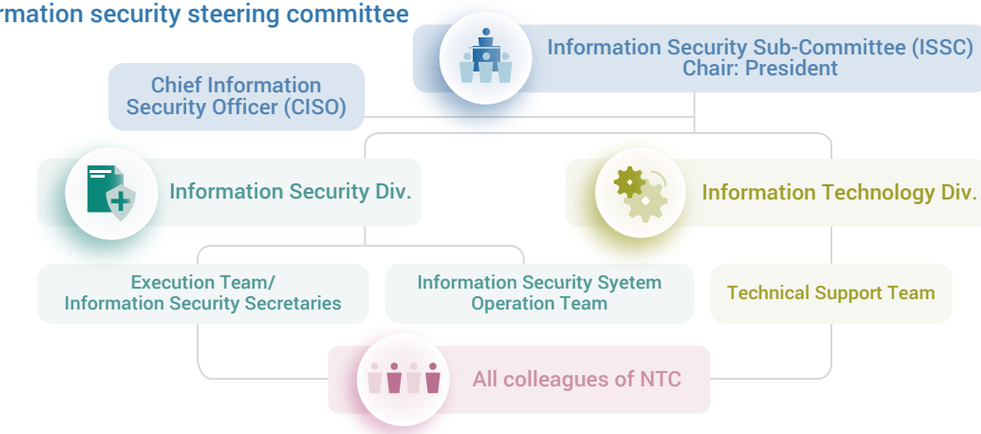
With decades of experience in the DRAM memory domain, Nanya Technology fully understands the challenges in DRAM process and product development, advanced process development, manufacturing know-how, and the importance of protecting intellectual property rights. We focus on strengthening information security measures and employee awareness to prevent sensitive technical data leaks. These efforts help preserve our R&D capabilities and core competitive advantage, thereby protecting the long-term interests of the Company and ensuring the working rights of our employees.

In 2022, Nanya Technology once again passed the triennial ISO 27001 information security certification, expanding its verification scope to cover 100% of all facilities. The certification remained valid in 2024, demonstrating our ongoing commitment to an information security management system that aligns with international standards.

To further enhance information security management, Nanya Technology established a cross-departmental Information Security Committee with the President as the convener. Several Level 1 supervisors serve as committee members, with one appointed as the Chief Information Security Officer (Executive Secretary). The committee includes Senior Division Head Yen-Chang Huang as the Chief Information Security Officer, along with representatives from the Quality Reliability Assurance Division, Legal & IP Division, Human Resources Division, and Automated Information Division. The Information Security Committee meets weekly to plan, approve, and oversee information security policies, objectives, and related regulations. It reports quarterly to the Board of Directors on the effectiveness of the information security management system and identifies opportunities for further enhancement. At the same time, four executive directors (President Pei-Ing Lee, Executive Vice President Lin-Chin Su, Vice President Joseph Wu, and Vice President Rex Chua) actively engage in the Company's quarterly information security meetings and the annual information security management review meeting. This helps make sure that our security management is working well and effectively.

Nanya Technology adheres to the Cyber Security Management Act requirements at the highest "A" level (equivalent to government agencies). We hold various cybersecurity certifications, including EC-Council Certified Chief Information Security Officer (CCISO), Certified Information Systems Security Professional (CISSP), EC-Council Certified Security Analyst (ECSA), EC-Council Certified Ethical Hacker (CEH), EC-Council CompTIA Security+, EC-Council Certified Network Defender (CND), EC-Council Certified Penetration Testing Engineer (CPENT), EC-Council Certified Application Security Engineer (CASE), and ISO/IEC 27001:2013 Information Security Management System (ISMS) Lead Auditor, enhancing the professional capabilities and efficiency of our information security team.

Information security steering committee



Milestones of Nanya Technology's Improvement Measures for Information Security Management

2017	• To deal with the risk of competitors recruiting our employees, which led to improper access to company secrets and sensitive business information, Nanya Technology set up an Information Security Division responsible for planning, implementing, auditing, and improving our information security management.
2019	• Nanya Technology obtained ISO27001 information security management system international standard certificate for the first time. • In response to the frequent cybersecurity attacks at home and abroad, and the emergence of new attack methods, Nanya Technology continued to develop external hacker protection strategies and defense in depth solutions.
2022	• Once again, Nanya Technology passed the triennial ISO27001 information security management system standard certification, with the scope of verification expanded to include the entire facility. • An OT (Facility) information security protection system has been established, incorporating vulnerability management and a monitoring and response mechanism. • Nanya Technology conducted ISMS information security management audits for major downstream subcontractors to continuously improve the effectiveness of supply chain information security.
2023	• Nanya Technology classified and graded suppliers, when conducting risk management and audit improvements for critical high-risk suppliers.
2024	• (Facility/FAB) OT information Security Protection: Nanya Technology has enhanced the visibility of industrial control equipment to monitor the normal connection behavior of facilities and machine equipment and mitigate the risk of exposure to unauthorized external equipment. • The information security automated joint defense and response system was launched to monitor more than 380,000 activities throughout the day, automatically blocking suspicious IP sources to improve threat detection and incident response capabilities. • Nanya Technology improved information security management for its supply chain by selecting 137 suppliers in 2024 for SAQ and third-party risk assessment, completing audits and improvements for critical high-risk suppliers. • Nanya Technology followed the NIST standard cybersecurity framework template and used third-party self-assessment information security risk scoring tools to analyze and evaluate multi-faceted compliance to ensure effective information security management.

1. Key Practices and Implementation Results of Information Security Management

Nanya Technology implemented information security policies to ensure the confidentiality, integrity, and availability of information. This protects the rights of our customers, shareholders, employees, and suppliers. The detailed implementation results in 2024 are explained below:

01 Strengthening Information Security and Building Defense in Depth

- Nanya Technology protects sensitive data through encryption, endpoint protection, and network gateways. We control network access, manage document outputs, and secure emails. Additionally, we employ metal detectors to check for restricted items related to information security, preventing external attacks and internal information leaks.
- Strengthening Endpoint Security: Installing antivirus software, updating official security patches, controlling USB access, and setting up backup mechanisms to enhance system security and reduce vulnerability risks.
- Protecting against External Threats: Establishing information security protection systems, isolating internet access, and implementing secure file mechanisms to prevent computer viruses or malicious programs from disrupting information system services or stealing confidential data, including through social engineering attacks.
- (Facility/FAB) OT information Security Protection: Nanya Technology has enhanced the visibility of industrial control equipment to monitor the normal connection behavior of facilities and machine equipment and mitigate the risk of exposure to unauthorized external equipment.
- The information security automated joint defense and response system was launched to monitor more than 380,000 activities annually, automatically blocking suspicious IP sources to improve threat detection and incident response capabilities.

02 Building Physical Security Protection

- Nanya Technology established the Confidential Information Management Procedure and installed metal detectors at all office and facility entrances to screen all items brought in or out. Confidential information must not be disclosed without authorization. An evaluation system is also in place to monitor the effectiveness of these measures.
- Setting up door access controls, system login identity verification, password management, access authorization, and regular vulnerability scanning audits.

03 Quality Management and Legal Compliance

- In 2022, Nanya Technology once again passed the triennial ISO 27001 information security certification, expanding the scope to cover 100% of all facilities. In 2024, we passed the certification of the third-party audit unit Taiwan Testing Technology Co., Ltd. (SGS) to maintain the validity of the certificate, demonstrating our ongoing commitment to an information security management system that aligns with international standards. ISO 27001
- Every year, Nanya Technology reviews its information security protection measures and policies, monitors security issues, and formulates response plans to ensure their adequacy and effectiveness. The implementation results are reported during ISO management review meetings.
- Nanya Technology places high importance on information security and personal data protection to safeguard customer rights and fulfill its responsibility for safeguarding personal data. Additionally, the Company isolates and controls access to personal data and employs encryption to prevent unauthorized data leaks.
- Nanya Technology followed the NIST standard cybersecurity framework template and used third-party self-assessment information security risk scoring tools to analyze and evaluate multi-faceted compliance to ensure effective information security management.

04 Security Awareness Training

- Nanya Technology conducts social engineering drills using well-known phishing email testing tools. Quarterly social engineering drills simulate realistic phishing emails with set goals, and additional training is provided to employees who click on links or open attachments. An evaluation system ensures all employees take exercises seriously, enhancing information security protection awareness. This year, we conducted 8 drills, involving over 29,000 participants locally and 1,331 from overseas subsidiaries.
- We conduct regular information security training for all employees and new hires annually to strengthen information security awareness.
- Cultivation of Professional Talent: Recruiting and nurturing IT personnel to develop both professional and cross-domain consolidated skills, supporting them in obtaining international certifications to enhance their abilities and expand their expertise.

05 Business Continuity

- Due to the constant occurrence of cybersecurity incidents, we have established Information Security Incident Report and Management Regulations. We conduct ad-hoc drills annually to practice our incident response for escalating and managing information security events.
- In accordance with the Cybersecurity Management Guidelines for TWSE/TPEx Listed Companies, we have not only defined levels of information security incident and set up internal and external reporting channels and processes, but also establish response procedures for intelligence of threat which affects stakeholders so as to prevent operational disruptions.
- Nanya Technology conducts risk assessment and identification based on the severity of impact on key business processes, using this analysis to determine the frequency of disaster recovery drills.
- Availability goals are defined for office, research and design, as well as technical development information systems. Our annual target allows no more than 1 service interruption, lasting less than 24 hours. In 2024, the Company had no system service interruptions.

06 Supply Chain Security Protection

- Nanya Technology extends its security protection to the supply chain by ensuring that all equipment undergoes security checks before use. Suppliers and their personnel are required to sign information security agreements to prevent potential attacks via supply chain relationships.
- In 2024, Nanya Technology conducted checks on its main downstream subcontractors for ISMS information security management. When potential issues were identified, the Company took appropriate measures to address and prevent them, ensuring the security of the supply chain aligns with our information security requirements.
- In 2024, Nanya Technology used Self-Assessment Questionnaires (SAQ) and Security Scorecards to classify its suppliers. The Company focused its risk management efforts and audits on critical high-risk suppliers.

07 Investigating Information Security Incidents and Hacking Methods

- Nanya Technology actively engages in information sharing with the Taiwan Computer Emergency Response Team/Coordination Center (TWCERT/CC) to promptly understand hacking techniques and implement early response measures.
- Nanya Technology commissions third-party organizations to conduct annual red team exercises, testing the Company's information security by identifying system vulnerabilities and weaknesses, ensuring they are addressed and mitigated as early as possible.
- Nanya Technology participated in the 2024 enterprise information security drill organized by TWCERT/CC to enhance its ability to respond to information security incidents and further improve its overall information security protection.

2. Business Continuity Plan (BCP)

Information Security Incident Response Drills: to validate the timeliness of our information security incident report and response procedures, we conduct ad-hoc drills annually for incident response of various scenarios such as computer compromises and DDoS attacks on our official website.

Business Continuity Operations for Information System: to address the differences in information system structures across departments, Nanya Technology conducts risk assessments and identifies potential risks based on the severity of each system's impact on key operational processes. The systems are classified into three severity degrees (Degree 1 to 3), with Degree 1 being the most critical. These classifications serve as the basis for determining the frequency of disaster recovery drills. The degrees are defined as follows:

Relationship Between Severity Degree Classification and Recovery Drill Frequency

Degree 1	Degree 2	Degree 3
If this system stops working, primary functions cannot provide service.	If this system stops working, secondary functions cannot provide service.	If this system stops working, it does not affect services, or alternative measures can be in place to keep operations working.
Recovery Drill Schedule **Annually**	Recovery Drill Schedule **Biennially**	Recovery Drill Schedule **Not required**

Recovery drill schedules are aligned with severity degrees (annually, biennially, or not required). Each department is responsible for registering the severity levels of the systems they operate and maintain in the "Information System Severity Degree Classification" documentation list. All Degree 1 systems have multiple backup mechanisms located in different rooms across different buildings. Important production data is encrypted for offsite backup and tested according to the information system disaster recovery plan to ensure normal operation. In 2024, 12 systems needed drills, and all of the 12 systems completed drills, achieving a 100% completion rate. When major anomalies occur, each information system management unit follows the response procedures defined in the Information System Response Measures Plan to notify the appropriate response teams to take action.

3. Information Security Awareness Training and Implementation Results

The Information Security Division assigns dedicated personnel, with team members from each department serving as security secretaries. Their tasks include implementing information security awareness training, developing management regulations, and conducting risk assessments of information assets.

Nanya Technology invests substantial resources to enhance information security awareness and build a shared understanding among all employees through training programs. This includes monthly meetings for information security secretaries, quarterly security meetings for Level 1 and above senior supervisors to review performance evaluation outcomes, quarterly social engineering drills, annual Information Security Month initiatives, and mandatory annual online reading of the Confidential Information Management Procedure to deepen employees' understanding and strengthen the culture of confidential information management. The 2024 training courses and hours are detailed on the table below:

Training Type	Information Security Awareness Training Courses	Participants	Hours
Designated Compulsory Readings for All Employees	Confidential Information Management Procedure	All employees	1,827
	Understanding BEC (I)	All employees	1,822
	How to Prevent BEC (II)	All employees	1,832
	URL Identification Training	All employees	1,799
Information Security Training for New Recruits	Good Information Security Management (I)	New hires (within 1 week)	665
	Good Information Security Management (II)	New hires (within 6 months)	516
Social Engineering Training	Social Engineering Drills	All employees (excluding TA)	2,528
	Social Engineering Training	Employees clicking on links during drills	52
Information Security Lectures (External Speakers)	Information Security Moat: Protecting Your Digital World	Information Security Secretaries and the Information Security Division	78
	Protecting the Gateway to the Digital World: Understanding ISO 27001	Department supervisors and the Information Security Division	79
	The Functionality and Benefits of Entra ID Cloud Identity Protection	Information Security Secretaries and the Information Security Division	27
	Special Lecture on Trade Secrets	Department supervisors, the Information Security Division, and supply chain vendors	130
	Zero Trust Themed Lecture at the Information Security Seminar	Department supervisors, the Information Security Division, and supply chain vendors	112
Internal Auditor Training	ISO 27001 Internal Auditor Training	Information Security Secretaries	118
Information Security Month Events	Information Security Management Quiz	All employees	1,822
Total Annual Information Security Awareness Training Hours			13,406

4. Information Security Goal Achievement

Nanya Technology recognizes the ongoing threats and risks to information security and has implemented appropriate protective measures. In 2024, the Company passed third-party audits with no significant deficiencies and reported no major security incidents such as customer information leaks and regulatory fines, as outlined below.

Item	Statistics
Number of information security violations or cybersecurity incidents	0 cases
Number of data leakage incidents	0 cases
Number of information security violations involving customers' personal data	0 cases
Number of customers and employees affected by data leakage	0 times
Amount of fines imposed due to information security or cybersecurity incidents	NT$0

5. Supply Chain Information Security

To promote supply chain information security, Nanya Technology evaluates significant Tier 1 suppliers, equipment vendors, subcontractors, and system integrators (140 companies in 2024) based on factors such as significance, risk level, annual procurement value, and sustainable development. The Company utilizes third-party information security risk assessments (requiring a minimum score of 80 or a B grade) and our internal security evaluations (requiring a score of 85 or above) to assess these selected companies. Those failing to meet the standards are classified as high-risk significant suppliers. Nanya Technology conducts on-site audits, provides guidance for continuous improvement, and requires such suppliers to sign information security clauses in procurement contracts and a Commitment to Comply with Information Security Policy to ensure information security.

In 2024, Nanya Technology expanded evaluations to 140 suppliers, a 164% increase compared to the previous year. Through individual information security coaching, training sessions, Security Score Card requirements, and on-site audits, we continue to help supplier partners improve their information security management. In addition, the Company is progressively requiring suppliers to obtain international certifications, such as ISO 27001, with 33% of suppliers currently certified. In 2024, to enhance supplier awareness of information security, Nanya Technology invited suppliers to participate in its Information Security Month event—Zero Trust Seminar: Never Trust, Always Verify. Through knowledge sharing and discussions with industry leaders and experts, the seminar explored how zero trust architecture can strengthen supply chain security and safeguard shared business data and assets against modern threats. A total of 37 participants from 17 suppliers attended the event.

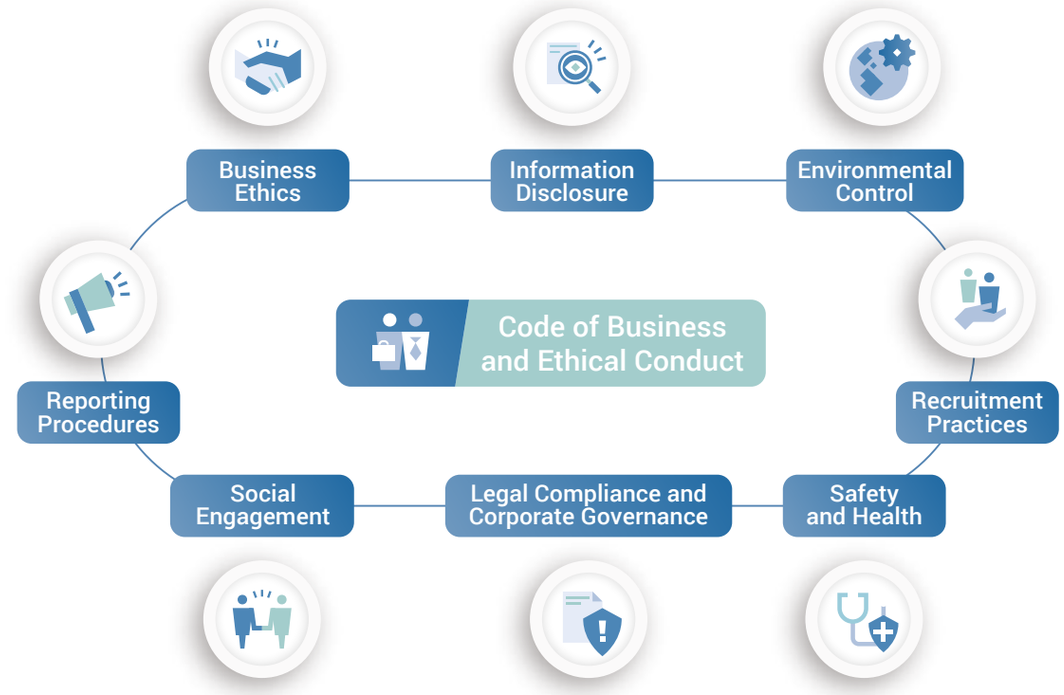
8.4 Ethical Management

Upholding the corporate culture and spirit of diligence and simplicity, Nanya Technology operates under ethical, honest, fair, transparent, and responsible business principles to reinforce legal compliance. The Company has established the Codes of Ethics for Directors and Managers for senior executives, as well as the Ethical Corporate Management Principles, Code of Business and Ethical Conduct, and Antitrust and Competition Law Compliance Manual for all employees. Additionally, the Company has launched a digital transaction platform for suppliers and implemented a robust auditing system to enforce ethical management and prevent illegal activities. Nanya Technology's Code of Business and Ethical Conduct stipulates that no donations other than charitable activities (such as political contributions) are permitted to maintain political neutrality. At the same time, the Company also encourages employees to actively fulfill their civic responsibilities as citizens. In 2024, there were no incidents of regulatory violations related to ethical management.

1. Code of Ethical Conduct

Following the Responsible Business Alliance (RBA) Code of Conduct, Nanya Technology established the Code of Business and Ethical Conduct and Labor & Ethics Policy as guidelines for business behavior. The Company also undergoes regular RBA VAP verification and achieved Silver recognition in 2024. The Code of Business and Ethical Conduct applies to all employees of Nanya Technology, including managers, as well as employees, customers, suppliers, and stakeholders of its subsidiaries and joint ventures. The Code encompasses areas such as business ethics, information disclosure, environmental control, recruitment practices, safety and health, legal compliance, corporate governance, social engagement, and channels for seeking guidance or reporting concerns. Nanya Technology is also committed to upholding human rights through established human rights policies and due diligence processes (see "Chapter 4: Employee Human Rights Protection" for details) to ensure that no human rights violations occur. Both the Labor and Ethics Policy and the Code of Business and Ethical Conduct are published on internal and external websites, allowing employees and external parties to access them at any time.

To strengthen integrity and ethical awareness, all employees of Nanya Technology and its subsidiaries must fully comply with the code of conduct, achieving a 100% coverage rate. In 2024, Nanya Technology continued to conduct the "RBA Labor and Ethics Code of Conduct Training" and the "Code of Business and Ethical Conduct Training" to all employees, achieving a 100% training coverage rate. All new hires also received digital courses on the "RBA Labor and Ethics Code of Conduct Training" as part of their onboarding.



To continuously enhance the working environment, Nanya Technology sets annual labor ethics goals and provides related training programs. Aligned with its management objectives of Zero Corruption, Zero Sexual Harassment, and Zero Workplace Violation, the Company conducted seven key training programs in 2024: "Labor and Ethics Code of Conduct Training," "Anti-Corruption Awareness Training," "Code of Business and Ethical Conduct Training," "Senior Executives Ethical Management Training," "Insider Trading Prevention Training," "Unsafe Workplace Behavior and Prevention Training," and "Antitrust Regulation Awareness." All programs achieved a 100% completion rate.

Ethical Management and Labor Ethics Training Achievements

	2021	2022	2023	2024
"RBA Labor and Ethics Code of Conduct Training" Completion Rate Note 1	100%	100%	100%	100%
"Code of Business and Ethical Conduct Training" Completion Rate Note 2	100%	100%	100%	100%
"Anti-Corruption Awareness Training" Completion Rate Note 3	100%	100%	100%	100%
"Senior Executives Ethical Management Training" Completion Rate Note 4	100%	100%	100%	100%
"Insider Trading Prevention Training" Completion Rate Note 5	100%	100%	100%	100%
"Unsafe Workplace Behavior and Prevention Training" Completion Rate Note 6	100%	100%	100%	100%
"Antitrust Regulation Awareness" Completion Rate Note 7	100%	100%	100%	100%

Note 1: A total of 3,634 individuals completed the "RBA Labor and Ethics Code of Conduct Training" in 2024. (Organized in November 2024)

Note 2: A total of 3,634 individuals completed the "Code of Business and Ethical Conduct Training" in 2024, covering whistleblowing policies and whistleblowing mechanisms. (Organized in November 2024)

Note 3: A total of 3,634 individuals completed the "Anti-Corruption Awareness Training" in 2024. (Organized in November 2024)

Note 4: The "Senior Executives Ethical Management Training" was incorporated into the "Code of Business and Ethical Conduct Training," with a total of 10 individuals completed the training in 2024.

Note 5: A total of 3,634 individuals completed the "Insider Trading Prevention Training" in 2024. (Organized in November 2024)

Note 6: The "Unsafe Workplace Behavior and Prevention Training" includes both in-person and online courses. In 2024, 1 in-person training course was conducted for department heads, taskforce leaders, and chief engineers/managers, with a total of 44 participants. Additionally, online training courses were provided for all employees, reaching 3,645 participants. The training was organized in October 2024.

Note 7: A total of 3,617 individuals completed the "Antitrust Regulation Awareness" in 2024. (organized in July 2024)

Note 8: The training participants listed above include all employees who received training in 2024, while new hires completed the courses during their orientation.

2. Antitrust

To ensure employees understand and comply with the antitrust regulation and reduce the risks of violations, Nanya Technology established the Antitrust and Competition Law Compliance Manual and the Antitrust and Competition Compliance Procedures, requiring employees and managers of all levels to strictly adhere to relevant regulations and timely report compliance status to the Board of Directors. The Company also conducts regular training for relevant personnel and requires them to sign the Compliance Manual. In 2024, no violations were reported.

Note: There is 1 antitrust case dating back to 2010 where the Brazilian Ministry of Justice alleged Nanya Technology violated antitrust regulations. This case is still in litigation. For details, please refer to Nanya Technology's 2024 Annual Report, "VI. Risk Analysis, Section (12) Litigation or Non-Litigation Events." The Company has retained legal counsel to handle this case, taking appropriate actions to safeguard its rights and interests.

3. Anti-Corruption

All employees of Nanya Technology are required to comply with the relevant management policies outlined in the Company's Code of Business and Ethical Conduct, Human Resources Management Regulations, and Work Rules. Any employee found guilty of corruption, embezzlement, or accepting bribes or kickbacks will be dismissed without exception. Depending on the circumstances, their direct supervisors may also be subject to disciplinary actions. The Code of Business and Ethical Conduct specifically prohibits employees from offering (or accepting) bribes or engaging in insider trading or other unethical behaviors that damage the Company's reputation. Those involved in serious or corrupt violations, such as using their positions to accept bribes, will be immediately dismissed. If these actions cause serious damage to the Company's interests, legal responsibility will also be pursued.

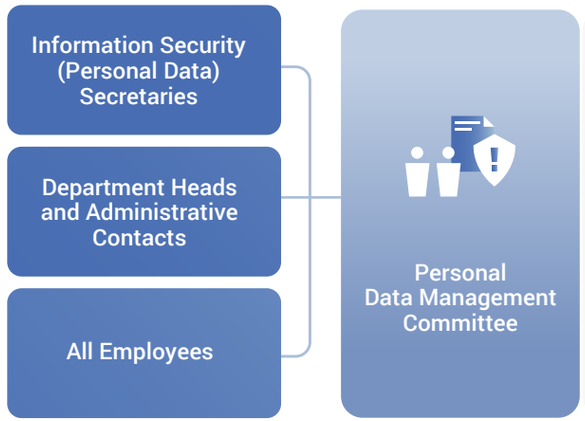
To prevent various types of misconduct, employees engaged in sales, procurement, contracting, supervision, budgeting, or other roles involving supplier interaction are strictly prohibited from accepting meals, entertainment, gifts, monetary items, or other benefits from suppliers. Regular job rotation has been implemented for these positions. Anti-corruption training materials have been developed for all colleagues, and in 2024, the "Anti-Corruption Awareness Training" coverage rate reached the goal of 100%, with a total of 1,817 person-hours of training. All employees are expected to follow ethical standards in both work and life, demonstrating the corporate culture of *diligence and simplicity*. In 2024, there was 1 corruption case. Except for the aforementioned case which is still in the judicial process, there were no other corruption-related cases that were sentenced in 2024, so the amount of the fine was NT$0. For details, please refer to "Chapter 4: Number of Grievance and Reporting Cases Received in the Past Years, by Channel."

4. Personal Data Protection

To ensure compliance with applicable personal data protection laws and regulations by employees, suppliers, customers and external parties, Nanya Technology has established the Personal Data Management Rules. These rules clearly define the organizational structure and responsibilities for personal data protection, specify regulations for the collection, processing, and use of personal data, and outline procedures for handling data subjects' rights. All departments are required to adhere to these rules when collecting or processing personal data. Departments commissioning personal data collection or processing to others, other departments, or other companies, are responsible for ensuring that the actions taken by the commissioned parties comply with these enforcement rules and relevant laws and regulations. Unless consent is obtained from the data subject or specifically required by other laws and regulations, Nanya Technology will never disclose personal data to third parties or use it for purposes beyond the original collection purpose. To manage personal data processing risks, Nanya Technology conducts an annual inventory and assessment of personal data items to ensure compliance with current policies. Improvement measures are implemented based on risk levels. For employee and customer personal data, access controls are set with strictly limited purposes. In 2024, no high-risk items were identified.

Since May 2018, the European Union's General Data Protection Regulation (GDPR) has been officially enforced. As Nanya Technology operates subsidiaries in Europe, the regulation imposes significant requirements on the management measures of personal data belonging to European employees, customers and suppliers. Nanya Technology has taken various response measures to comply with GDPR and has published these measures in the Personal Data Protection Notice on the Company's official website. We have implemented related systems throughout all subsidiaries to increase employee awareness of personal data protection and reduce the risk of violations. In 2024, a total of 3,634 employees completed the "Personal Data Protection Training," achieving a 100% completion rate with no violation incidents. The Company conducts internal personal data audits every year to ensure thorough implementation of personal data management. Nanya Technology has published its Privacy and Cookies Policy on the official website. Within the authorized scope and for specified purposes, the Company adopts secure and reasonable methods to collect, process, and use personal data. We also ensure that customers can exercise their rights as stipulated under the Personal Data Protection Act. Due to our strict and effective implementation of personal data protection, in 2024, there were no violations and no secondary use of data beyond authorized purposes.

Structure of the Personal Data Management Committee



Responsibilities of the Personal Data Management Committee

- Evaluation and review of the legality and appropriateness of personal data protection and management mechanisms
- Regular testing, assessment, and measurement to ensure the effectiveness of technical and organizational functions for processing personal data
- Providing necessary resources for establishing personal data management mechanisms

Number of Personal Data Regulation Violations and Associated Fines

	2021	2022	2023	2024
Number of Personal Data Complaints	0	0	0	0
Number of Personal Data Violation Fines	0	0	0	0
Fine (in NT$)	0	0	0	0
Number of Complaints from External Parties	0	0	0	0
Number of Complaints from Competent Authorities	0	0	0	0

5. Internal Control

Internal Control System

Nanya Technology has established an effective internal control system in accordance with the Regulations Governing Establishment of Internal Control Systems by Public Companies. This system takes into account the overall operational activities of the Company and its subsidiaries, while adhering to relevant industry regulations. We continuously review the system to adapt to changes in internal and external environments, ensuring its ongoing effectiveness in both design and implementation.

The internal control system operates on an ongoing basis, continuously monitoring various operational and management activities. When deviations from company policies, operating procedures, established objectives, or expected standards are identified, they are reported to the appropriate management levels through feedback mechanisms. Corrective actions are then implemented as needed to ensure that operations remain aligned with the Company's intended direction. The internal control mechanism also cross-checks operations to prevent fraud.

Internal Audit

Nanya Technology has established an Auditors Office that reports directly to the Board of Directors. The Company employs 3 dedicated auditors who participate annually in audit courses offered by professional training institutions, in accordance with regulatory requirements. This training continuously enhances their expertise and capabilities. Through this independent and professional internal audit structure, the Company implements internal control principles across all levels of the organization.

Internal auditors not only prepare audit reports on deficiencies and anomalies discovered in the internal control system during inspections, but also track these issues to ensure relevant departments implement appropriate improvement measures promptly. Additionally, these audit reports are submitted to independent directors for review by the end of the month following the completion of the audit. Internal auditing is not solely the responsibility of the independent audit department. Each department within the Company must also conduct self-inspections of specific audit items at required intervals. The independent audit department then performs follow-up inspections based on independent inspection results to ensure the internal control system is effectively implemented across all departments.

Statistics of Internal Audit Items

	2021	2022	2023	2024
Number of Audit Items	42	42	42	42
Number of Non-Conforming Items Detected	2	3	3	2 Note
Non-Conforming Item Improvement Rate	100%	100	100%	100%

Note: There were 2 items, 1 in the production category and 1 in the financial category. Both have been improved.

8.5 Quality Management

Nanya Technology's quality management system is customer-oriented and built around six aspects: new technology development, new product development, supplier management, process control, subcon management, and customer service—all aligned with the Company's technical development strategy. Throughout each stage, we apply effective tools such as reliability verification, problem analysis and resolution, 8D approach, experimental design, statistical testing, Failure Mode and Effects Analysis (FMEA), the 7 QC tools, SPC/Cpk process control, mistake-proofing, and internal audits to implement corrective actions and adjustments. We place equal emphasis on internal process quality improvement and external customer satisfaction. For both internal and external quality matters, the PDCA cycle is applied across all quality performance indicators. Through continuous improvement, we ensure the effectiveness of quality monitoring and control measures while achieving our quality goals and ensuring product safety. There were no product recalls during the five-year period from 2020-2024.

Quality Management Aspect

New Technology Development	New Product Development	Supplier Management	Process Control	Subcon Management	Customer Service
Project management	Project management	Supplier assessment	IPQC	Subcon evaluation	Customer requirements
Item review	Item review	Supplier audit	SPC/Cpk	Subcon audit	Complaints and returns
Phase review	Phase review	IQC	FMEA	Non-conforming handling	Delivery control
Quality confirmation	Design review	e-COA/SPC	Control plan	Change control	Technical service
PFMEA	Design verification	Non-conforming handling	APC/R2R	Regular meetings	Customer satisfaction
Control plan	Quality confirmation	Change control	Calibration/MSA	Audit guidance	Customer change notification
SPC/Cpk	DFMEA	Regular meetings	Change control	HSF control	
MSA	Reliability verification	Audit guidance	Non-conforming handling	Subcon assessment	
Reliability verification	Sample verification for customer approval	HSF control	Shipping quality control	Raw material control	
Mass production review	Mass production review	Supplier assessment		Test program control	
HSF confirmation	HSF confirmation				

QC 7 Tools, Problem Analysis and Solving, 8D, Design of Experiments, Statistical Testing
FMEA, SPC/Cpk, Fool-proof Design, AI , Internal Audit, Continuous Improvement

Product quality control process

Nanya Technology is committed to providing high-quality products and has established a comprehensive quality control process that covers supplier management, process quality control, and shipment quality control to ensure product quality and traceability. The various controls are described below.

Supplier management: Establish a qualified supplier list system, conduct supplier evaluation and review, and regularly audit and evaluate the performance of qualified suppliers to ensure they meet quality requirements.

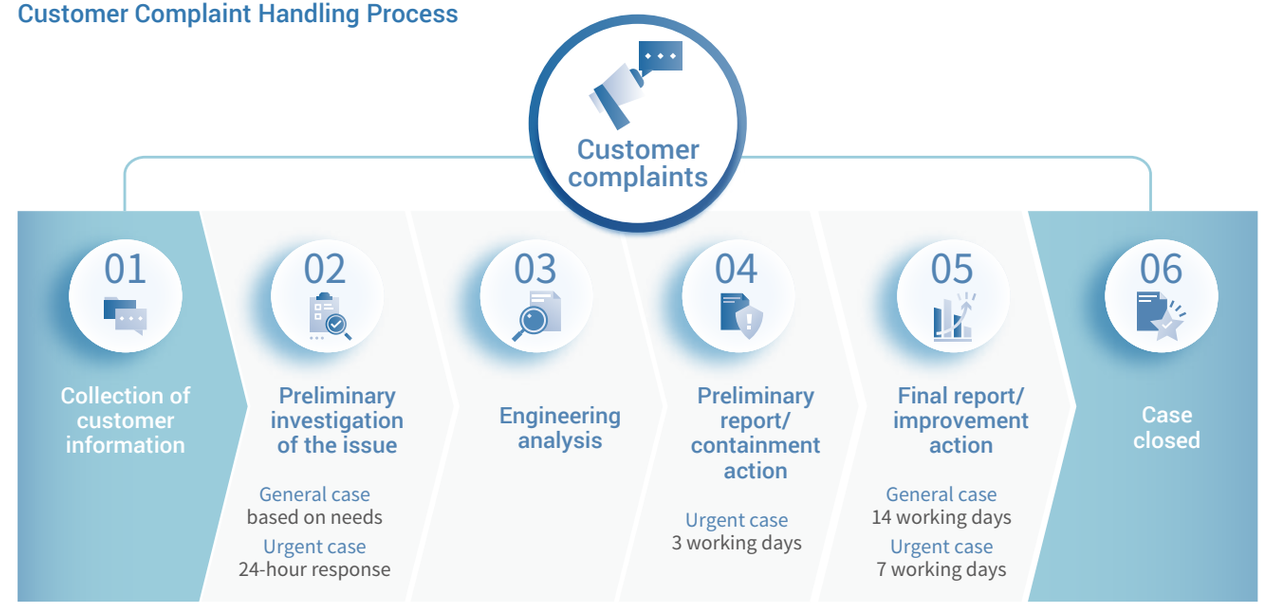
Process quality control: We use fully automated production operations and statistical process control technology to monitor process variation, detect and eliminate potential quality problems early, maintain process stability, monitor production yield, regularly analyze the causes of defects, and take improvement measures to continuously improve product yield. All products must undergo 100% functional and performance testing to confirm that the products meet specifications and customer requirements.

Shipping quality control: Through the production information management system, product packaging, labeling, quantity and shipping conditions are checked to ensure that the shipped products are consistent with the order content. The system will record the product's production batch number, test records and other information to achieve product traceability, and conduct a final sampling inspection before shipment to ensure that the product's appearance and quality meet the standards.

Customer Complaint Procedure

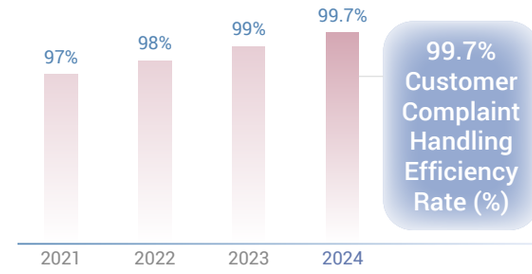
Nanya Technology is committed to improving product quality and responding swiftly to customer quality issues to meet expectations. To speed up problem analysis, If customers or end users have any quality issues, they can contact us through Nanya Technology's customer service website, Nanya Technology will then contact the customer to gather relevant information, reasons for the complaint, and specific requirements. If necessary, a preliminary investigation of the issue will be conducted. If the issue is found to be related to our products or requires further analysis, we will create a case in the complaint system and arrange return shipping for inspection. Upon receiving the complaint product, we will analyze it, track progress based on urgency, consolidate complaint analysis report within the specific timeframe, and provide regular updates to the customer until the case is resolved. Through collaboration between Field Application Engineering, Quality Assurance, Product Engineering, and Process Departments, and utilizing the complaint management system for process oversight, Nanya Technology has consistently responded to over 90% of customer complaints within the target timeframes over the years.

Customer Complaint Handling Process



Note: If the case requires other analysis to verify the root cause, we update the progress of analysis according to the analysis plan until the case is closed.

Achieving Rate of Customer Complaint Cases



In 2024, 99.7% of cases were completed within target timeframes. Nanya Technology continues to maintain close communication with customers to quickly understand usage methods and failure conditions, enabling faster analysis and problem resolution. Cases that missed the target timeframes were those requiring more complex analysis, including customer platform analysis, signal measurement, parameter adjustment, and test program development, which require more time. Throughout the analysis process, regular progress updates are provided, and analysis plans are also discussed with customers.

International Certification of Quality Management System

Having passed third-party quality audits and certification by the LRQA Group Limited Taiwan Branch, Nanya Technology maintains ISO 9001 and IATF 16949 international quality management system certifications. These standards form the basic structure of our quality management system, serving as guiding principles and the basis for all department procedures.

Internal Audits of Quality Management System

Nanya Technology assesses the implementation of its quality management system through annual internal audits, with the Quality Reliability Assurance Division Head acting as the convener and the representative of the quality management system. The Quality Reliability Assurance Division conducts audits across all relevant departments annually based on the quality management system plans. These audits cover the entire quality management system, including quality system audits, process audits, and product audits. Furthermore, the Quality Reliability Assurance Division encourages each department to conduct self audits and cross-audits. The Quality Reliability Assurance Division is responsible for developing audit plans. To enhance the efficiency of internal audits, a quality audit taskforce has been formed, consisting of trained and qualified staff members who act as auditors, conducting internal audits in an objective and impartial manner. Regarding audit implementation and records, during audits, if the audit taskforce identifies any issues, the lead audit department issues an Electronic Corrective Action Request addressing the deficiencies findings. The department responsible for the deficiency must acknowledge the request and implement corrective actions. The taskforce tracks the progress of these deficiencies and verifies the effectiveness of the corrective measures. The management of the audited area is responsible for ensuring that all necessary improvements and corrective measures are completed within the specified timeframe. The Quality Reliability Assurance Division reports internal audit results to Top management in quality monthly meetings and semi-annually quality system management review meetings. They require corrective measures for any issues identified. No major findings were identified in the internal audit in 2024.

Strengthening Quality Awareness

Nanya Technology promotes a quality culture based on Upholding Quality and Creating Value. This quality management philosophy is put into practice by fostering an environment that encourages technical innovation, continuous improvement, and teamwork among employees. The Company aims to enhance employees' ability to meet business goals, adhere to quality policies, and contribute to its sustainable operations. To help employees understand and enhance effectiveness, Nanya Technology implements annual training and development plans that include core courses, professional skills training, quality training courses, electronic announcements, quality posters, recognition for outstanding teams, Improvement proposal system, quality competitions, technical paper competitions, and other promotional activities. These initiatives help cultivate a strong sense of quality awareness, responsibility, and cultural literacy, driving overall quality enhancement across the organization. The 2024 quality training courses and hours are detailed on the table below:

Promoting Continuous Improvement Activities

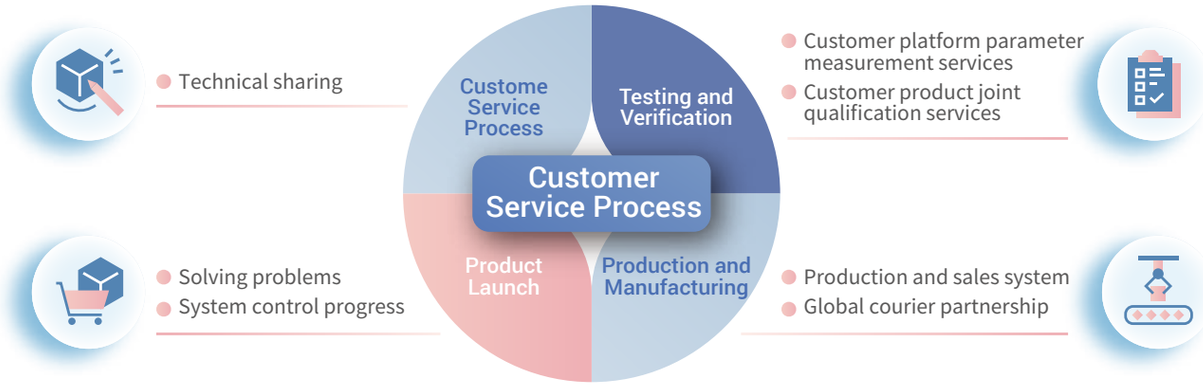
Item	Description
Establishment	Nanya Technology established the Quality Policy that builds core quality values: We strive for continuous improvement, working in a practical way, with a spirit based on exceeding our customers' requirements in *quality, delivery and service*. The policy and goals are published on the Company homepage and promoted to all employees via the TDS employee training system.
Innovation	Nanya Technology organizes Outstanding Team events to promote employee engagement in quality innovation, strengthen teamwork, and enhance continuous improvement capabilities, setting examples for a successful teamwork model.
Sharing	Nanya Technology has built a knowledge management platform called "Knowledge Alliance" to support company-wide quality management, professional development, and the sharing of quality-related experiences.
Rewards	Nanya Technology has established the Rewards for Improvement Proposals and Outstanding Team Selection programs to encourage continuous improvement initiatives and promote improvement competitions. We recognize and reward innovative ideas from employees, inspiring them to consider improvement opportunities and submit proposals beneficial to operational performance.
Improvement	Nanya Technology holds monthly quality competitions, using quantified indicators to evaluate quality management performance, including nonconformance prevention, production line yield, defect quantity, equipment nonconformance, and appearance defect on wafer, motivating colleagues to focus on quality management and continuous improvement.
Audit	Through internal quality audits, customer audits, and third-party audits, Nanya Technology continuously drives quality improvements and incentive programs, maintaining third-party audit certifications for its quality management system each year.

Quality Management System Training

Training Type	Quality Training Course	Participants	Hours
Designated Compulsory Readings for All Employees	Quality_HSF and Responsible Mineral Sourcing Policies and Goals	All employees	1,183
	Green Product Training	All employees	1,792
	Responsible Mining Investigation Report	All employees	1,792
Quality Training for New Employee	New Employee (I): Quality Concepts and Quality Management System, Introduction of Knowledge Management and System Overview	New Employee (within 1 month)	1685
	New Employee (II): NTC Product Introduction, Process & Equipment Overview, DRAM Operation Principles, SPC, Quality Costs, Problem Analysis and Solution Methods, Document Control, Change Management Rules, Procurement Management, EDA System Introduction	New Employee (within 6 months)	7456
Semiconductor Manufacturing Process	New Product Development and Verification Process Introduction	R&D/Design/Process/Product Engineering/Marketing and Quality Assurance Staff	102
	Parameter Tool Overview, Defect Inspection Tool Overview, Stack Process Integration, Basic Record (Advanced Course), MOS Component Physics	R&D/Design/Process/Product Engineering/Marketing and Quality Assurance Staff	1018
Product Technology	Physical Failure Analysis and Various Electron Microscope Principles and Applications	R&D/Design/Process/Product Engineering/Marketing and Failure Analysis Staff	446
	Introduction to Packaging Process	R&D/Design/Process/Product Engineering/Marketing and Quality Assurance Staff	98
	Electrical and Chemical Analysis	Process/Product Engineering/Testing and Quality Assurance Staff	110
	Process Development Training: Process and Equipment Introduction	R&D/Process Staff	1261
Testing Technology	Basic Testing Concepts	R&D/Design/Process/Product Engineering/Testing and Quality Assurance Staff	144
	Product Back-End Production Process	R&D/Design/Process/Product Engineering/Testing and Quality Assurance Staff	92
	Introduction to Post-Packaging Testing Process	R&D/Design/Process/Product Engineering/Testing and Quality Assurance Staff	69
Quality Management	Internal Auditor Training: Quality Management System, Hazardous Substance Free Management System	Quality Audit Staff	138
	Introduction to Automotive Product Development and Verification Proces	R&D/Design/Process/Product Engineering/Testing/Marketing and Quality Assurance Staff	34
	Procedures for Introducing Sub-Plan & PCRB Review of New Products	R&D/Design/Process and Quality Assurance Staff	110
	Supplier/Subcon Quality Management	Materials/Process and Quality Assurance Staff	108
	Process and Management for Product/Process Change Notification	R&D/Design/Process/Product Engineering/Testing/Marketing and Quality Assurance Staff	112
	Process Non-Conforming Handling Regulations	R&D/Design/Process/Testing and Quality Assurance Staff	122
	Introduction to Customer Complaint and Analysis Process	Sales/Marketing/Product Engineering and Customer Service Staff	106
	Introduction to Calibration Management System	Equipment and Quality Assurance Staff	566
	Failure Mode and Effects Analysis (FMEA)	R&D/Design/Process/Equipment and Quality Assurance Staff	148
	Introduction to Automotive Product APQP/PPAP Process	R&D/Design/Process/Product Engineering/Testing/Marketing and Quality Assurance Staff	102
	Design of Experimental Methods (Basic)	R&D/Design/Process and Quality Assurance Staff	198
	Quality Reliability Verification: Product Reliability Introduction, Dielectric Layer Process Reliability, Component Process Reliability, Metal Layer Process Reliability	R&D/Design/Process and Quality Assurance Staff	648
	Production Manufacturing Division: Quality Training, Company Product, Introduction to Production Indicators and Process Overview, Production Line Management and Operation Regulations, Computer Application Operation	Production Unit Staff	403
Total Annual Quality-Related Training Hours			20,043

8.6 Customer Relationship Management

Nanya Technology is committed to providing the best customer service, recognizing that appropriate and timely customer service is the key to maintaining customer relationships. Strong customer relationships help build customer loyalty and strengthen trust. Our vision is to become the Best DRAM Partner for Smart World, adopting a service-oriented approach. By closely collaborating with controller chip makers and customers, we strengthen product research, development, and manufacturing to meet diverse needs. We aim to offer comprehensive products and system solutions, delivering superior and more reliable services to our customers.



1. Product Design and Test Verification Phase

To improve the efficiency and frequency of customer service and build closer customer relationships, the Field Application Engineering Division supports the technical needs of customers across Taiwan, China, Southeast Asia, Europe, the Americas, Japan, and Korea. Nanya Technology conducts ad-hoc technical sharing sessions and offers DRAM professional courses tailored to customer requirements. In 2024, Nanya Technology conducted 96 sessions to provide technical support, assist customer engineers in resolving design and testing challenges, and enhance their understanding of DRAM usage and applications.

Additionally, Nanya Technology supports customers in understanding the characteristics of their product platforms by providing efficient, intensive, and high-quality platform parameter measurement services. This significantly accelerates new product development progress and verification cycles, reduces investment risks, and enables end products to enter target markets in a timely manner. Nanya Technology also provides joint qualification services, supporting early-stage product development and verification to detect and resolve compatibility issues before mass production. In 2024, Nanya Technology completed a total of 1,032 measurement service cases and 27 joint qualification service cases.

2. Production and Sales Phase

Nanya Technology produces products that meet customer demands through strict quality control. Sales maintain ongoing communication with customers and provide weekly demand forecasts for headquarters. After consolidating global sales feedback, headquarters uses this information to generate production plans through the production and sales system, continuously adjusting based on weekly updates to effectively meet customer demands. Furthermore, Nanya Technology collaborates with several major international express companies, selecting the most suitable express provider based on customer location and delivery efficiency to ensure product delivery aligns with customer requirements.

3. After-sales service Phase

For customer quality issues, Nanya Technology solves product issues through the customer complaint handling process in order to meet customer expectations.

4. Customer Confidential Information Protection

Regarding customer privacy, Nanya Technology has established the Personal Data Management Rules as its standards for collecting, processing, and using personal data. Unless consent is obtained from the data subject or specifically required by other laws and regulations, Nanya Technology will never disclose customers' personal data to third parties or use it for purposes beyond the original collection purpose.

Nanya Technology has established Confidential Information Management Procedure, which define confidentiality levels that all employees are required to review. Metal detectors are installed at offices and facility entrances and exits, and restricted items related to information security are not allowed to be brought in or out. All items must undergo inspection through metal detectors, and company confidential information cannot be disclosed without proper authorization, ensuring the protection of customer rights and interests.

5. Customer Satisfaction

Nanya Technology actively understands customer requirements for product quality, delivery, and service through multiple communication channels, including customer satisfaction surveys, business and technical evaluation meetings, and customer service platforms. This enables us to continuously improve products and services while strengthening customer relationships.

In terms of customer satisfaction, Nanya Technology conducts annual surveys of both direct trading customers and end customers through neutral third-party investigation companies and internal methods. These surveys, which utilize online platforms or interviews, aim to gather a fair and objective understanding of customer demands. The survey covers topics such as products, delivery, quality, technical services, communication, commercial, and competitor ranking comparisons.

Nanya Technology has established a comprehensive Customer Satisfaction Handling Standard Procedure and a Customer Satisfaction Committee. Utilizing the Plan-Do-Check-Act (PDCA) management cycle, the Company works towards the shared goal of improving customer satisfaction. The Committee is composed of cross-departmental units, with managers from marketing, sales, operations management, field application engineering, and quality assurance departments participating. Main tasks include selecting investigation targets, sending questionnaires, collecting questionnaires, analyzing data, regularly reviewing customer opinions, coordinating and proposing appropriate improvement plans, and reporting customer satisfaction results in senior management meetings. Finally, they provide customers with continuous improvement solutions, forming a complete and effective cross-functional service team. Through services, they build customer relationship management based on mutual prosperity and work to continuously enhance customer satisfaction.

Besides customer satisfaction surveys, customers regularly conduct business and technical evaluation meetings with Nanya Technology's service team, maintaining close communication to enhance service quality. To improve customer satisfaction, Nanya Technology has established a review platform that prioritizes addressing and improving customer demands. Customers can also access the customer service platform via Nanya Technology's corporate website Contact Us to submit suggestions and requests, continuously strengthening customer relationships. We will continue to strengthen internal coordination across departments to respond promptly to customers' urgent or unexpected needs, consistently improve product quality, enhance timely and effective communication of quality issues, maintain good communication with customers, and strive to meet all customer requirements.

Contact Us

- Identifying survey respondents
- The annual survey is conducted in parts on a monthly basis

- Distributing surveys
- The survey covers areas including Product, Delivery, Quality, Technical Service, Communication, Commercial, and Competitor ranking comparisons

- Corrective actions
- Reporting on management review meeting
- Reporting improvement plan to customers

- Data collection and analysis
- Cross-departmental review meetings held by the Customer Satisfaction Committee

The overall average customer satisfaction score for 2024 was 95.7 points, which exceeded the goal of 91 points. Each year, Nanya Technology reviews customer satisfaction survey results and conducts benchmark learning to establish reasonable targets. The proposed goal is submitted by the Quality Reliability Assurance Division and approved by the President. For 2025, the target has been set at a score of 91 or higher.

Analysis shows that customers gave high ratings of 97 points or above in three key areas: delivery, technical service, and communication. These results reflect Nanya Technology's efforts to accelerate customer new product verification and share technical insights during design, testing, and verification phases. In addition, Nanya Technology has expedited new product development in response to market demand, supply, and application needs, enhanced communication with customers, actively addressed improvement issues, enforced strict quality control, and continuously improved by incorporating and valuing customer feedback.

Nanya Technology's overall performance has been recognized by customers over the years. With scores above 80 points considered satisfactory, 99.2% of customers were satisfied with our overall performance in 2024. This marks the seventh consecutive year exceeding the customer satisfaction goal of 95% or higher. The customer satisfaction percentage goal for 2025 is set at 95% or higher.

Customer Satisfaction Results