

8

Integrity and Transparency

A Trustworthy Company

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Nanya adheres to regulations and abides by moral standards. We continue to strengthen corporate governance and risk management mechanisms and use comprehensive education and training programs to improve the professional ethics of all employees and build common prosperity in the industry to become the most trustworthy company.

Elevated sustainability governance

The Sustainable Development Committee was restructured from an internal management organization to a functional committee under the Board of Directors

Constituent stock of the DJSI World Index

Constituent stock of the DJSI World Index and Emerging Markets Index

TOP 5%

Top 5% in the 9th Corporate Governance Evaluation of TWSE Listed Companies



Strategy and Performance of Material Topics



Risk Management

Risk Management:
Establish effective risk improvement mechanisms and procedures
Loss management:
Operating stress test and lowering operating costs.

Effectiveness:
Mobilize all employees for risk management training and regular drills for operating risks.

2022 Goals	2022 Performance Target achievement status	2023 Goals
4 quarterly meetings and reported to the Board of Directors 2 times	4 quarterly meetings and reported to the Board of Directors 2 times	4 quarterly meetings and reported to the Board of Directors 2 times
Emergency response plan completion rate : 55 items	67 items	Emergency response plan completion rate: 55 items
Stress testing : Implement 7 aspects each year	8 aspects	Stress testing : Implement 7 aspects each year
Education and training : 100% of all employees	100%	Education and training: 100% of all employees



Business Integrity

Focus on both internal and external operations: Implement regular internal education and training sessions and expand them to include external entities. Provide sufficient reporting channels and protection to cultivate professional ethics and legal compliance culture.

2022 Goals	2022 Performance Target achievement status	2023 Goals
Material violations of regulations : 0 cases	0	Material violations of regulations: 0 cases
Corruption cases : 0 cases	0	Corruption cases: 0 cases
Employees' labor ethical training completion rate : 100%	100%	Employees' labor ethical training completion rate: 100%
Employees' antitrust training completion rate : 100%	100%	Employees' antitrust training completion rate: 100%
Workplace violence : 0 cases	0	Workplace violence: 0 cases
Violation of trade secrets 0 cases	0	Violation of trade secrets 0 cases



Customer Service

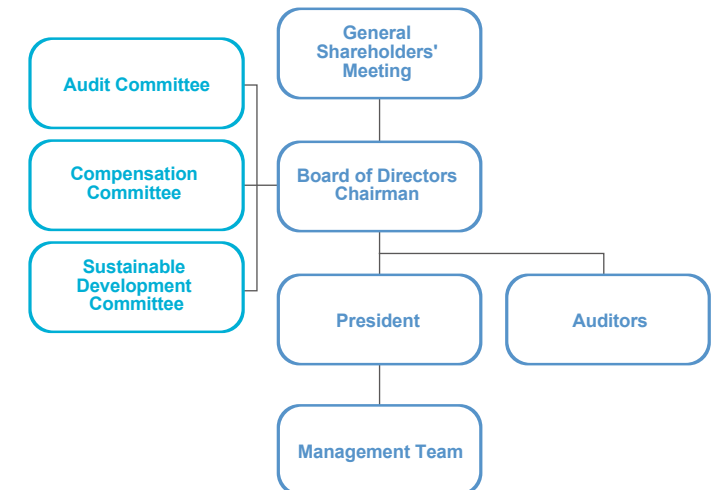
Design and testing:
Use global engineering support services to resolve issues with customer design and testing.

Production and sales:
Implement rigorous control of quality and improve delivery efficiency.
After-sales services:
Use the customer complaint management system to quickly resolve customers' issues

2022 Goals	2022 Performance Target achievement status	2023 Goals
Customer satisfaction score : 91 points	94.7	Customer satisfaction score: Over 91 points
Customer participation in platform parameters measurement services : 930 cases	950 cases	Customer participation in platform parameters measurement services: 935 cases
Joint product verification services for customers : 24 cases	31	Joint product verification services for customers: 24 cases
Customer technical exchange and courses : 88 sessions	115 sessions	Customer technical exchange and courses: 92 sessions

8-1 Corporate Governance

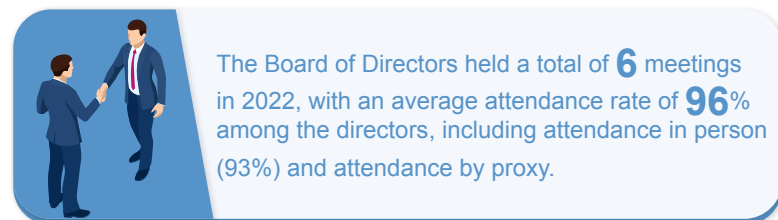
Nanya believes that through comprehensive and efficient corporate governance mechanisms, we are able to reinforce the Company's operations and protect shareholders' interests. The Company was once again selected as a constituent of the Dow Jones Sustainability Indices (DJSI) World and Emerging Markets in 2022 and was listed in the S&P Global Sustainability Yearbook, ranking in the top 5% of the global semiconductors and semiconductor equipment industry. Currently, Nanya is a constituent stock of the FTSE4Good TIP Taiwan ESG Index and the TWSE Corporate Governance 100 Index. In addition, the Company was ranked in the top 5% for the fifth time in the 9th Corporate Governance Evaluation of TWSE Listed Companies released in 2023. These performances show that our continued efforts in corporate governance are recognized.



Note: On August 3, 2022, Nanya's Board of Directors approved the establishment of a Sustainable Development Committee and the merger of the original Risk Management Committee based on functional considerations.

Operations of Board of Directors and Functional Committees

Nanya's Board of Directors complies with relevant laws and regulations and resolutions of shareholders' meeting in its operations. The directors possess the necessary professional knowledge, skills, and qualities to carry out their duties, and are guided by the principles of sustainable management to create the maximum interests for the shareholders. The main responsibilities of the Board of Directors are to ensure transparency of company information and compliance with laws and regulations, appoint senior managements, formulate earnings distribution proposals, and supervise and guide company operations. To establish a sound governance system for the Board of Directors, enhance its supervisory function, and strengthen its management capabilities, Nanya has formulated its [Rules of Meetings of the Board of Directors](#), which stipulate the relevant provisions for conducting its business to ensure compliance. The Board of Directors held a total of 6 meetings in 2022, with an average attendance rate of 96% among the directors, including attendance in person (93%) and attendance by proxy.



The Board of Directors held a total of **6** meetings in 2022, with an average attendance rate of **96%** among the directors, including attendance in person (93%) and attendance by proxy.

Nomination and Election of Board Members

Nanya has established fair, just, and open [Rules for the Election of Directors](#), encouraging shareholders to participate in the nomination and election of directors. The candidate nomination system and cumulative voting method are adopted for the election of directors, in accordance with the Company Act and relevant laws and regulations. In addition, Nanya's [Articles of Incorporation](#) stipulate that the Board of Directors shall consist of 9 to 12 directors, including at least 3 independent directors, with a three-year term. The Company has also established regulations for evaluating the performance of the Board of Directors. The evaluations are conducted regularly every year and evaluation results serve as a reference for the nomination and re-election of directors.

Management of Conflict of Interest

Nanya has provisions on avoidance of interests in the rules of Meetings of the Board of Directors, and the charters of Audit Committee, Compensation Committee, and Sustainable Development Committee. If a director or a juristic person that the director represents is an interested party in relation to an agenda item, the director shall state the important contents of the interested party relationship at the respective meeting. When the relationship is likely to harm the interest of the company, that director shall not participate in discussion or voting on that agenda item and shall recuse himself or herself from the discussion or the voting on the item and shall not exercise voting rights as proxy for another director. In addition, the Company also has [Codes of Ethics for Directors and Managers](#), which requires relevant personnel to adhere to ethical standards when performing their duties and to avoid personal interest or potential conflicts of interest that may affect the overall interests of the company, in order to prevent actions that may harm the interests of the company and its shareholders.

Board Diversity

Nanya's [Corporate Governance Principles](#) stipulate that the composition of the Board of Directors shall be determined by taking diversity into consideration, including but not limited to gender, race, and nationality. The current Board of Directors consists of 12 members with diverse professional backgrounds, including 4 independent directors and 2 female directors, accounting for 33% and 17% of the total, respectively. Moreover, at least one of the independent directors has expertise in accounting or finance, and all independent directors hold concurrent position as independent directors in no more than three other public companies. There are 8 directors, representing 67% of the total, who do not hold managerial positions in Nanya. Additionally, the Chairman of the Board also does not concurrently serve as a senior executive of Nanya, which demonstrates the spirit of sustainable corporate governance through the separation of responsibilities. As of the end of 2022, 3 directors were aged between 51 and 60 years, while the others were over 60. The average tenure of the directors is 9.4 years.



Implementation
of Board
Diversity Policy

Professional Courses for Board Members

To enhance the professional competence of the directors, the Company arranges at least 6 hours of training courses for them every year. In 2022, the total number of training hours for the directors was 92 hours, with an average of 7.7 hours per director. The courses included a variety of topics such as economics, corporate governance, information security governance, sustainable development, circular economy, net-zero emissions, green industries, and legal compliance. For information on the training courses of the directors, please refer to pages 58 to 59 of Nanya's [2022 Annual Report](#).

In addition to their diverse professional backgrounds, Nanya's directors also have experience as senior managers, government officials, or public representatives, which provide them with the multidimensional abilities required to perform their duties as directors. In 2023, the Company will continue to plan and arrange training courses for the directors on topics related to sustainable development, corporate governance, or risk management, in response to the development trends of sustainability issues and corporate governance, and to strengthen the comprehensive abilities of the directors.



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Functional Committees and Main Duties

To strengthen the supervisory functions and management mechanisms of the Board of Directors, the Audit Committee, Compensation Committee, and Sustainable Development Committee were set up under Nanya's Board of Directors. Each functional committee is responsible to the Board of Directors and submits their proposals to the Board of Directors for approval.

Audit Committee



- The Committee consists of 4 independent directors, with Mr. Ching-Chyi Lai serving as the convener.
- The Committee held 5 meetings in 2022, with a 100% attendance rate.

Authority and responsibility: To supervise the execution of the Company's business operations and financial status, audit the Company's financial statements, assist the Board of Directors in carrying out its supervisory responsibilities, and be responsible for tasks assigned by the Company Act, Securities and Exchange Act, and other relevant laws and regulations.

Compensation Committee



- The Committee consists of 4 independent Directors, with Mr. Shu-Po Hsu serving as the convener.
- The Committee held 2 meetings in 2022, with a 100% attendance rate.

Authority and responsibility: To establish and periodically review policies, systems, standards, and structures for the performance assessments and compensation of the directors and executives.

Sustainable Development Committee



- On August 3, 2022, Nanya's Board of Directors approved the establishment of a Sustainable Development Committee and the merger of the original Risk Management Committee based on functional considerations.
- The Committee consists of 7 directors, including 4 independent directors, with Mr. Pei-Ing Lee serving as the convener.
- The Committee held 1 meeting in 2022, with a 100% attendance rate.

Authority and responsibility: To deliberate on the Company's policies, strategies, and management guidelines regarding sustainable development and risk management; to oversee the Company's promotion of sustainable development and risk management related matters, as well as their implementation plans; to review significant information related to sustainable development, including the sustainability reports and other publicly disclosure matters, and to report to the Board of Directors.

Performance Evaluations of Board of Directors and Functional Committees

To implement corporate governance and improve the functionality of the Board of Directors, Nanya's Board of Directors has established the [Regulations of Performance Evaluation of the Board of Directors](#). The performance evaluations of the Board of Directors and its functional committees are regularly performed each year. In 2022, the performance evaluations were conducted on the Board as a whole, individual directors, the Audit Committee, the Compensation Committee, and the Risk Management Committee. The evaluation results were all "good" and were reported to the Board of Directors in November 2022. For information on the implementation of the 2022 performance evaluations for the Board of Directors and its functional committees, please refer to pages 32 to 33 of Nanya's [2022 Annual Report](#).

Compensation of Senior Executives

The compensation of managerial officers of the Company includes monthly salaries and various bonus systems, pension systems, and evaluation systems approved by the Compensation Committee. They are reported to the Board of Directors for approval before implementation. Members of the Remuneration Committee are all independent directors and provide external remuneration recommendations. The committee meets at least twice a year to ensure the reasonableness and competitiveness of remuneration.

The salary adjustment, bonuses, and other compensation of senior executives are determined in accordance with the Company's operations and personal performance and contributions. The Company included their economic, environmental, and social contributions and other corporate governance indicators for sustainable development. The Company also references salary standards in the industry and assigns the Human Resources Department to draft recommendations and report them to the Compensation Committee. The Committee Member shall review the recommendations and submit them to the Board of Directors for approval and execution.

Remuneration of the president and vice presidents is in accordance with Company rules, and includes fixed compensation, such as fixed salary, diligence incentive, and year-end bonus, monthly pension contributions (including new and old pension system) according to the Company's retirement regulations, and employee welfare funds; variable compensation includes special incentives, incentives, and employee bonuses paid for special situations according to the Company's retention measures and business performance.



In addition to annual performance evaluations, 360-degree evaluations and sustainable development evaluations on the following aspects are also convened for senior managers.



Shareholding Status of Senior Executives

March 26, 2023

Position Title	Name	Number of Shares Held
President	Pei-Ing Lee	1,455,098
Executive Vice President	Lin-Chin Su	650,601
Vice President	Joseph Wu	610,000
Vice President	Rex Chuang	459,000
Vice President	Yau-Ming Chen	0
Assistant Vice President	Chi-Meng Su	0
Assistant Vice President	Mark Mao	0
Assistant Vice President	Jeff Lin	216,027
Assistant Vice President	Rex Chen	62,000
Assistant Vice President	Chuan-Jen Chang	173,048

8-2 Risk Management

Nanya Technology Corporation established a Risk Management Committee under the Board of Directors in 2020 to strengthen board functions and risk management mechanisms. The Company further established the Sustainable Development Committee under the Board of Directors in August 2022 with consideration to the implementation of ESG to achieve sustainable development and updated development goals. The Risk Management Committee was then merged into the Sustainable Development Committee due considerations of authority and function. The Sustainable Development Committee Charter stipulates that the committee shall have no less than three members, and half or more of all members must be independent directors. The committee is currently formed by 4 independent directors and 3 directors.

Nanya formulated the [Risk Management Regulations](#), which was approved by the Board of Directors. In accordance with the Risk Management Regulations, the risk management policies are effective identification, analysis and assessment, control and action, ongoing supervision of various risks, and enhancement in risk awareness of the staff, with the aim of controlling risks within the tolerance level, and ensuring the integrity, effectiveness, and efficiency optimization of risk management.

Missions and Commitments



Risk Management Missions

We will establish and maintain effective risk management systems and constantly improve them, lower operation cost to ensure corporate sustainable profits, and create a quality working environment to achieve the goals of corporate sustainable operation.



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 employees of all levels receive adequate training and have the skills for performing various risk management tasks to ensure the normal operations of the Company.
- The Company shall provide necessary resources to maintain the effective operations of risk management mechanisms and continue to implement improvements to reduce risks.
- We shall strengthen communication with stakeholders, increase the risk management awareness of all employees, and fulfill our risk management policy.

Organization and Operations

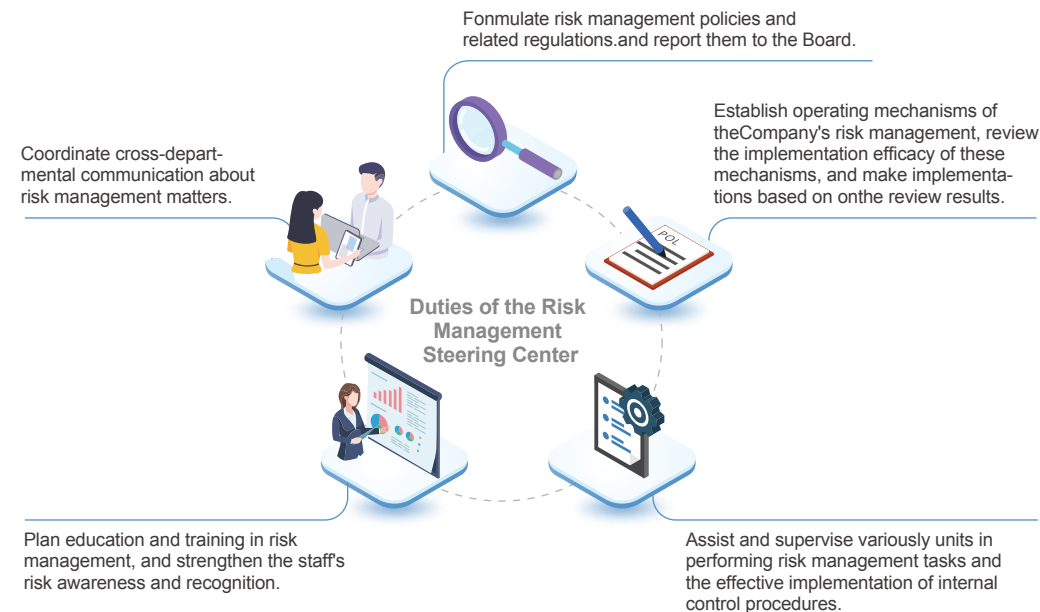
The board of directors is the highest level decision-making and supervision unit for risk management, and is responsible for establishing the Company's risk management policy and regulations. The board of directors supervises the implementation of the risk management system and the effective operation of its mechanisms. The Sustainable Development Committee reviews the Company's risk management policies, strategies, and management approach, and supervises the Company's implementation of risk management matters and implementation plans to achieve risk management goals. The Sustainable Development Committee meets twice a year and reports the situation of risk management or major risk items to the Board of Directors in a timely manner.



In accordance with the [Risk Management Regulations](#), Nanya established the Risk Management Steering Center. The Executive Vice President serves as the center's Director and members are assigned by each department head based on tasks. The Steering Center is responsible for promoting and supervising the work implementation of each risk management team as well as the entire risk control. Moreover, to conform with the Company's operational strategies, the Steering Center set up five functional teams, i.e., industrial and operational, information security, hazard, finance, and legal, under its purview. Each risk management team not only shall gather risk information on internal and external environments to perform daily risk monitoring, but shall also constantly follow up and assess the risk level of risk factors, take improvement measures, and report implementation results of risk management to the Steering Center.

The Risk Management Steering Center shall meet quarterly to review the operational performance and business continuity plans of each risk management team to ensure the applicability, suitability, and effectiveness of the ongoing operations of these risk teams.

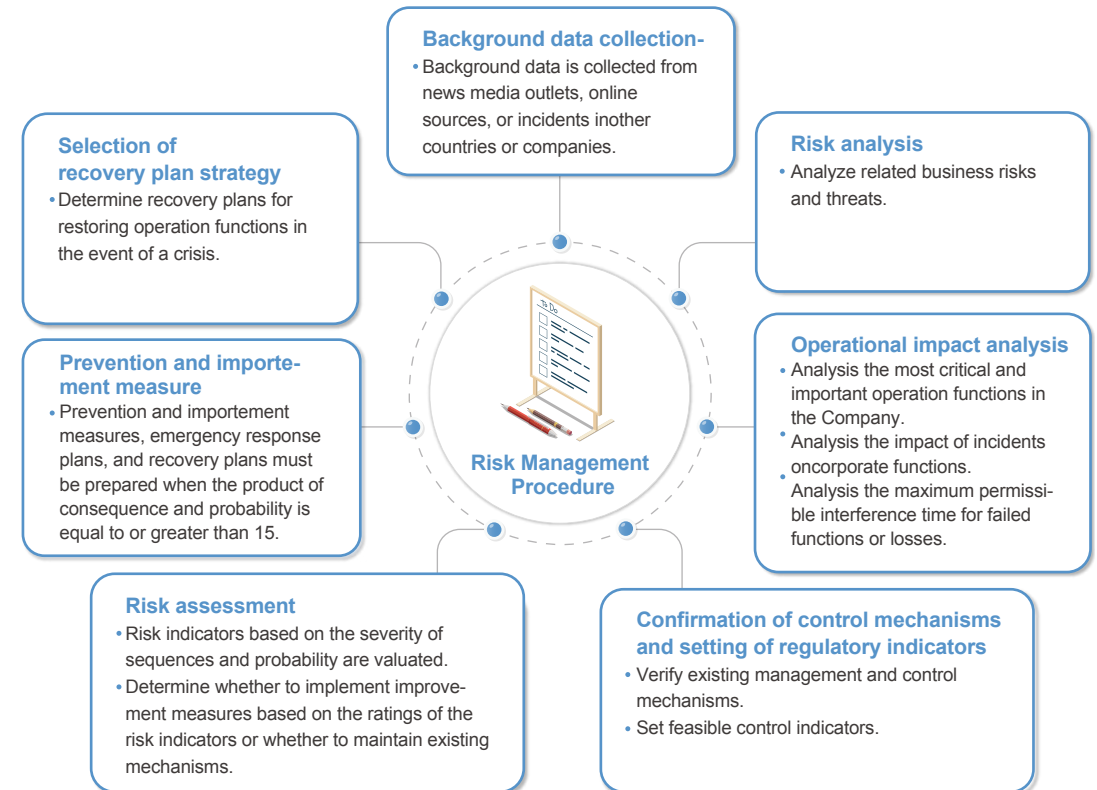
The Corp. Auditors shall annually check the implementation status of risk management policies and higher risk items, provide suggestions for improvements in a timely manner, and follow up the improvement results. In addition, external (third-party) audits are performed every two years.



Risk Management System

Nanya's risk management systems are used to identify and analyze risks currently faced by the Company, establish suitable [risk appetite](#) and control procedures, and supervise compliance with various risks and [risk appetite](#). We adopt risk management systems and uncover the Company's potential risks and opportunities to effectively execute risk management and ensure normal operations of the Company. We create value for shareholders, employees, customers, and society to achieve sustainable development goals for the Company.

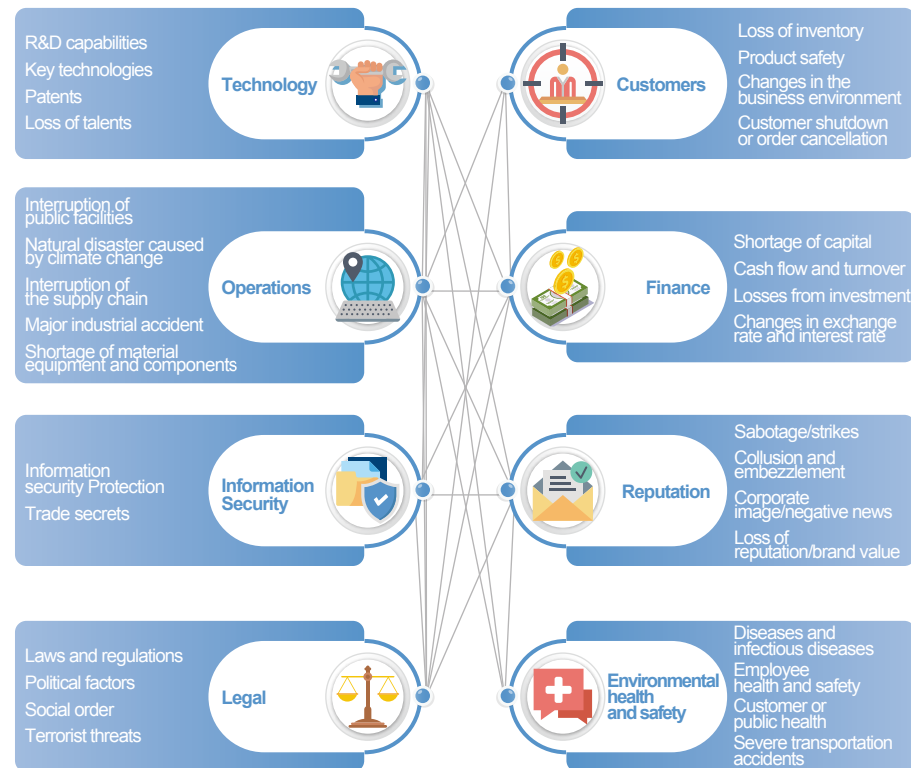
Risk Management Procedure



In accordance with the mechanisms and values of the ISO 31000 Enterprise Risk Management (ERM) Guidelines, Nanya Technology Corporation formulated risk management policies and procedures in combination with our strategic goals for long-term operations to serve as guiding principles. We list risks with externalities, new risks, and risks with significantly higher importance or potential long-term, significant, or specific impacts as emerging risks, which are reviewed and tracked over the next three to five years. Through long-term planning and promotion, we aim to raise the risk awareness of all employees, and further internalize the awareness in daily management to ensure the normal operations of the Company.

Relevance of Risk Factors

We verified potential risks, threats, and operational impacts in the internal and external environment with respect to company operations, technologies, customers, finance, reputation, EHS, law, and information security based on the risk management system. We analyzed risk factors with the highest correlation, and periodically review prevention and improvement measures through quarterly meetings, so that standard operating procedures will be more thorough. We periodically conduct drills of emergency response measures to effectively minimize risks.



Emergency Response Mechanisms and Measures

The Company complies with the principle, framework, and spirit of ISO22301 when applying them in emergency response mechanisms and measures and completing

certification of ISO9001, ISO14001, ISO50001, ISO27001, and ISO45001. To reduce risks and damage of emergency incidents, Nanya has a complete set of operational norms and methods for handling emergency anomalies, covering manufacturing, supply chain and warehousing, information security, human resources and other aspects. We can immediately take response measures in the event of an emergency, mitigate the impact of the incident and quickly recover, and ensure normal operations to meet client needs. For example, there are specific steps and improvement measures for the shortage of raw materials, events that affect 10% and above of production capacity (e.g. earthquake, typhoon, toxic gas, fire alarm, and labor shortage), utility system abnormality, automated system abnormality, contractor production capacity abnormality, and customers returning goods after sale.

In addition, the emergency response to personnel safety, such as fire alarm, gas leakage, leakage, odor, earthquake and radiation leakage, emergency response measures, notification procedures and command systems are all in accordance with relevant environmental health and safety regulations. The Company organizes at least one emergency evacuation drill and two fire safety drills each year to ensure the effectiveness of emergency response measures. We use quarterly meetings to discuss related prevention and improvement measures on a regular basis to enhance our standard operating procedures. We also conduct regular drills for emergency response measures to effectively minimize risks.

Risk Identification

Risk Identification Results

Nanya annually identifies risk items proposed by the Risk Management Steering Center. We took response measures against identified risk items based on risk levels. A total of 179 risk items were proposed in 2022, and the risk profile and the distribution of risk items and quantities were specified below after identification. Based on the statistics, 0 items needed immediate improvement; 6 items required improvement plans, 96 items should have indicators set up for monitoring, and 77 items were kept under observation.

Consequence (C)

	1	2	3	4	5
5	2	1			
4	12				
3	27	28	3		
2	32	28	1		
1	37	8			
	1	2	3	4	5

likelihood (L)

Evaluation criteria of consequence: 1 = mild; 5 = severe

Evaluation criteria of likelihood 1 = rare; 5 = always

Response measures:

- Continue observation
- Set indicators for monitoring
- Require improvement plan
- Immediately make improvement

Response Measures to Risks

After risk identification, items that required improvement plans were mainly in the aspects of operations, accounting for 5 items, and information security, accounting for 1 item. Each team formulated and implemented response measures for the items, and also established handling mechanisms.

Operational risk

- **COVID-19:** Continue to monitor domestic and overseas vaccination rate, encourage employees to be vaccinated as soon as possible and report it to the Company, so that we can monitor employee vaccination rate and herd immunity. At present, 96.65% of the Company's employees received the first shot, 95.62% received the second shot, 89.44% received the third shot, and 8.82% received the fourth shot. The Company has had 2,360 confirmed cases so far, in which 2,355 have completed isolation, and average rate of confirmed cases was 65.4%.
- **Electricity:** Different electricity rationing scenarios are simulated each year, and emergency response drills are conducted. We continue to track power development projects and stable power supply measures of the government and Taiwan Power Company, in order to assess related risks and respond in a timely manner. Emergency power generators and DUPS equipment and response measures of our fabs were able to effectively respond to voltage drop, electricity rationing, and major events of abnormal power supply in recent years, and did not cause any severe production incidents.
- **Manpower:** Strengthened talent training, improved salaries and benefits, collaborated with high-quality universities and colleges in internships to prevent unstable manpower, and cooperated with human resource agencies for a long period of time, so that the Company will be able to immediately recruit short-term manpower. The percentage of job openings filled internally increased from 1.26% in January 2022 to 55.88% in December, an increase of 29.35% compared with the previous year.

Information Security Risk

- Completed an access control list (ACL) for computers of high risk endpoints (1,113 computes in total), and installed the unified threat management (UTM) system on key equipment (10 in total) to lower the scope affected by risks.
- Installed an information security monitoring system on OT equipment to monitor the list of assets and network topology, implement vulnerability management and risk assessment, and use AI for big data analysis, so as to achieve early discovery of potential threats.
- Added "supply chain information security threat"; the Company plans to implement differential management through supplier classification; design a self-evaluation form for suppliers to evaluate the current status of their information security, and then use suppliers' self-evaluation results and attributes as the basis for classification; conduct on-site audits for key high-risk suppliers.
- The goal is to complete audits of (3) high risk suppliers before November 30, 2023.

Finance Risk

The sales of DRAM products are mainly conducted in US dollars. The Company established an offshore subsidiary at the end of 2018 to reduce the impact of exchange rates on the US dollar positions held by the parent company. In the future, we will continue to periodically review and manage the US dollar positions and implement the following practices:

- Convert the US dollar cash to the New Taiwan dollar and keep the lowest US dollar positions;
- Evaluate the use of pre-selling Foreign Exchange Forward to lower the exchange rate risk of accounts receivable;
- Evaluate the increase in debt denominated in US dollars to offset the exchange rate risk of accounts receivable for retention of reasonable US dollar net positions to reduce the impact of appreciation (depreciation) in New Taiwan dollars on profit and loss

Hazard Risk

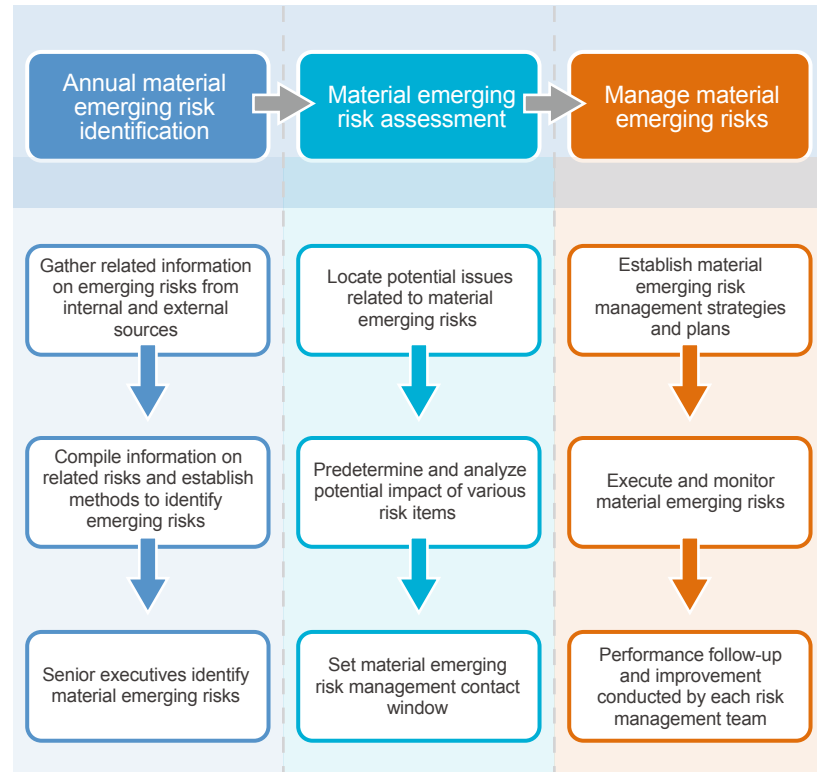
- Under the continued operation of ISO45001 & ISO14001 management systems, the Safety and Hygiene Division continues to identify potential EHS risks. We have established indicators and continue to monitor low risk hazards. For medium and high risks, we proposed and implemented improvement plans, and presented the risks that were identified and their control measures in quarterly risk management meetings.
- Risk management will focus on expansion (construction) projects (parking lot, expansion of the new Fab 5A) in 2022, and will mainly aim to prevent occupational accidents from occurring in the construction process. The Company appointed additional personnel to carry out daily inspections and audits of the expansion area. Furthermore, project audits and management is carried out in coordination with the related departments. We also participate in monthly meetings of the construction site collaboration organization and deficiency improvement reviews, in hopes of eliminating or reducing the risk of severe occupational accidents during the expansion (construction) period.
- We have consistently directed our efforts to the implementation of Enterprise Risk Management (ERM), and we continue to identify potential risks and implement management measures for different levels of risk to mitigate the impact of incidents. We continue to improve our BCP/BCM to rapidly recover from impacts and reduce losses.

Legal Risk

- **Compliance with the Personal Data Protection Act:** In response to the personal data protection regulations of the European Union, United States, China, and Taiwan, the Company has obtained the consent or authorization of employees and customers and updated labor contracts and employee manuals of overseas subsidiaries to ensure employee and customer privacy. With regard to cross-border transmission of information, we have signed cross-border agreements that comply with the regulations of each country or the official version agreements, and immediately update the versions to ensure their effectiveness.
- **Compliance with the climate change regulations:** The Company became a founding member of the Semiconductor Climate Consortium (SCC) in 2022, and strives to continue reducing GHG emissions through technological innovations and maintaining close communication with members of the SCC. The Company publishes annual progress reports on the 3 major scopes of carbon emissions each year. We set short-term and long-term carbon reduction goals in coordination with government policy, in order to achieve net zero emissions by 2050. Carbon emission reduction measures are included in the planning and design of new fabs. The best available control technology (BACT) is used for air pollution prevention equipment. The prohibition or restricted use of GHG with high warming potential are prohibited or restricted, and may affect the use of process raw materials. We will evaluate a voluntary reduction plan to offset our emissions, and pay carbon fees according to the type of emissions, which may increase operating costs. The Company has low risk of being ordered to suspend operations.
- **Intellectual property protection:** The Company has formulated an intellectual property management strategy and deepened its patent portfolio. We also included the protection of trade secrets into the training course for new employees, and require employees to strictly abide by their obligation of confidentiality. The Company established information security management regulations to protect data safety and customer privacy. We raise employee awareness to protect the Company's confidential information and improve their knowledge of regulatory compliance through education and training, thereby lowering the risk of information leakage. The implementation progress is reported to the Board of Directors each year, and is disclosed on the official website.
- **Compliance with antitrust regulation:** The Company has collaborated with legal experts of different countries, periodically gathered international antitrust standards and enforcement status, and comprehensively promoted the compliance with antitrust regulations to the staff. Currently, we have only one antitrust lawsuit case being appealed in the courts in Brazil, and this has no material impacts on our operations.

Emerging Risks

Nanya Technology Corporation pays close attention to changes in the economic environment. We identify long-term risks and opportunities and adapt our business strategies to ensure sustainability and long-term operating performance. Each risk management group or managers at each level gathers related domestic and international information to evaluate potential risks in the Company's long-term operations. They used questionnaires or evaluations in meetings of senior executives to identify emerging risks with the highest level of potential impact in the future and review mitigation and response strategies. The topics and strategies are used as important references for formulating future business strategies.



Department heads gathered emerging risks in 2022, and senior executives identified four material emerging risks. Nanya has formulated response countermeasures while continuing to implement improvements with the aim of mitigating related impacts.

Environmental risks

Emerging Risk 1 The government's energy transformation and carbon reduction policy may put pressure on the Nanya's operations

Risk description

- The government adopted a new energy policy to achieve a non-nuclear homeland and international carbon reduction commitment by 2025, and is thus promoting the energy transformation of Taiwan Power Company and general enterprises.
- The government will pass carbon reduction measures into law and promote the carbon reduction transition of enterprises to achieve its commitment to net zero emissions by 2050.
- The government may begin collecting carbon fees in 2024, which might increase the Company's operating costs.
- The government is expected to set carbon emission limits for each industry in 3-5 years to control total GHG emissions.

Impact

- During peak electricity usage in the future, if the power generators or transmission and distribution systems of Taiwan Power Company malfunction and renewable energy supply is unstable, it may result in power rationing.
- When carbon reduction measures are passed into law in the future, the cost of raw material production plants will increase and cause the Company's raw materials costs to increase, creating the issue of green inflation.
- When Taiwan begins to collect carbon fees in the future, Nanya Technology Corporation expects expenses to increase by NT\$132 million each year, which will impact profits.
- Additional expenses are required to purchase carbon rights when GHG emissions exceed the total limit.

Response measures

- To respond to and prevent the risk of power rationing, we have installed diesel fuel power generators and Dynamic Uninterruptible Power Supply (DUPS) to increase the operational resilience of our fabs, and planned the following measures:
 - a. Set electricity saving plans and reduce overall electricity consumption.
 - b. Reduce electricity use for non-production purposes when there is insufficient power supply.
 - c. Review available space and install solar panels to generate electricity for self use.
- In response to future limits on GHG emissions, the Company began implementing the Science Based Target (SBT) project in 2022 to reduce GHG emissions.
- Continue to observe the legislation of related laws and regulations.

Social Risks

Emerging Risk 2 Insufficient key talents

Risk description

- The semiconductor industry has become a key industry that has attracted global attention. Recently, many major companies are building new fabs, expanding production capacity, or upgrading technologies, and it has significantly increased demand on key semiconductor talent. Due to the severely low birth rate in Taiwan, the number of students graduating from science and engineering departments has significantly decreased, and impacted the mid-term and long-term talent supply of the overall industry.
- A domestic semiconductor manufacturer has announced that its new fab will recruit at least 15,800 employees. This does not include the manpower required when fabs that have passed the environmental impact assessment begin production in the future. As a result, the domestic semiconductor industry will continue to suffer from a labor shortage, which will increase the difficulty of recruiting key talent.

Impact

- The semiconductor industry has a shortage of technical talent, insufficient recruitment or loss of current talent will severely impact the product and process technology development of companies, which will further impact their long-term competitiveness.
- As new generation fabs are being built, a considerable amount of talent will be needed in the future, and a shortage of employees will impact the time it takes for the Company's new fab to reach mass production, and business growth will be limited.

Response measures

- Build a pool of key talent and implement key talent development and retention measures.
- Expand the scope of industry-academia collaboration, establish an internship cooperation platform with nearby universities, and establish a stable source of human resources in the long-term.
- Monitor industrial, government, academic, and research talent trends, and support and promote talent development measures.
- Improve company image, enhance the brand as an employer, and attract talent to join the Company.
- Encourage women and foreign workers to join the semiconductor industry and increase the percentage they account for in promotions and hiring.

Geopolitics

Emerging Risk 3 Conflict between the United States and China has created tense political relations across the Taiwan Strait, creating uncertainty for future operations

Risk description

- U.S. House of Representatives Speaker Nancy Pelosi visited Taiwan in August 2022, and caused China to conduct a large scale military exercise in the Taiwan Strait. The U.S. Congress recently passed several bills to support Taiwan and build closer relationships with Taiwan. Hence, cross-Strait relations may become a part of the conflict between the U.S. and China.

Impact

- If tensions in the Taiwan Strait rise, it may force the upstream supply chain to change its shipping route, which will significantly increase transportation time and cost.
- If tensions in the Taiwan Strait rise, it may also cause downstream customers to worry about the stability of the Company's deliveries, and transfer purchase orders to supply chains in other regions, affecting the company's purchase orders.
- If tensions in the Taiwan Strait rise, it may severely impact the confidence of international and domestic financial markets, and will impact the Company's operations.

Response measures

- Monitor the situation in the Taiwan Strait and increase inventory of raw materials when appropriate.
- Continue to develop new technologies and new products to enhance the company's technology and cost competitiveness, thereby strengthening customers' confidence.
- Consider increasing overseas hub to diversify the Company's operational risk and reduce customers' concern about the stability of delivery.

Other risks

Emerging Risk 4 Information security – Hacking/Viruses may cause production, operational, or financial losses

Risk description

- The rise and convenience of the Internet provides excellent channels and environment for cyber criminals. The number of information security incidents (mainly extortion) has significantly increased due to cyberattacks/viruses from hackers. The number of major information security incidents among public companies in Taiwan in the fourth quarter of 2022 was higher than the total of the first three quarters (as shown in the table below).

Major information security incidents of public companies in Taiwan in 2022

Quarter	2022Q1	2022Q2	2022Q3	2022Q4
Number of suppliers	3	0	2	6

Source: TWSE

- According to the Company's internal statistics, the number of hacking attempts in 2022 increased approximately 200% compared with 2021, showing a significant increase in information security risk.
- The supply chain has inadequate information security. When hackers cannot directly hack their main target, they will attack the relatively vulnerable supply chain instead to increase their chances of hacking their main target.

Impact

- If hackers obtain classified and sensitive data of the Company or customers, they will be able to threaten or extort the Company.
- Hackers that steal the Company's advanced process technologies will threaten the Company's sustainability and profitability in the long-term.
- If hackers paralyze the Company's operations, it will cause production or operational losses.

Response measures

- Establish complete monitoring mechanisms to immediately discover abnormal conduct and lower the probability of hacking or data leakage.
- Establish defense-in-depth to increase the difficulty of hacking, and encrypt classified files to prevent the data from being exploited or used for threats after being leaked.
- Continue to patch system vulnerabilities to lower known risks.
- Continue to analyze hacking methods and patch system vulnerabilities to block attacks.
- Continue to conduct information security incident drills to improve emergency response abilities.
- Establish supply chain classified management measures, and prepare a supplier information security self-evaluation questionnaire, to help suppliers examine potential risks and vulnerabilities, and thereby improve the overall information security of the supply chain.

Risk Culture Construction

To establish a comprehensive risk management culture, Nanya Technology Corporation's Sustainable Development Committee, which is subordinate to the board of directors, reviews the Company's risk management policy, strategies, and management approach, and supervises the Company's implementation of risk management matters and plans.

In accordance with the defined scopes, organizations, duties, and risk management procedures stipulated in the [Risk Management Regulations](#), the committee has fully implemented risk management tasks and held meetings twice in 2022 to review the implementation and operation of risk management.

The Risk Management Steering Center is headed by managerial officer (Executive vice president) as its director. The Center internalizes risk awareness in the management hierarchy, and reviews risk management performance and emerging risks on an annual basis. The Company included risk management results into annual performance evaluation items for management (president and supervisors ranked assistant vice president and above). Through management by objective carried out by senior managers, risk management measures are implemented to comprehensively raise the Company's risk awareness.

Nanya Technology Corporation provides a variety of incentives to encourage employee proposals and stimulate peers to think innovatively and reduce potential risks. The proposals are reviewed based on the expected benefits, creativity, application scope, completeness, and quality contributions, and incentives are provided as encouragement accordingly. The Company set up a 24-hour instant case report system information security line, employee feedback mechanisms etc. to provide employees with immediate response. We have deep-rooted the risk management culture among

all employees through TV walls, posters, and computer wallpapers. Our evaluation regulations have already included employees' understanding and implementation of risk management as an evaluation item in quarterly work evaluations and year-end evaluations, and serves as a basis for performance ratings, promotion, bonuses, and stock options, as well as the implementation of risk management measures. Furthermore, the Company also irregularly organizes management activities to raise employees' risk awareness, such as the "Information Security Month" in 2022, during which information security seminars, online Q&A, and information security awareness training built employees' consensus of information security, and created a culture in which all employees participate in the prevention and improvement of risks.

	2019	2020	2021	2022
Number of improvement proposals put forward by employees and benefits				
Number of proposals (case)	225	207	207	212
Proposal (case-closing) bonus (Thousand NTD)	583	414	412	507
Proposal benefits (Thousand NTD)	368,722	1,583,318	882,517	756,744
Number of proposals in each category				
Process and equipment risks	105	67	61	68
Productivity and quality risks	91	114	85	41
Environmental health and safety risks	13	9	26	16
Other risks	16	17	35	87
Total	225	207	207	212

Risk Management Education and Training

Nanya Technology Corporation annually arranges for the directors in the management to attend corporate governance and risk management courses held by institutions approved by the government. Moreover, the Company also arranged for Sustainable Development Committee members to attend risk management courses on the aspect of business strategies in 2022, so as to assist and strengthen the Company's risk management operations. In addition, the Company also compiles risk management education materials, makes rolling adjustments to the contents of the materials each year based on implementation items, contents, and results, and requires employees to read on the computer system each year, in order to raise the risk awareness of all employees. The completion of employee risk management education and training achieved the goal of 100% coverage rate in 2022, with a total of 1,809 training hours. We hope that through the education and training, employees will fully understand the Company's risk managements and incorporate their risk management awareness in daily management.

8-3



Information Security

Nanya Technology Corporation is actively implementing information security related systems to protect the interests of shareholders and customers. The Company has invested over NT\$1 billion into information security over the past 5 years, and also established an Information Security Committee. Information security is personally supervised by the president and overall information security operations are already on track. We continue to make improvements in response to external threats, and ensure the Company's smooth operation to gain the trust of shareholders and customers.

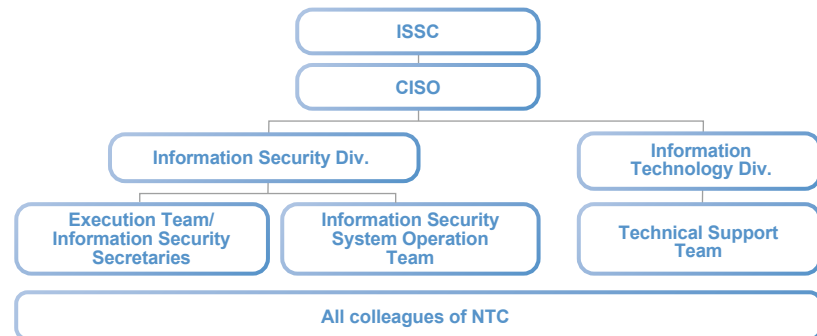
We have focused our efforts in the field of DRAM for several decades, and are fully aware of the challenges in developing DRAM processes and products, as well as the importance of advanced process development, production know-how, and intellectual property rights protection. This is why we take information security very seriously, and have enhanced information security measures and raised employees' information security awareness to prevent the leakage of classified and sensitive data. These efforts aim to maintain the Company's R&D capabilities and core competitiveness, which is necessary to protect the Company's long-term interests and employees' work rights.

In 2022, Nanya Technology Corporation once again passed the information security verification that is carried out for ISO 27001 every three years. The scope of verification was expanded from the six main units to 100% coverage of all fabs, showing Nanya Technology Corporation's emphasis on its information security management system, while meeting international standards.

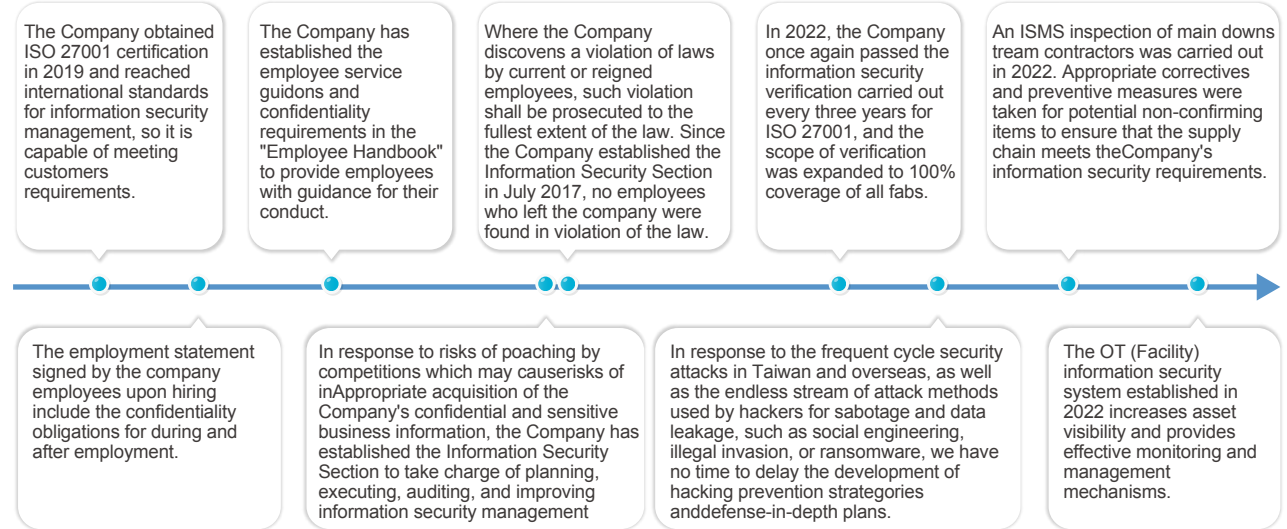
Nanya Technology Corporation established an inter-departmental Information Security Committee to advance information security management. The President serves as the convener and five level 1

supervisors were appointed as committee members. They include the Information Security Officer (Special Assistant Shin-An Niu) and heads of the Quality Assurance Division, Legal & IP Division, Human Resources Division, and Automated Information Division. Meetings of the Information Security Committee are convened every week. The committee is mainly responsible for the planning, formulation, approval, and supervision of the information security policies, goals, and related regulations. In addition, the committee quarterly reports the results of the operations of the information security management system to the board of directors. In addition, our four executive directors (President Pei-Ing Lee, Executive Vice President Lin-Chin Su, Vice President Joseph Wu, and Vice President Rex Chuang) also actively participate in the Company's quarterly information security meetings and annual information security management review meetings to ensure the effectiveness and benefits of the management.

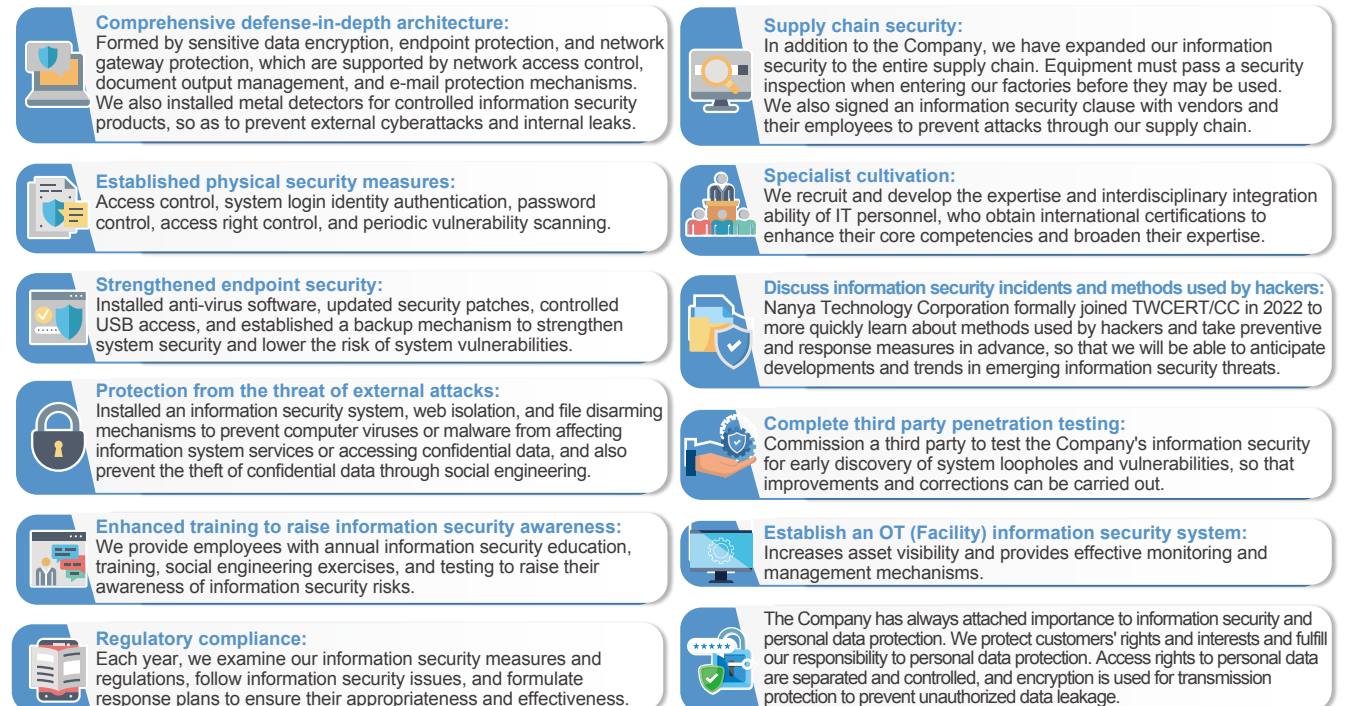
In coordination with the enactment of the Cyber Security Management Act, Nanya Technology Corporation obtains effective cyber security certificates the same as government agencies with Grade A information security responsibilities. We have already obtained EC-Council CCISO (Certified Chief Information Security Officer), EC-Council ECSA (Certified Security Analyst), EC-Council CEH (Certificated Ethical Hacker), EC-Council ECIH (Certified Incident Handler), CompTIA Security+, EC-Council CND, and ISO/IEC 27001:2013 Information Security Management System (ISMS) Lead Auditor (ISMS chief auditor) to enhance the professional competencies and efficiency of information security personnel.



Nanya's improvement measures for information security management



Nanya's main measures for information security management



Business Continuity Plan (BCP)

As different departments have different information system structures, we have performed risk evaluation and identification on these systems based on the severity of the impact of each system on key operation procedures so as to define the degree of severity of each system. The severity degrees are to serve as the basis for determining the frequency of post-disaster recovery exercises. The severity is classified into three degrees from important to minor (Degree 1 to 3). Description of each degree is explained below:

Degree of severity and recovery cycle table

Degree 1	Degree 2	Degree 3
The suspension of operations of the system will suspend services provided with the primary functions.	The suspension of operations of the system will suspend services provided with the secondary functions.	The suspension of operations of the system will not affect the services provided or the system can continue operations with other remedial measures to provide services.
Recovery drill cycle Half a year	Recovery drill cycle Two years	Recovery drill cycle No drills required

The recovery drill cycle is also divided based on the severity degrees (semi-annually, every two years, no drills required). Each department shall register the rating of the systems they are responsible for operations and maintenance in the list in the “information system severity degree classification” document. All Degree 1 systems are provided with multiple backup mechanisms placed in different server rooms in different buildings. All production information is provided with remote backup through encryption and the Company conducts recovery exercises each year according to the information system disaster recovery plan, in order to ensure the normal operation of systems. The Company has a total of 17 systems that required drills in 2022. We completed drills for 17 systems and the completion rate was 100%. Each information system management unit notifies the response units in the execution of response measures in accordance with the response procedures in the “Information System Response Plan” in the event of major anomalies.

Information Security Awareness Training and Results

In terms of information security awareness training, Nanya Technology Corporation has invested many resources in hopes of raising information security awareness and building a consensus among all employees. We raise awareness among information security officers during monthly information security meetings, compare the performance of reports from supervisors ranked level 1 or above in quarterly information security meetings. conduct social engineering drills on a quarterly basis, and organize information security month activities each year. To develop a culture for the management of confidential information, all employees must complete reading courses of the “Company Confidential Information Management Regulations” each year. See the table below for courses and number of hours in 2022

Information Security Awareness Training Courses	Subjects	Number of hours
Information Security Month Online Q&A	All employees	1,827 hours
Information Security Seminar (Virtual Artillery Fire in the Russo-Ukrainian War – Modern Cyber Warfare)	Information security officers, Information Security Divisio	100 hours
Information Security Seminar (Sharing of Trade Secret Cases)	Supervisors, Information Security Section	104 hours
Social engineering exercises	All employees (excluding TA)	2,373 hours
Social engineering training	Employees who clicked on the link	198 hours
[Reading for all employees] Company Classified Information Management Guidelines	All employees	1,489 hours
[Reading for all employees] Sharing of Trade Secret Cases and Exchanges	All employees	775 hours
Total		6,866 hours

Information security month activities are organized every year to raise employees’ information security awareness, and all employees participated in the production of the information security promotion clip. Implementation results are as follows

Item	Implementation results
Promote the participation of all employees and presentation in the form of short clips, and have share their own experiences of encountering fraud.	35 units submitted at least one short clip
Organized two physical information security seminars "Virtual Artillery Fire in the Russo-Ukrainian War – Modern Cyber Warfare" and "Sharing of Trade Secret Cases (Ministry of Justice Investigation Bureau)."	Unit supervisors and information security officers participated over 120 times.
All employees participate in Q&A on information security policy and rules.	99.9% of employees answered all questions correctly

Information security implementation results

Implementation results of Nanya Technology Corporation under the information security policy to ensure the confidentiality, integrity, and availability of information, and to protect the rights and interests of customers, shareholders, employees, and suppliers in 2022 are shown in the table below:

Company Classified Information Management

Implementation measures

There are metal detectors at the entrances of office areas and plants, objects must be carried by personnel through the metal detectors, the Company's confidential information may not be disclosed to others without authorization, and the Company established related evaluation mechanisms.

Implementation results

There were no confidential information leakage incidents.

Social engineering exercises

Implementation measures

Every quarter 2 social engineering drills are carried out by mailing phishing mail and setting goals for the drills. Enhanced training is provided to employees who click on the link and open the attachment in the e-mail. We also established related evaluation mechanisms so that all employees will take the drills seriously, and to raise their information security awareness.

Implementation results

There were over 28,000 participants in the 8 drills during the year.

Information security and monitoring

Implementation measures

Company's internal statistics, the number of hacking attempts has significantly increased since 2021. To lower the probability of hacking or data leakage and prevent data from being exploited or used make threats, the Company established a complete defense-in-depth system, analyzed hacking methods, continued to patch system loopholes, and appointed dedicated personnel for monitoring.

Implementation results

conduct penetration testing and red team assessments.

Business continuity

Implementation measures

1. The Company assessed and identified risks that have the most severe impact on key business processes, and used it as the basis for the frequency of post-disaster recovery drills.
2. Defined availability goals for information systems for the office area, R&D and design, and technology development, and set the annual goal for service suspension at ≤ 1 time and < 24 hours each year.

Implementation results

1. Exercises were 100% completed for all 17 of the systems that required exercises to be performed in 2022.
2. Services of information systems were not suspended.

Information Security Risk Protection

The Company understands that its information systems will continue to face threats and risks, and thus comprehensively deployed suitable information security mechanisms. The Company passed the third party audit in 2022 without any major deficiencies, and there were no customer information leakages and fines for major information security incidents as well, see the table below for details.

Item	Statistics
Violations of information security or network security incidents (number of cases)	0 cases
Data leakage incidents (number of cases)	0 cases
Number of information security violations involving customers' personal data	0 cases
Number of customers and employees affected by data leakage	0 cases
Amount of fines due to information security or network security incidents (NTD)	NT\$0

8-4 Business Integrity

Nanya Technology Corporation upholds the corporate culture and spirit for “diligence”. We use ethical, honest, fair, transparent, and responsible business philosophies to strengthen legal compliance. We established the “Code of Conduct for Directors and Managerial Officers” for senior executives and the “Ethical Corporate Management Best Practice Principles,” “Labor and Ethical Work Guidelines” and “Antitrust and Competition Legal Compliance Principles” for employees. We established the digital transaction platform for suppliers and a comprehensive auditing system to implement ethical governance and prevent violations of laws. Nanya Technology Corporation did not have any violations in 2022. Nanya Technology Corporation stipulates in the Business and Ethical Code of Conduct that it will not make donations other than to charity (such as political donations), in order to remain politically neutral and encourage employees to perform their civic duties.

Ethical Code of Conduct

Nanya Technology Corporation referenced the Code of Conduct of the Responsible Business Alliance and established the [Labor Ethical Management Policy](#) and Business and Ethical Code of Conduct as the basis for business conduct, and periodically carries out RBA VAP verification, receiving platinum grade with a perfect score in 2022. In which the Business and Ethical Code of Conduct is applicable to all employees of the Company (including managerial officers), and is also applicable to employees of subsidiaries, customers, suppliers, and stakeholders. Contents include business ethics, information disclosure, environment control, recruitment, safety and health, compliance and corporate governance, and social engagement. The Company is also committed to respecting human rights, established a human rights policy, and performs due diligence to ensure there are no violations of human rights. The “Labor and Ethics Policy” and “Business and Ethical Code of Conduct” have been published on the internal and external websites and made available to all employees and external personnel at all times.

All employees of the Company and subsidiaries are required to abide by the code of conduct to raise employee awareness of integrity and ethics; coverage reached 100%. We continued to offer the RBA Labor and Ethical Code of Conduct Course and Business and Ethical Code of Conduct Course for all employees in 2022; training coverage reached 100%. We also offered the digital RBA Labor and Ethical Code of Conduct Course for all new recruits.



To continue to optimize the workplace environment, Nanya Technology Corporation implements related training by setting labor moral goals each year. We organized five courses including “Labor and Ethical Code of Conduct Course” and “Anti-corruption Course” with “Anti-corruption Course”, “Business and Ethical Code of Conduct Course”, “Senior Executive Ethical Corporate Management Course”, and “Occupational Hazards and Preventive Training” based on the management objectives of “zero corruption”, “zero sexual harassment”, “prevention of insider training,” and “zero illegal infringement in the workplace”. The training completion rate was 100% for all courses.

Ethical corporate management and labor ethical education results

	2020	2021	2022	2023 Goals
"RBA Labor and Ethical Code of Conduct Course" completion rate ^{Note 1}	100%	100%	100%	100%
"Business and Ethical Code of Conduct Course" completion rate ^{Note 2}	100%	100%	100%	100%
"Anti-corruption Course" completion rate ^{Note 3}	100%	100%	100%	100%
"Senior Manager Ethical Corporate Management Course" completion rate ^{Note 4}	100%	100%	100%	100%
Completion rate of "Advocacy Briefing on Prevention of Insider Trading" ^{Note 5}	100%	100%	100%	100%
"Occupational Hazards and Preventive Training" completion rate ^{Note 6}	100%	100%	100%	100%
"Antitrust promotion" completion rate ^{Note 7}	100%	100%	100%	100%

Note 1: A total of 3,603 individuals completed the "RBA Labor and Ethical Code of Conduct Course" in 2022. (organized in October-November 2022)

Note 2: A total of 3,603 individuals completed the "Business and Ethical Code of Conduct Course" in 2022. (organized in October-November 2022)

Note 3: A total of 3,601 individuals completed the "Anti-corruption Course" in 2022. (organized in July-August 2022)

Note 4: The "Senior Executive Ethical Corporate Management Course" was incorporated into the "Business and Ethical Code of Conduct Course" and a total of 10 individuals completed the training in 2022.

Note 5: A total of 3,603 individuals completed the "Insider Trading Prevention Training" in 2022. (organized in October-November 2022)

Note 6: The "Occupational Hazards and Preventive Training" course includes both physical and digital courses. In 2022, a total of 2 physical courses were held, and the attendees consisted of department heads, project supervisors, chief engineers/managers, and entry-level managers of direct units (105 individuals received training), and the digital courses were provided to all employees (3,603 individuals received training).

Note 7: A total of 3,532 individuals completed the "Anti-trust Act Course" in 2022. (organized in September-October 2022)

Note 8: Trainees of the courses listed above are all employees who receive training that year. New employees take the courses during orientation.

Antitrust

To ensure employees understand and abide by the Antitrust Law and reduce the risks of violations, Nanya Technology Corporation established the “[Antitrust Policy](#)”, “Antitrust and Competition Legal Compliance Principles” and the “Antitrust and Competition Legal Compliance Operating Procedures” to strictly require employees and managers to abide by laws and regulations and report the compliance status to the Board of Directors. We also organize regular training courses for related employees and require them to sign the compliance handbook. No cases occurred in 2022.

Note: There is still 1 ongoing anti-trust case that occurred in 2010, when the Company was accused by Brazil’s Ministry of Justice and Public Security for violating anti-trust regulations (please refer to page 165 of Nanya Technology Corporation’s [2022 Annual Report](#)). The Company has engaged counsels to deal with the case to protect its interests.

Anti-corruption

All employees must abide by Nanya’s “[Business and Ethical Code of Conduct](#)”, “Human Resources Management Regulations,” and “Work Rules” for related personnel. Any abuse of powers, embezzlement, bribery, acceptance of commissions, once verified, shall result in termination of employment without exception. The direct supervisors shall also be punished accordingly based on the circumstances. For example, the Business and Ethical Code of Conduct stipulates that employees may not offer (or accept) bribes or engage in unethical conduct that damages the Company’s image, such as engaging in insider trading, or become involved in severe violations or corruption cases (e.g. employees using their position to accept bribes. Employees will be immediately terminated if they are verified to be in violation, and the Company reserves the right to take legal action if such violation causes the Company to sustain significant losses.

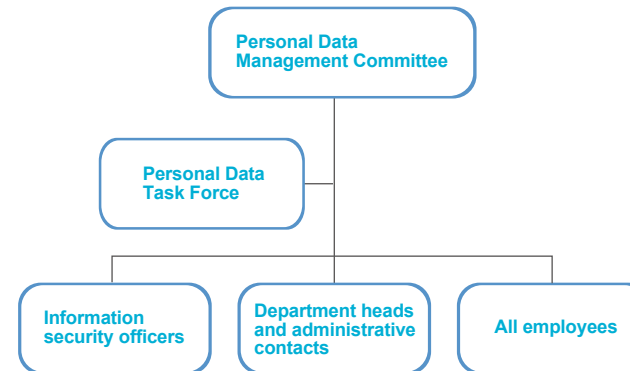
Personnel holding positions involved in business, procurement, outsourcing, construction supervision, and budget and other interests of vendors may not accept the invitation of vendors to any form of entertainment, and may not accept money or other benefits from vendors, in order to prevent all forms of corruption. We have implemented periodic job rotations for related positions. We also prepare anti-corruption education materials to educate all employees. We completed 100% of anti-corruption training courses in 2022 and provided 1,801 hours of training, in hopes that all employees can abide by ethical principles in both work and life and fulfill the corporate culture of “diligence”. No cases of corruption had occurred from 2019 to 2022.

Furthermore, we evaluate business locations in Taiwan and overseas based on compliance with ethical corporate management related regulations and internal audit mechanisms each year. No corruption risks were found in 2022.

Protection of Personal Data

The Company has established the Personal Data Management Procedures to ensure that our employees, suppliers, clients or outsiders may abide by the personal information protection regulation. The procedures specify the organization and duties for personal data protection, and provide regulations on the collection/processing/use of personal data as well as information on how data subjects shall exercise their rights and how their data is processed. Departments are required to comply with the Procedures when collecting and processing personal data. If a department commissions other individuals, other departments, or other companies to collect or process personal data, it must ensure that the individual, department, or company’s conduct complies with the Procedures and related laws and regulations. Unless consent is obtained from the owner of personal data or due to special provisions of other laws and regulations, the Company will not disclose personal data to a third party or use the personal data for other purposes. To manage personal data processing risk, the Company compiles a personal data inventory and assesses whether it is in compliance with current policy each year. We then implement improvement measures based on risk levels. We set controlled access for personal information of employees or customers and apply strict restrictions on the use of such information. No high-risk items were found in 2022.

Structure of the Personal Data Management Committee



Duties of the Personal Data Management Committee



Duties of the Personal Data Management Committee

The European Union’s General Data Protection Regulation (GDPR) entered into force in May 2018. As the Company has established a subsidiary company in the European Union, the legislation provides a certain level of regulations on measures for managing the personal information of European customers, clients, and suppliers. Nanya has adopted response measures based on the requirements in the GDPR and implemented related systems in subsidiaries to increase employees’ awareness for personal information protection and reduce the risks of violations. All 3,603 employees received personal data protection training in 2022 with good results. The Company annually conducts internal audits of personal data to ensure the implementation degree of personal data management. Nanya announced its [Privacy and Cookies Policy](#) on the official website. Within the authorized scope of certain purposes, we use safe and reasonable methods to collect, process, or utilize personal data. Moreover, we ensure that clients may exercise their rights stipulated in the Personal Data Protection Act. As the Company’s personal information protection has been rigorously and effectively executed, there were no violations in 2022. Furthermore, the data is not used for other purposes.

Number of violations of personal data regulations and fines

	2019	2020	2021	2022
Personal data complaints (Number of cases)	0	0	0	0
Fines for violation of personal data (Number of cases)	0	0	0	0
Fine (NTD)	0	0	0	0
Number of complaints to external units (number of cases)	0	0	0	0
Number of complaints to the competent authority (number of cases)	0	0	0	0

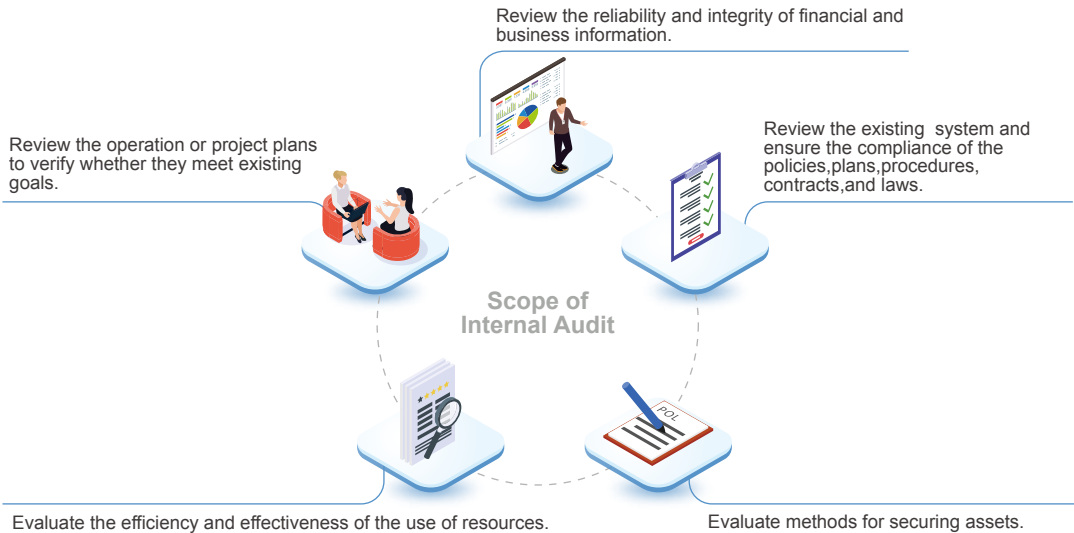
Internal Control
Internal Control System

Nanya established an effective internal control system based on the Company and its subsidiaries’ overall operation activities and its industry in accordance with the “Regulations Governing Establishment of Internal Control Systems by Public Companies”. The Company conducts reviews at any time to respond to changes in the Company’s internal and external environment as well as to ensure that the system design and implementation remain effective.

The implementation of the internal control system is a continuous operation. We continue to inspect various business and management operations and detect deviations from company policies, operating procedures, existing goals, or standards. We use a feedback system to respond to the appropriate management level and take necessary corrective actions for the issues to ensure the Company’s operations are implemented in accordance with the original plans. We use the internal control system to complete audits and prevent abuse in operations.

Internal Audit

Nanya established Corp. Audit under the Board of Directors and appoints three dedicated auditors who participate in related auditing courses organized by professional training institutions each year to improve their professional skills. We also use the professional and independent internal audit operations framework to implement internal control in all levels of the Company.



In addition to the audit report on the status of correction of defects and irregularities of internal control systems, the internal auditors shall follow up and provide reminders to ensure that relevant units take appropriate improvement measures in a timely manner. They shall submit the measures to the Independent Directors for review before the end of the following month after the completion of the audit report. Internal audit is not merely the responsibility of the independent audit department. The Company’s units must complete independent business inspections within the specified cycles for specific audit items. Independent audit units shall review the results of the self-inspections and implement review inspections regularly or from time to time to ensure the execution of the internal control systems of each unit.

Internal audit items

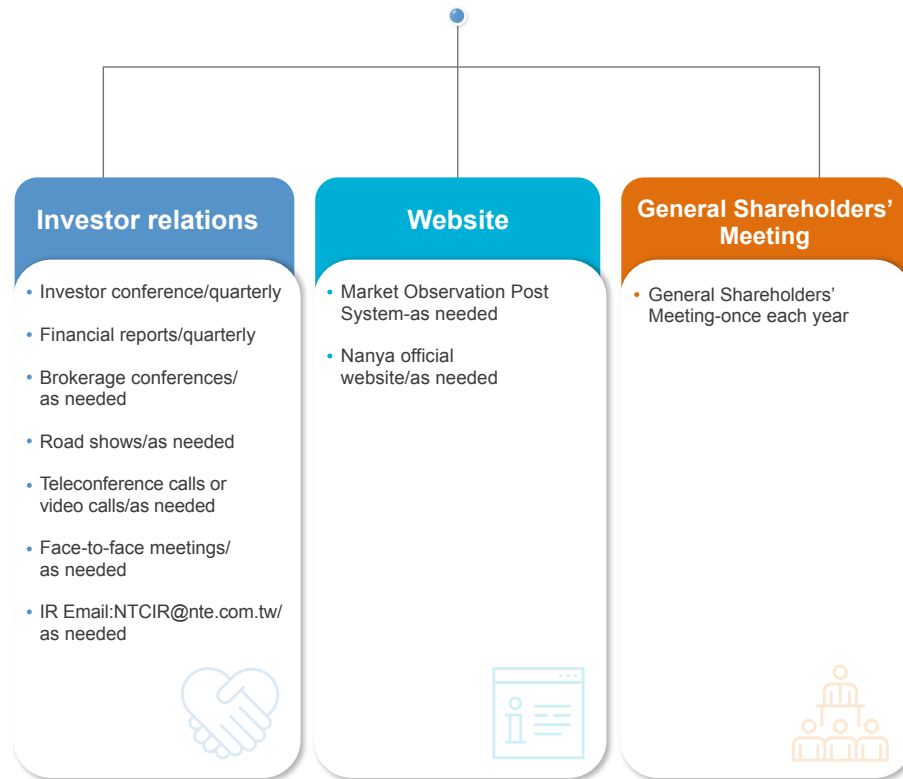
	2019	2020	2021	2022
Number of audit items	45	45	42	42
Number of anomalies discovered	4	3	2	3 ^{Note}
Anomaly improvement rate	100%	100%	100%	100%

Note: The 3 items include 1 engineering-related item, 1 computer-related item, and 1 finance-related item; all improvements were completed.

Information Disclosure

Nanya Technology Corporation uses multiple and transparent channels to disclose related information to stakeholders in real time. In 2022, we conducted 4 quarterly investor conferences and participated in 25 investor forums and seminars organized by external securities brokers. We also uploaded financial data and related information and videos to the company website/[Investor Relations Section](#) and Market Observation Post System in accordance with regulatory requirements so that investors is able to receive correct and transparent information related to the Company's operation and financial results in real-time.

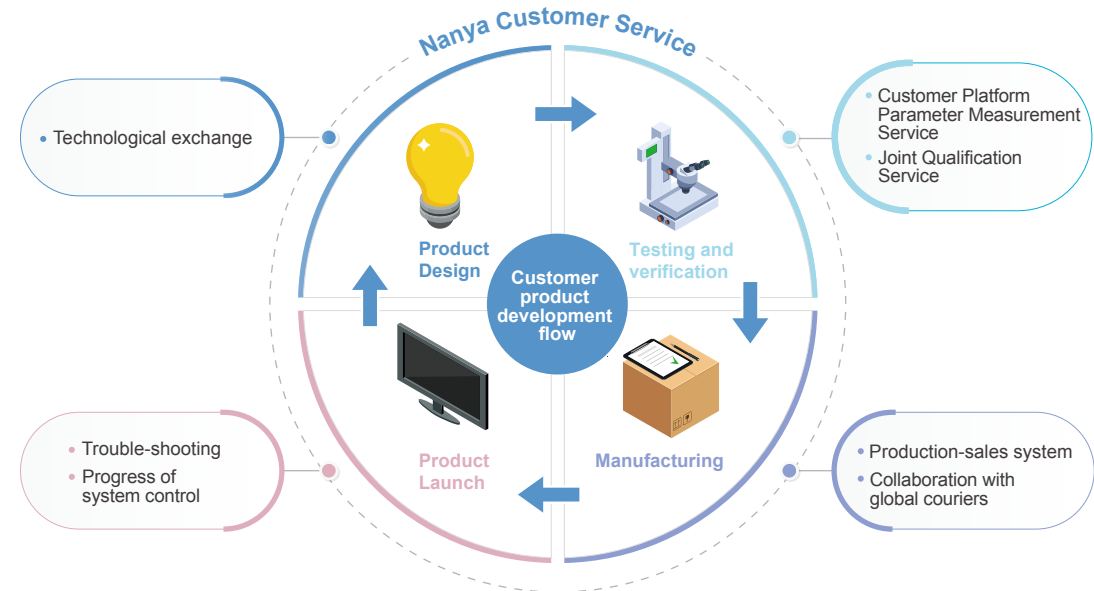
Communciation Channels



8-5 Customer Service

Nanya is committed to providing the best customer service and is convinced that quality and timely customer service is crucial to the maintenance of customer relationships. Good customer relationships will help us build customer loyalty, and consolidate the good and trusted partnerships with customers. Our vision is to become the best memory partner in the smart era as well as a service-oriented enterprise. Through close cooperation with controller chip makers and customers, we will strengthen product R&D and manufacturing in order to satisfy diverse requirements, provide customers with comprehensive products and system solutions, and offer better and more trustworthy service.

Customer service process



Product Design and Testing Verification Stage

In order to improve the efficiency and frequency of customer service and effectively build close relationships with customers, the Field Application Engineering Division provides technical support to customers in Taiwan, China, Southeast Asia, Europe, the United States, Japan and South Korea, organizing irregular technology exchange events to meet the technical needs of customers. Despite business travel restrictions due to the pandemic over the past three years, Nanya Technology Corporation continued to provide uninterrupted services by switching to online technology exchanges. A total of 115 sessions were held in 2022 and provided technical support and helped resolve issues faced by engineers of customers in design and testing.

In addition, through the highly efficient, intensive, and high-quality customer platform parameter measurement service, of which 950 cases were completed in 2022, Nanya assisted customers in understanding the characteristics of their product platforms so that the new product development progress and verification cycles of customers were significantly accelerated, reducing investment risks and helping final products to be launched in a timely manner in the demand market. Nanya also provides joint qualification service for customers to assist them in development and verification at the initial stage of products. Therefore, compatibility issues may be detected early, and improved before mass production. A total of 31 cases were completed under the joint qualification services in 2022.

Production and Sales Stage

Nanya Technology Corporation has obtained the ISO 9001:2015 and IATF 16949:2016 quality system certifications. The Quality Assurance Division monitors and controls product quality as well as implements improvements in order to make sure that all production processes are fully optimized. Moreover, the Division includes each stage of the production process into a well maintained and tightly controlled system, manufacturing the products that meet customers' requirements. Sales personnel continue to communicate with

customers and provide estimates of customers' future demand to the head office every week. The head office summarizes demand estimates from sales personnel worldwide, and convert it into a production plan through the production and sales system. Adjustments are made based on weekly feedback from sales personnel to meet customer demand.

After-sales Service Stage

Nanya is committed to enhancing product quality and rapidly responding to customers' quality issues to meet their expectations. In order to accelerate the efficiency of problem analysis, the Nanya's service team will fully understand the problems reported by customers first, arrange FAE on-site support to verify the problem if necessary. If the problem is related to Nanya's product or required further analysis, it would be registered in RMA system and arrange sample back. After receiving RMA sample, Nanya will update failure analysis report to customers based on analysis plans, and provide improvement actions and disposition plan once analysis is completed. The field application engineering, quality assurance, product engineering, and process engineering work together and use the RMA system for process management. Over the years, a response was provided to customers within the target time limit for over 90% of customer complaints.

Customer complaint handling process

Customers complaints



Information collection on the client end



Preliminary investigation of the issue

- General – As needed
- Urgent – Response in 24 hours



Engineering analysis



Preliminary report/Prevention measure

- Urgent – 3 work days

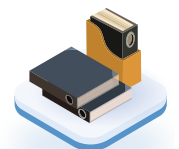


Final report/Improvement measure

- General – 14 work days
- Urgent – 7 work days



Case closed

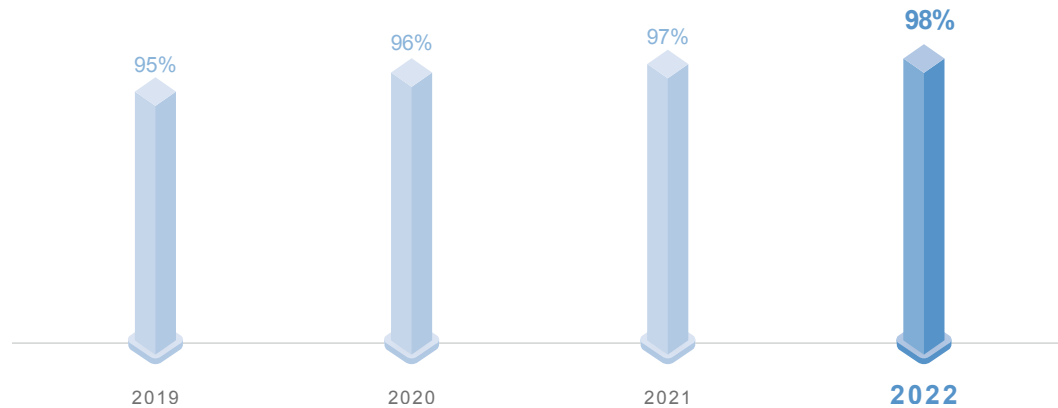


Note: If the case requires other analysis to verify the root cause, we update the progress of analysis according to the analysis plan until the case is closed

Achieving rate of customer complaint cases

98% of customer complaint cases were resolved within target deadlines in 2022. We will continue to maintain frequent communication with customers and understand how customers use our products and failure conditions in the shortest time possible, in order to accelerate problem analysis and solve problems. The cases that were not resolved within the deadline involved more complex analysis, and required customer platform analysis, measurement platform signals, parameters adjustment, and development of testing programs. This is why the cases took longer. Progress is periodically updated and analyzed in the analysis process, and plans are discussed and analyzed with customers.

Achieving rate of customer complaint cases



Customer Privacy Protection

Customers are extremely important partners of Nanya Technology Corporation, and the privacy and confidential information of customers are treated as if they were the Company's confidential information. To ensure confidential information is well protected, Nanya Technology Corporation has formulated the Confidential Information Management Procedure. Regarding the documents provided by customers, after internal filing procedure and the confidentiality classification, these documents are archived in the document control center. In the future, if employees require access to these documents, they have to go through the document application procedure. Based on the level of document confidentiality and the purpose of use, corresponding supervisors give their approval and then the document control center will authorize the access and distribute the documents to the applicants. In 2022, no case involving violation of customer privacy occurred. If a customer suspects or discovers evidence indicating an information leak, a complaint can be lodged through the Nanya Reporting Mailbox and Reporting Hotline.

Results of Customer Satisfaction Survey

Nanya strive for continuous improvement, working in a practical way, with a spirit based on exceeding our customers' requirements in quality, delivery and service. In relation to customer satisfaction, Nanya employs an impartial third-party consultancy company and Internal survey to conduct satisfaction survey for direct and end-customers through the internet or interviews, that Nanya can understand customers' needs from a fair and objective perspective. The content of the survey includes the dimensions of "Product", "Delivery", "Quality", "Technical service", "Communication", "Commercial" and "Comparison with competitors".

Nanya has a complete customer satisfaction procedure standard and a customer satisfaction committee, and uses the PDCA (Plan, Do, Check, Action) management cycle to form the common goal of improving customer satisfaction.

The committee is composed of cross-function department, and is participated by the directors of marketing, business management, field application engineering and quality assurance departments.

The main function include the selection of survey objects, sending questionnaires, collecting questionnaires, data analysis, regularly reviewing customer comment, coordinating and proposing appropriate improvement plans.

And report the results of customer satisfaction in the top manager review meeting. Finally, feedback the continuous improvement plan to customers, Integrate into a complete and effective cross-function service team, customer relationship management that creates coexistence and co-prosperity value through "service", and continuously improve customer satisfaction.

In addition to the customer satisfaction survey, customers regularly conducts business and technical review meetings with Nanya's service team, Nanya is able to keep close relationships with customers and provide better service.

In order to improve customer satisfaction, Nanya has established a special review platform, which prioritizes handling and improving customer needs.

Customers can find and [contact our customer service platform](#) through the company homepage of Nanya, input your suggestions and requirement, and continue to improve customer relations.

We will commit ourselves to strengthening the collaborative cooperation among internal relevant divisions in response to urgent or sudden demands from customers. Moreover, we will continuously strive to improve product quality and the timeliness and efficiency of communication on quality issues with customers while keeping smooth communication with customers, making every effort to satisfy customers' requirements.

Customer Satisfaction Survey Procedure



The average overall satisfaction score of 2022 was 94.7 points, reaching the target of 91 points. Continue to maintain a high level of customer satisfaction above 91 points

Our customer satisfaction has gradually increased and the target score for 2023 is 91 points and above. The target setting of the customer satisfaction survey is to consider the fluctuation of the industrial characteristics and the annual regular review of the performance and benchmarking, and set a reasonable target, submitted to the President for approval by the Quality Assurance Division.

The overall performance of Nanya over the years has been affirmed by customers. In 2022, 99.2% of customers are satisfied with the overall performance of Nanya. It has maintained a high level of customer satisfaction ratio of more than 95% for five years. The goal for customer satisfaction is 95% and above in 2023.

Customers highly recognize the Nanya's performance on delivery, technical service and communication, Mainly Nanya assists the client in accelerating the verification of new products and technical exchanges during the product design, testing and verification phase.

In addition, based on market supply and demand and product application status, Nanya accelerates the development of new products, strengthens communication with customers and faces various improvement issues with a positive attitude, adheres to product quality control, and listens to customers' voices for continuous improvement. Thus, in 2022, there were no product recalls.

Customer satisfaction results

