

2020 BOE CORPORATE SOCIAL RESPONSIBILITY REPORT





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About This Report

Reporting Period

This report covers the period from January 1 to December 31, 2020. Part of the content is beyond the above time range.

Reporting Cycle

BOE has published the annual CSR Report since 2010. The last report was published in April 2020.

Reporting Scope

This report, covering regions where BOE operates, presents the CSR philosophy, strategy and practices of BOE and its subsidiaries as well as their business operations during the reporting period.

Reporting Data

This report provides data gathered as of December 31, 2020.

Preparation Basis

This report is prepared in accordance with the core option of *GRI Sustainability Reporting Standards (GRI Standards)* issued by the Global Sustainability Standards Board (GSSB), *Guidelines of the Shenzhen Stock Exchange for Standardized Operation of Companies Listed on the Main Board*, *Code of Corporate Governance for Listed Companies*, *Guidance on Social Responsibility of Information and Communication Technology Industry (SJ/T 16000-2016)*, and *Evaluation Index System of Social Responsibility Governance Level of Information and Communication Technology Industry (T/CESA 16003-2017)*.

Designations

BOE Technology Group Co., Ltd. is also referred to as "BOE" "the Company" or "we" in this report.

Report Availability

This report is available in printed and electronic versions. The electronic version can be accessed online or downloaded from the official website of BOE, www.boe.com. You are welcome to call or email us if you have any questions or advice about the report.

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Message from the Chairman



*Align Actions with Principles
in the Beautiful Symphony of ICPST*

The light is at the end of the tunnel. Having pulled through the COVID-19 pandemic in 2020, human is about to secure the final victory against the invisible enemy.

Facing the once-in-a-century pandemic and great changes unseen in a hundred years, Chinese people have endured hardships and blazed new trails.

We, the BOE family, have forged ahead fearlessly against the trend. Being the leading role of semiconductor display and heading to the innovation company of IoT, we regard innovation as our inner force to obtain final triumph, which endows us with the courage to take the lead, break new ground, and stand at the first place in the smart IoT industry.

The first place represents not only our excellence, but also our extraordinary vision!

If we compare the smart scenes enabled by smart technology revolution and IoT ecosystem to splendid waterfalls of technology, BOE is the vast lake under the waterfalls, collecting, integrating and transforming the flows.

The dreamland of technologies born in this process is one that we stay committed to, where IoT is ubiquitous, characterized by interfusion and harmony. Here, technologies and industries are interconnected, and the internet of everything fills every corner with vitality.

Bearing the commitment in mind, we have created highlights in the extraordinary year of 2020 with our hands. In this year, we saw our revenue and net profit soar against the trend, carried forward in the intelligent system and innovation business, integrated and acquired the Nanjing and Chengdu assembly lines of CEC-Panda, and became one of the Brand Finance Global 500 for the first time.

As a Chinese proverb goes, actions begin with principles, and principles culminate with actions.

The philosophy of our ancestors serves as our moral compass till this day, and the BOE family has interpreted it in a new light: we are motivated to align actions with principles and create the beautiful symphony of ICPST (Integration of Chips, Panels, Software and Things), and we are dedicated to benefiting our users, partners and connecting the society with the ubiquitous "IoT ecosystem of BOE".

Better innovation with deep understanding of customers

The pith of industrial revolutions in history lies in beginning with new understanding of users and succeeding in innovation of technology.

Steamers ushered in technological innovation in transportation in 18th Century, electrical technologies brought sea change to way of production and people's lifestyle in 19th Century, and computer science boosted information applications in a myriad of industries in the 20th Century. In a new era of science and technology when the fourth industrial revolution is getting full-fledged, IoT technology is assuming a main role with the intelligence revolution.

BOE was all about displays 20 years ago, and now we are all about IoT.

Against this backdrop, IoT technology is what the users need in a bid to adapt to application scenarios amid the internet of everything, solve the difficulties of information processing, advance productivity and improve the way of life.

As every technological revolution involves core resources most precious to companies, we will lose the competition marathon unless we take full advantages of these resources. Obviously, our ICPST innovation serves as the most persuasive paradigm of action in the era of IoT.

We have achieved fruitful results in innovation over the past year. We have upgraded the 8K super large borderless displays, made breakthroughs in flexible panels manufacturing techniques, raised the percentage of products integrating software and hardware, and leaped forward in artificial intelligence.

BOE is invariably committed to cutting-edge and industry-leading technologies. While benefiting the life of users worldwide with ICPST, we have also presented brilliant user-oriented innovations to our peers and have been granted the following honors: the flexible AMOLED technology won the Special Prize of Beijing Science and Technology Progress Award and the IFA Gold Award of Innovative Display Technology, 14 technologies in artificial intelligence and big data algorithm ranked top 10 in the world in 2020, and 5 technologies in artificial intelligence gained industrial championship!

Honors denote high recognition, and widespread applications represent desirable results.

The BOE intelligent airport display system has brought passengers more efficient and convenient travel experience in Beijing Daxing International Airport. Ultra HD displays and other devices have assisted teachers and students with cloud education resources and improved diversified interaction in virtual classrooms. Smart retail solutions have advanced commercial efficiency and user experience. Medical monitors, ventilators and other vital signs monitors as well as the All-in-one Interactive Display for Video Conference have contributed technologically to the fight against COVID-19 at Huoshenshan Hospital and Leishenshan Hospital in Wuhan.

It is important to remember that these innovations are inseparable from the craftsmanship of the BOE family, members of which always strive for the best and never cease the dedication.

Adhering to the principle of "respect for technology and persistence in innovation", BOE maintains high investment in innovative technologies. Even in the challenging year of 2020, a large portion of our revenue was spent on research and development of new technologies and rapidly integrated and innovated advantages of semiconductor display in IoT, big data, etc.

The BOE family believes that we will make more impressive achievements through our arduous efforts in a long run by upholding innovation with deep understanding of our customers. From 1993 to 2021, BOE has written a chapter with courage, wisdom and strength. Our actions in the past decades are proofs that all technological innovations are missions and responsibilities centered around users, people and technology applications!

Greater ecosystem with deep understanding of partners

In the business world, more choices mean greater benefits, and choices here refer to user choices and enterprise cooperation choices. The former focuses on product innovation based on demand, while the latter focuses on platform and win-win results, so as to achieve the development effect of "1+1>2".

Industry competition is still intensifying in 2021, and the innovation of models and content has never stopped. The competition among leading companies is no longer about the simple results of wins and losses; rather, competition in comprehensive strength in sustainable development has become a trend.

Among them, cooperation in ecosystem does not only present a development opportunity, but also serves as a "high-quality gene" for enterprises to adapt to competition in new industries. In the technology ecological chain, enterprises are no longer a single and vertical business organization, but a fertile platform inextricably linked with the outside world.

BOE agrees with this principle, and acts in line with it.

An IoT ecosystem development path featuring model innovation and platform supports has been formed step by step since BOE proposed the IoT development strategy of "opening up technologies and application platforms to create value through ICPST" in 2016.

In terms of model innovation, we upgraded our business model in 2020 and created a "1+4+N" aircraft carrier business group of integrated development, in which the carrier is semiconductor display, cruisers consist of sensors, Mini LED, smart systems as well as smart medicine and engineering integration, and destroyers are smart finance, industrial internet and others integrated in IoT scenarios. Our business has been extended to the semiconductor display industry chain and the value chain of IoT scenarios.

Speaking of platform supports, two aspects must be mentioned. First, BOE has cultivated an industry platform integrating panels, modules, products and services by applying the core capabilities of global leading display, sensor and system device to transportation, homes, offices, security, education and telecommunication, among others. Second, we have created a BOE intelligent system

innovation center that integrates the software and hardware technology development platform, the new materials and equipment industry transformation platform, the product and service marketing and promotion platform, the international talent exchange and training platform, as well as the open technology and market cooperation platform, while focusing on solutions in six major scenarios including intelligent vehicle, smart retail, smart finance, smart medicine and engineering integration, industrial internet and smart city public services. Through the platforms, we create values and shares development opportunities with industrial partners.

It is worth mentioning that the BOE intelligent system innovation center serves as an important platform in constructing the aircraft carrier business group, facilitating the association with partner from upstream and downstream, the research and development of software and hardware technology, the promotion of market brands, the transformation and implementation of supply chains, introduction and training of talents and cooperation in product technologies.

As of the end of 2020, partners from various industries have witnessed the vigorous ecosystem of BOE: contracts have been concluded about innovation centers in Chongqing, Chengdu and Qingdao. We have engaged in profound cooperation in smart finance, intelligent vehicle, smart park, smart retail, and smart city public services as well as industrial internet with more than 500 partners and have provided high-quality solutions for over 50 types of scenarios.

BOE smart financial solutions have covered more than 1,500 banking outlets in China, and BOE smart retail solutions have entered more than 20,000 stores in over 61 countries. BOE smart park solutions have been put into use in 6 cities including Taoxichuan culture and creative park in Jingdezhen (Jiangxi Province) and the demonstration plot in Tianjin. BOE smart transportation solutions have covered more than 80% of high-speed rails and subway lines of 22 cities in China, while providing professional services to many cities overseas.

The evolution of living beings in the nature depends on the exchange in substances, energy and information with others, and the same goes for innovation of ICPST, whose success hinges on the absorption of associated innovation energy from IoT ecosystem. The value of model innovation and platform supports is thus manifested.

Stronger CSR with deep understanding of society

BOE is short for Best On Earth, which is our vision, ambition and motivation. While we pursue life-changing technologies, we fulfill the corporate social responsibilities invariably.

While performing these public duties, we continue to improve our environmental management system and respond to global climate change. We use clean energy, build numerous national-level green factories, and create green products such as virtual price tags and virtual conference table tags in line with China's low-carbon development goals. We pay attention to talent incentives and employee development and have released the first medium and long-term equity incentive plan and carried out talent empowerment plans and technology competitions, which has not only helped to retain talents for the enterprise, but has also cultivated more innovative talents for the industry and society, promoting sustainable industrial development. We are enthusiastic about social welfare, and we have played our part in supporting the pandemic prevention and control, education, health care and cultural inheritance on the basis of our own industry, making a contribution to the building of a fair, inclusive and harmonious society.

With the blueprint drawn, a bright future for BOE is on the horizon.

"The power of China's innovation" will become a backbone of a new round of global information industrial revolution.

To a large degree, it has motivated the BOE family to emerge as a leader in era of internet of everything.

We strongly believe that right principles and understandings enable us to surge forward with great momentum. We will align actions with principles and play the beautiful symphony of ICPST!



About BOE

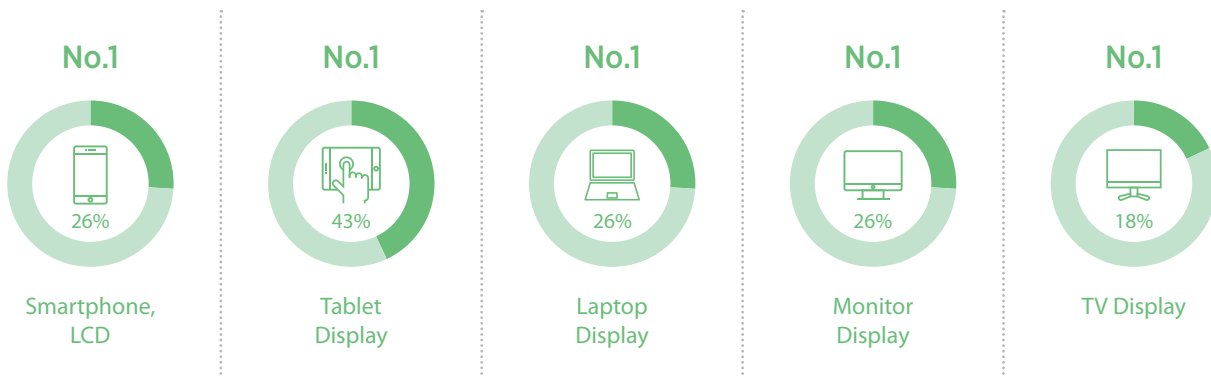
Our Businesses

BOE Technology Group Co., Ltd., founded in April 1993, is an IoT company providing intelligent interface products and professional services for information interaction and human health. Focusing on the transformation and development strategy of IoT, BOE upgraded the organizational structure in 2020, based on the future semiconductor display development and the segmented application market of IoT. Having integrated the seven original business groups, we created a “1+4+N” aircraft carrier business group with the semiconductor display as the core and Mini LED, sensors and application solutions, intelligent system and innovation business, as well as smart medicine and engineering as intelligent system and innovation business, as well as smart medicine and engineering as integrated development.



»» Display Business

BOE is committed to providing interface devices in the fields of TFT-LCD, AMOLED, Micro display, etc., and building an integrated platform that engages everything from panels to modules, from products to services. Our display business focuses on providing customers with high-quality displays for mobile phones, tablets, laptops, monitors, TVs, automobiles, digital signage, video walls, wearable, industrial control, VR/AR, electronic shelf labels, white goods, medical displays, mobile payment, and interactive whiteboards, etc. In 2020, BOE broke new ground in 8K UHD displays, large-size displays, flexible screens, and quantum dot displays, leading the development of multiple industries. In addition to bringing users a colorful display world, BOE has also continuously improved technology and manufacturing process, and fully adopted the concept of green health.



¹Note: The data comes from the 2020 annual data of Omdia, a professional research and consulting organization.



»» Sensors and Application Solutions Business

The sensor and application solutions business focuses on hospital detection, home detection, communication and transportation, smart home and other fields, providing customers with integrated sensor design and intelligent manufacturing services. It also provides systematic solutions in terms of medical imaging, biological detection, smart windows, microwave communication, and fingerprint recognition, etc. The products include X-ray flat panel detectors, digital microfluidic chips, dimming glass and fingerprint recognition systems, etc.

»» Mini LED Business

The Mini LED business mainly provides next-generation LED solutions with glass substrate and PCB-based semiconductor technology and advanced micron-level packaging technology. It can be widely applied to commercial occasions, business meetings, stage performances, sports events and other fields. BOE has achieved fruitful results in the Mini LED business. In addition to glass substrate active-driving Micro LED products, the Company has launched display products such as 75-inch 8K Mini LED, 65-inch Mini LED, and glass substrate Mini LED with 0.9mm pixel pitch, bringing a brand-new visionary world.

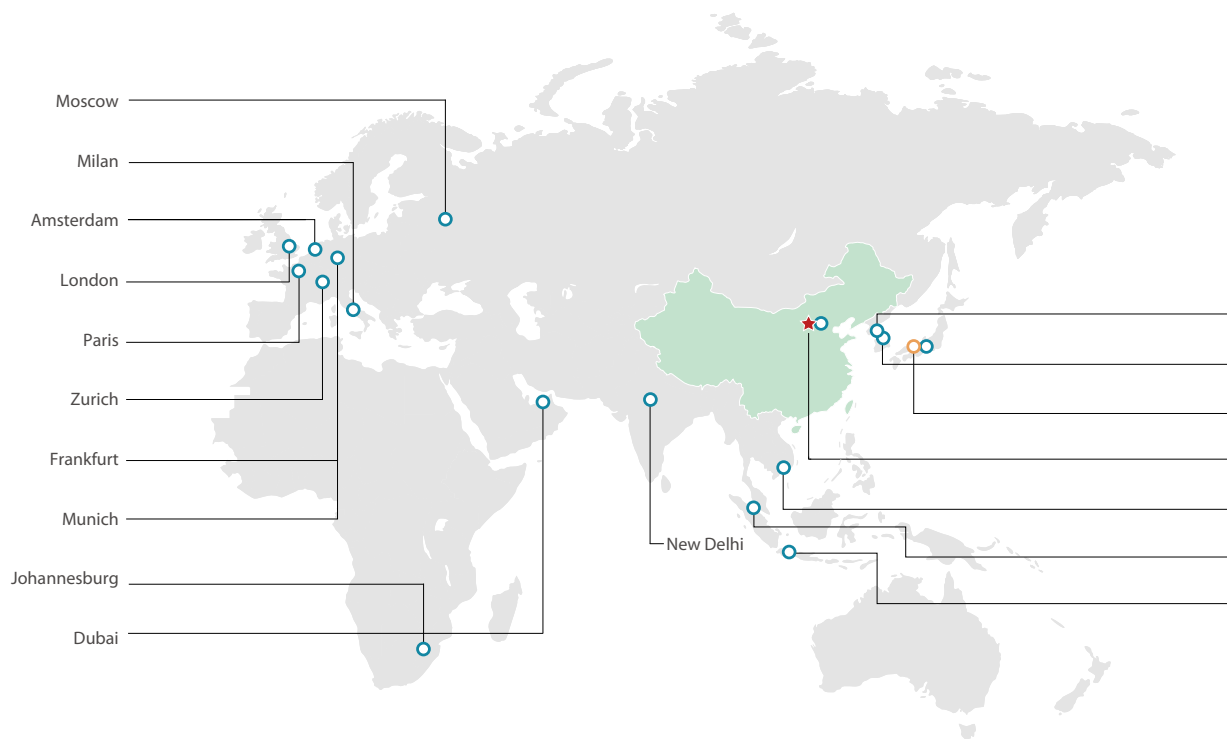
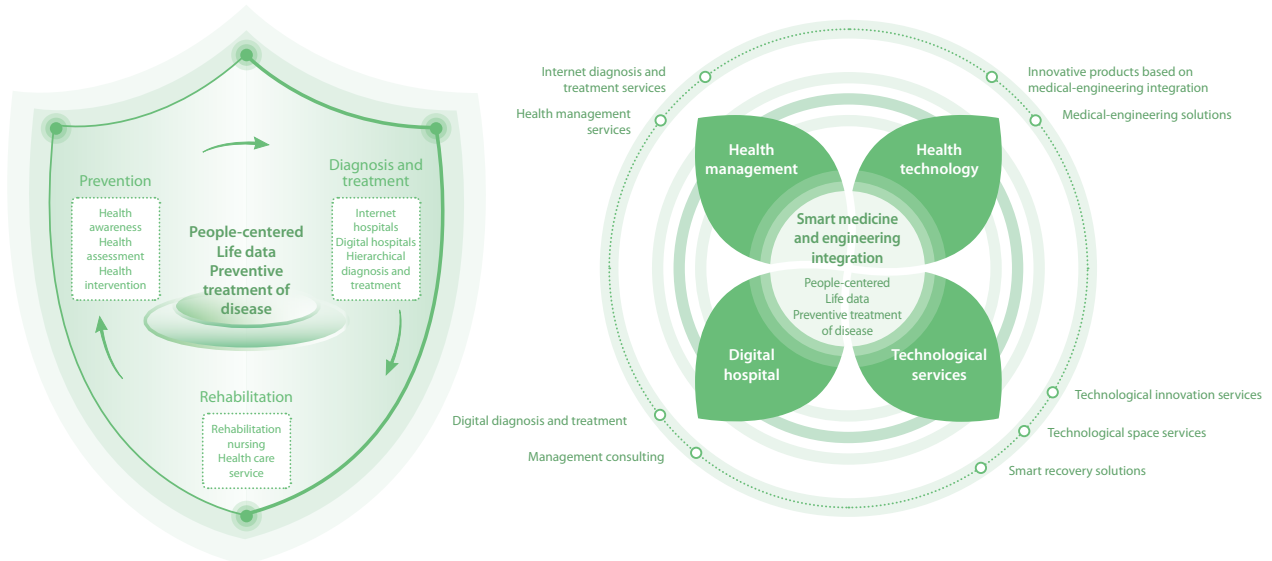
»» Intelligent System and Innovation Business

BOE intelligent system and innovation business provides integrated solutions in IoT segments including smart parks, smart finance, smart transportation, smart education, smart medical care, urban light space, smart energy and smart cities through artificial intelligence, big data and cloud computing technology, with a focus on software and hardware fusion products and services.

Guided by the smart system and innovation business, BOE has established the intelligent system innovation center as one of the important starting points for building a smart IoT ecosystem. At present, the center has put into operation in Chongqing, Chengdu, Qingdao and other places, contributing to the construction of new infrastructure and the creation of smart cities in various regions.

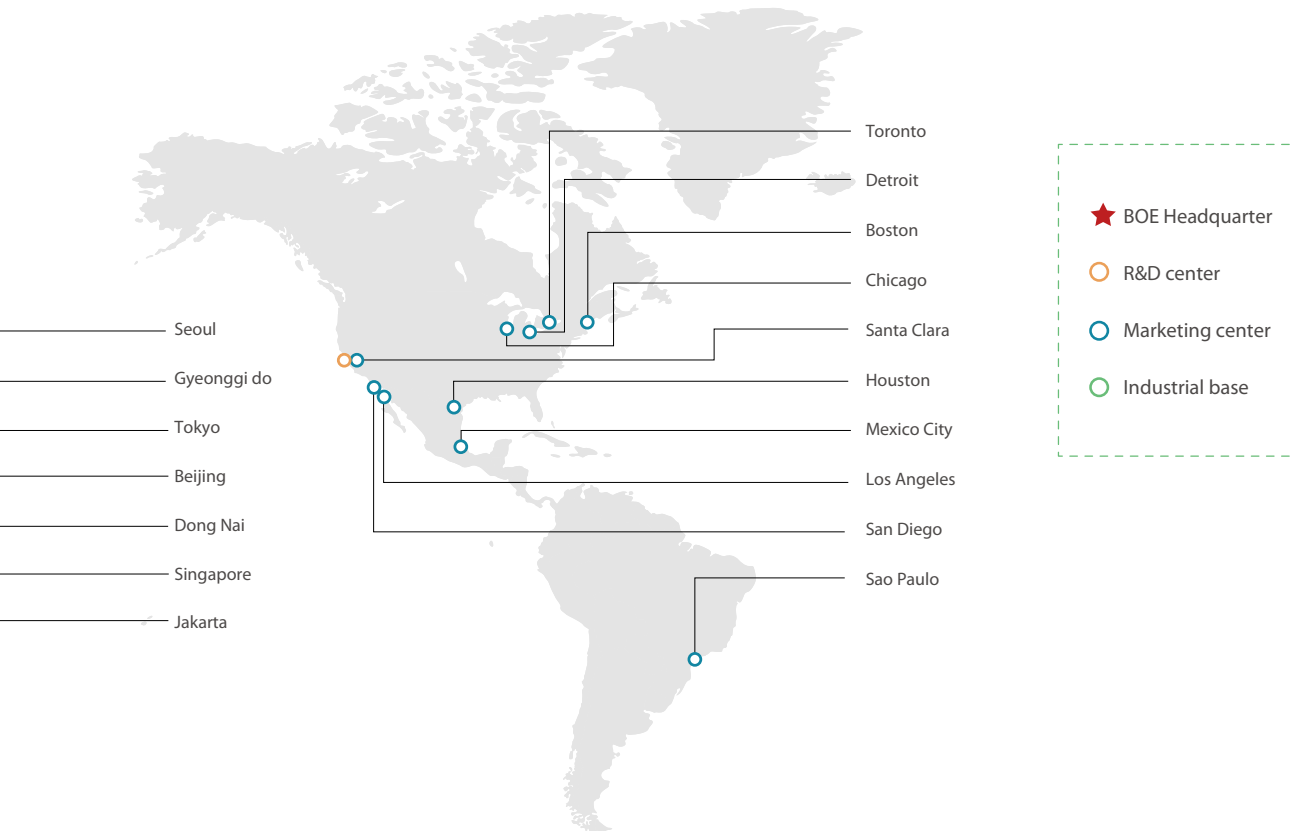
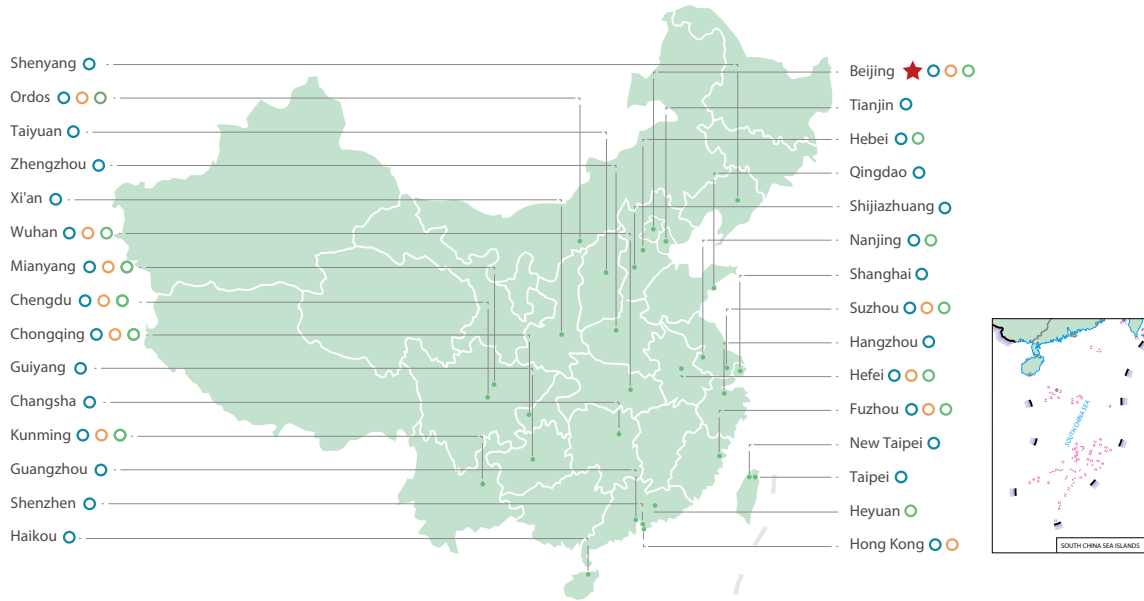
Smart Medicine & Engineering Integration Business

Smart medicine and engineering integration means to incorporate technology and life science innovation. With the innovative integration of medicine and engineering and a people-centered approach, it focuses on the three major scenarios of family, community and hospital. Through the establishment of a healthy IoT platform and the connection with testing equipment, medical staff and customers, it forms an intelligent health management ecosystem. It provides the closed-loop full-cycle health service with health management as the core, medicine and engineering integration terminals as tools and the Internet hospitals and digital hospitals as the underpinning part, aiming to provide people with high-quality and convenient health and medical services.



Global Presence

As of December 31, 2020, BOE had 76,459 employees in total. With its revenue reaching RMB 135.553 billion in 2020, the Company has manufacturing bases in many parts of China including Beijing, Hefei, Chengdu, Chongqing, Fuzhou, Mianyang, Wuhan, Kunming, Suzhou, Ordos, and Hebei, as well as subsidiaries in 19 countries and regions such as the United States, Germany, the United Kingdom, France, Switzerland, Japan, South Korea, Singapore, India, Russia, Brazil, and the United Arab Emirates. The service network covers major regions of the world such as Europe, Americas, Asia, and Africa.



BOE



成为地线上的人
Best on land

成为地线上的人
The world is a marketplace
of global players

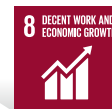
成为地线上的人
A global trading platform
products and services

成为地线上的人
A role model in the trading world



Governance: Consolidating Development Foundation

With the management philosophy of *making progress through innovation and managing the enterprise with integrity*, BOE pursues sustainable development. The Company continuously strengthens the internal management system, establishes and improves the compliance management system, protects the rights and interests of shareholders to the greatest extent, and improves decision-making and governance with open and pioneering mind. BOE is fully aware that the development of an enterprise cannot do without the support and participation of stakeholders. We actively listen to the constructive opinions of stakeholders, and use the management principles of “integrity, standardization, transparency, and responsibility” to work together with upstream and downstream partners. While fulfilling responsibilities and improving self-responsibility governance, we actively promote the overall improvement of supply chain CSR management and sustainability capabilities, and build a benign business environment featuring responsible, efficient, standardized operations, transparent management, and fair competition.

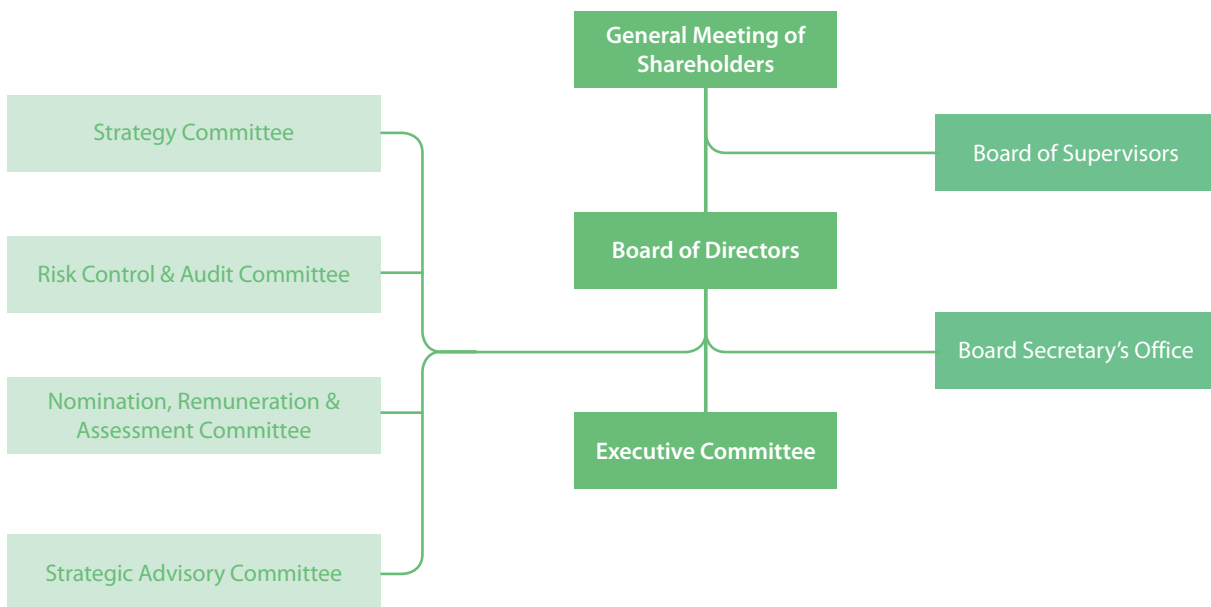


Corporate Governance

BOE has established and improved a compliance management system that meets local laws and regulations and business ethics standards in the fields of fair competition, intellectual property protection, and business ethics. We constrain the behavior of enterprises and employees with strict governance standards, and actively build and maintain a fair competition, an open and transparent market environment. We promote intellectual property protection awareness and business ethics, and win the long-term trust and support of the public and the majority of stakeholders with integrity, standardized operations, and transparent management.

»» Enhancing Governance Structure

A good corporate governance mechanism helps to enhance the value of a company and safeguard the rights and interests of shareholders, and is an important foundation for the Company to achieve sustainable development. In the long-term practice of corporate governance, BOE keeps improving its corporate governance system and management level. The general Meeting of Shareholders, the Board of Directors and its specialized committees, the Board of Supervisors, and the management and the departments in the charge of the general manager all have clearly defined powers and responsibilities and work with high efficiency.



Corporate governance structure

BOE's General Meeting of Shareholders is the highest authority, and the specific responsibilities of the subordinate organizations are as follows:

Board of Directors

- The Board of Directors is the decision-making arm for the Company's operation and management. It is composed of three specialized committees (Strategy Committee, Risk Control & Audit Committee, Nomination, Remuneration & Assessment Committee) and Strategic Advisory Committee.
- The Board of Directors, its specialized committees, and the Company's functional departments collaborate with each other to establish and improve the mechanism for the stakeholder engagement and oversee, implement and review strategic plans concerning the economy, environment and society.

Committees under the Board of Directors

- The Strategy Committee, as a permanent body during the adjournment of the meetings of the Board of Directors, is responsible for examining strategies and the implementation concerning the Company's marketing, brand, technology, products, organizational structure, human resources, internal control and supervision, and professional ethics punishment, etc.
- The Risk Control & Audit Committee is mainly responsible for conducting risk control and audit over matters that need to be submitted to the Board of Directors for decision making, and providing professional advices.
- The Nomination, Remuneration & Assessment Committee is mainly responsible for reviewing matters regarding the nomination, remuneration, performance assessment on directors and senior executives.
- The Strategic Advisory Committee studies the long-term development strategy and major investment decisions of the Company and provides professional advice for the Board of Directors.

Executive Committee

- The Executive Committee's main responsibility is to formulate the Company's business strategies and plans, and to implement them after they are approved.

Board of Supervisors

- In accordance with laws and relevant regulations of BOE, the Board of Supervisors shall earnestly supervise financial affairs, the performance of directors and senior executives in order to safeguard the legitimate rights and interests of the Company and shareholders.

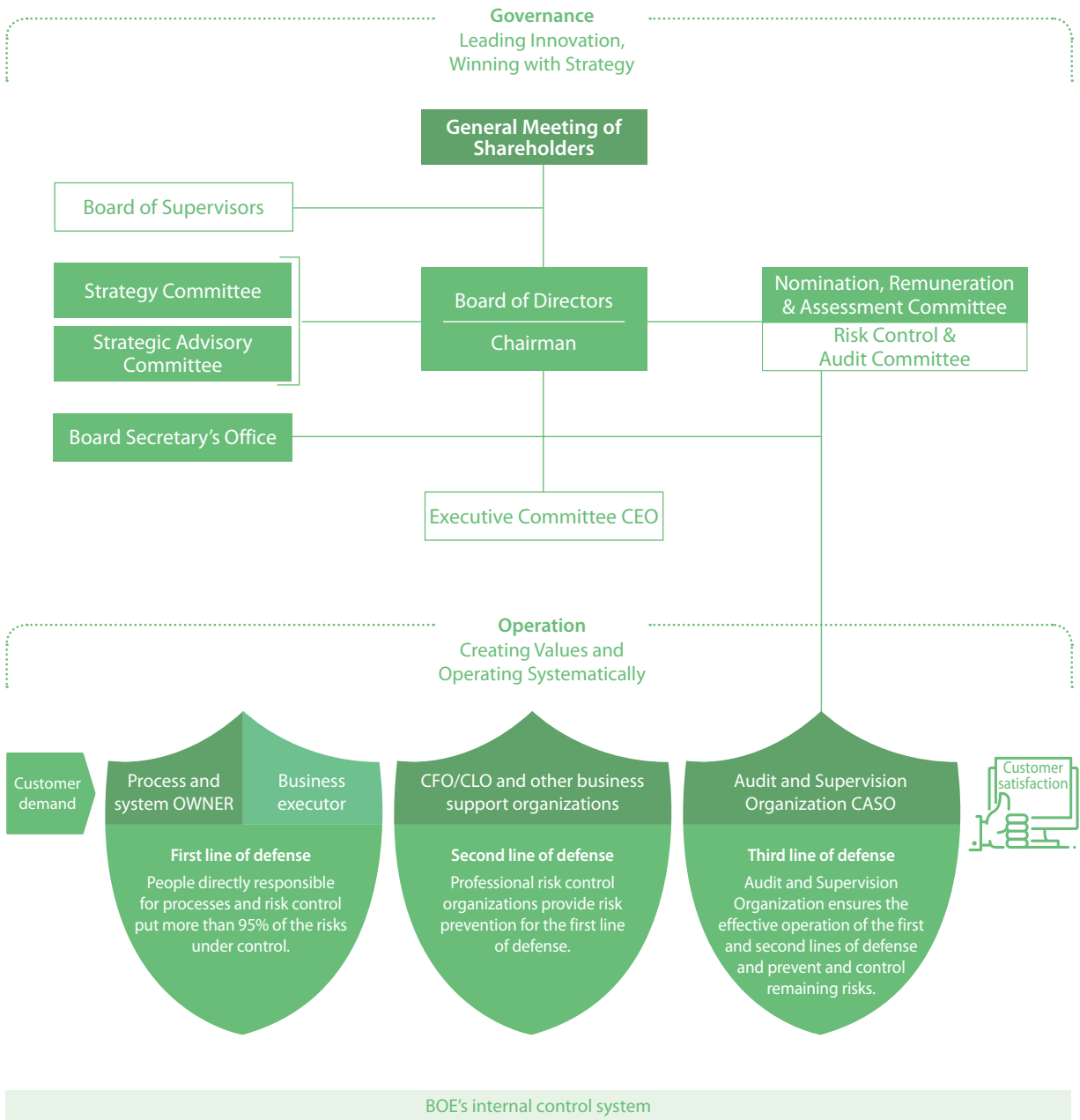
In 2020, in accordance with the needs of strategic development and relevant provisions of laws and regulations, BOE's Board of Directors reviewed and amended the *Rules of Procedures for Shareholders' Meetings*, *Rules of Procedures for the Board of Directors*, *Rules of Procedures for the Board of Supervisors*, *Risk Control and Audit Committee Composition and Procedures of the Board of Directors*, and *Composition and Rules of the Nomination and Remuneration of the Evaluation Committee of the Board*. At the same time, in accordance with the *Comprehensive Pilot Program for Deepening BOE's Market-oriented Reform* and relevant laws and regulations adopted by the Beijing Municipal Party Committee and Municipal Government, we formulated the *Professional Manager Management System* and appointed the Company's executive directors and senior managers as professional managers. We carried out management and assessment of professional managers in accordance with the requirements of the system, and further improved the management efficiency of the Company².

We also initiated the second phase of innovation and reform of the enterprise organization, and established an organizational operating system adapted to the transformation strategy of the IoT. Horizontally, integrations are established among the front, middle and back business platforms. Vertically, core functions of strategic management, process management and performance management are connected. We have built an organizational mechanism and a process management system with rapid response, high efficiency and close collaboration, so as to better adapt to the strategic requirements of BOE's long-term development.

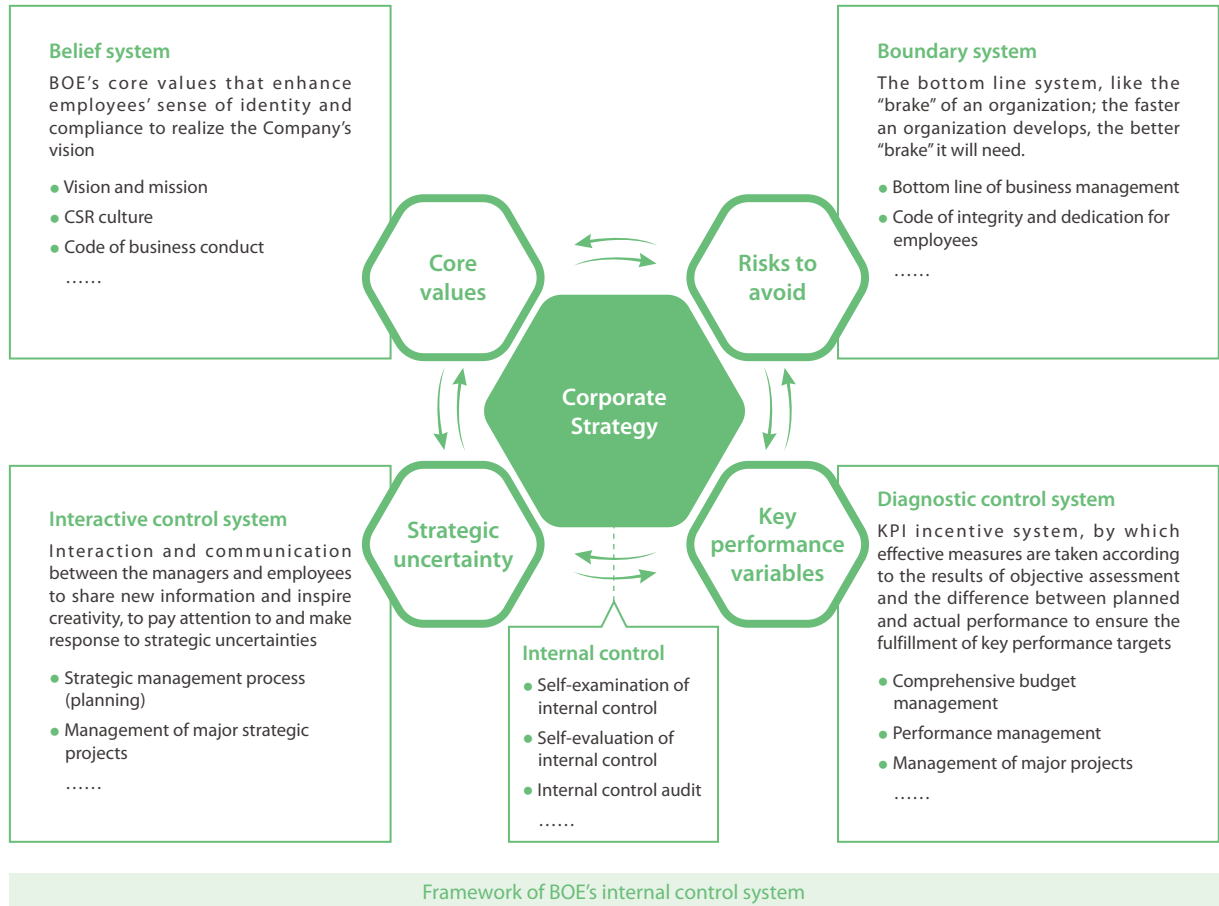
²Note: Please refer to BOE 2020 Annual Report for details of other specific work content of the company's board of directors, board of supervisors, and shareholders' meeting in 2020.

»» Standardizing Internal Control

BOE's internal control follows the values and management methodology of "leading innovation, winning with strategy, creating values and operating systematically". It is customer-oriented and could realize rapid response. The process is concise and efficient, and the business grows rapidly. It makes risk moderate and controllable. The management system prevents systemic risks with three layers of protection, namely customer orientation, business-driver, and the entire process as the base. The Board of Directors and the Strategy Committee are responsible for risk management at the company level; the Board of Supervisors oversees risk management conducted by the Board of Directors; the permanent bodies of the Risk Control & Audit Committee under the Board of Directors are the internal control departments, responsible for overseeing and evaluating risk management.



BOE has established an internal control system based on four control levers, i.e. belief system, boundary system, diagnostic control system, and interactive control system. The coordination, dynamic balance, and effective operation of the four levers ensure the implementation of our strategies.



BOE's internal control system consists of examination, evaluation and audit by the Company. We formulate and implement annual internal control development plans according to the regulatory requirements on listed companies and the realities of BOE. The process and system owners and the business executors are in charge of internal examination, which helps identify defects in a bid to correct them in time. The internal evaluation is implemented by the audit organization. Based on examination results, the design and operation of major risk areas and key control points are evaluated according to the regular and special evaluations, with a defect report and an evaluation report released. With such efforts, an overhaul is initiated and monitored, and the influence of events before and after the base date of the report is closely followed. BOE hires independent external accountants to conduct an independent and impartial evaluation of the internal control operations, and issues annual internal control audit reports.

In order to ensure that our operation and management is legal and compliant, assets are safe, and financial reports and related information are true and complete, we continued to improve internal control system, optimize process system and publish process performance analysis module in 2020, which effectively promoted the process efficiency management. Besides, we compiled the annual internal control rules plan and organized internal control self-evaluation/audit work. External accounting firms were hired to evaluate internal control audits, ensuring there are no major defects of internal control.

In November 2020, the BOE Audit and Supervision Organization was rated as the 2017-2019 National Advanced Group by the China Institute of Internal Audit.

» Business Integrity and Compliance

BOE is committed to fostering a corporate culture of high standards that integrate business ethics and compliance management principles. Over the years, we have continued to guide and regulate the business behaviors of employees, management personnel and partners through management enhancement, system improvement and operation standardization, providing a solid guarantee for long-term steady growth.

Code of Professional Conducts

Every employee in BOE is obliged to abide by the *BOE Code of Professional Conduct*, which presents the criterion for everyone in BOE to work honestly with high efficiency, implement our strategy firmly, and strictly implement our regulations. The *BOE Code of Professional Conduct* is also the iron law for staff's professional ethics. All employees shall sign and abide by the *BOE Declaration of Professional Ethics*, follow the employee's basic morals, and accept broad supervision.

Basic ethics

- Be proud of BOE and be honest and fair
- Be strict with yourself, adhere to professional ethics and constantly strive for BOE and personal reputation

Duty performance

- Act in accordance with the policies and guidelines of BOE, and faithfully perform your duties
- Abide by the rules and regulations and fulfill the duties assigned by the Company in the best way
- Take good care of company property and never leak company secrets
- Maintain good communication and cooperation between colleagues and departments, and strive to improve work efficiency

Self-improvement

- Keep learning and progressing, improve yourself and pursue excellence

External communication

- Perform duties with integrity and fairness and establish a good corporate image
- Do not accept any form of inducement which may cause to make an impartial judgment
- Do not engage in any activities contrary to social ethics and morality in daily life and work

Avoid conflicts with the Company's interests

- Avoid personal behaviors and relationships that would conflict with the interests of BOE
- Use the Company's assets correctly according to BOE's regulations, and do not use the Company's assets for improper personal benefit



BOE Declaration of Professional Ethics

- Comply with the confidentiality rules and regulations, and do not seek any personal interest by divulging or using the Company's confidential information
- Hold in high esteem the honor of their occupation, create value, and do not abuse power for personal benefit or damage the Company's interests
- Abide by the Company's rules and regulations to work in a fair and efficient manner. Do not take or offer bribes. Do not ask for bribes or commit corruption
- Efficiently collaborate to create shared value. Never prevaricate and set obstacles
- Report malpractices or the Company's management loopholes in a timely manner

Promoting Fair Competition

For a long time, BOE adheres to the principle of fair competition, respects every competitor, and regards excellent competitors as the driving force to inspire us to constantly seek innovation and change. BOE believes in winning with leading technologies, innovative business models, and quality products and services. We strictly comply with relevant provisions of the *Anti-monopoly Law of the People's Republic of China*, the *Anti-unfair Competition Law of the People's Republic of China* and the *Law of the People's Republic of China on the Protection of Consumer Rights and Interests*. We have formulated detailed company guidelines, and regularly publish *International Compliance of Express Delivery*, resisting unfair methods to restrict or exclude market competition behavior.

In 2020, BOE faced no lawsuit concerning unfair competition or anti-monopoly. One lawsuit filed by BOE in 2019 was closed, in which we sued the other party for unfair competition. The other party was judged to compensate BOE for economic losses of RMB 2.5 million. In April 2020, the case was selected as one of the 2019 annual Top Ten Innovative Cases of Intellectual Property Judicial Protection by Ningbo Court.

Enhancing Compliance Management

BOE follows the basic management principle of integrity, compliance, transparency and responsibility, and integrates the culture of integrity and dedication into the routine management of the Company. An effectively integrity and dedication system is set up and running in the Company to prevent any corruption or malpractices. It includes the integrity and dedication system for employees and the cooperation system for partners. It effectively improves employees' ability to practice integrity and efficiency, and puts forward integrity and self-discipline requirements for partners, which fundamentally guarantees BOE's stable and healthy development. In order to better supervise and manage the integrity and self-discipline situation, we have set up a special inspection and whistle-blowing email address: jubao@boe.com.cn, and follow up and deal with all kinds of reported information and incidents in a timely manner.

BOE's Integrity and Dedication System		
Integrity and dedication system for employees	Regulation system	<ul style="list-style-type: none"> System scope: it covers the whole working cycle of employees from recruitment, employee practice, talent management, performance evaluation, manager's performance to resignation. Regulations: <i>BOE Declaration of Professional Ethics, BOE Supervision Outline, Economic Responsibility Audit Management Measures, Fraud Investigation Management Measures, Blacklist Management System, etc.</i>
	Education system	<ul style="list-style-type: none"> The training course for integrity and dedication has been carried out according to different levels such as position, title and key business fields, including new hire orientation, daily integrity and dedication education and training for new managers, and integrity education training lectures for managers at all levels, key business areas & major project personnel.
	Implementation system	<ul style="list-style-type: none"> Strengthening the ability of the responsible persons and departments to perform their duties; Establishing standardized and effective performance management, and set up incentive and commendation mechanisms to motivate every employee to be dedicated, diligent and of good performance.
	Examination and supervision system	<ul style="list-style-type: none"> Establishing multiple channels for anti-corruption, such as the mailbox, email, telephone and on-the-spot whistle-blowing, to accept broad public supervision. After receiving the tip-off clues, the Audit and Supervision Organization or the business inspection department shall dispose of the clues according to the established working procedures, and establish a special investigation team to carry out the supervision and investigation.
	Punishment system	<ul style="list-style-type: none"> Under the Strategy Committee of the Board of Directors, there is a professional ethics disciplinary committee to deal with violations of relevant regulations and systems.
Integrity and cooperation system for partners	Integrity evaluation system	<ul style="list-style-type: none"> BOE has established a set of rules and regulations shared with its partners: No procurement action shall violate the <i>Procurement Red Line</i>; all the partners are required to sign the <i>Integrity Agreement</i>, and their integrity record is required to be assessed. BOE conducts full-life-cycle integrity management for partners, and provides training on quality, internal control, and integrity for partners who do not meet the standards. If partners are found to have fraud during the performance of the contract, they will be sanctioned in accordance with our <i>Blacklist Management System</i> and the <i>Fraud Investigation Management Measures</i>.

In order to promote international anti-corruption cooperation and strengthen integrity in building the Silk Road, BOE participated in the Third Business Integrity and Compliance Training for Enterprises Engaged in Belt and Road in November 2020. BOE also actively responded to the integrity and compliance initiative for such enterprises and made commitments to enhance corporate integrity awareness, strengthen corporate compliance, strictly abide by laws and regulations, promote industry integrity and self-discipline, and fulfill CSR.

100% signing rate of *BOE Declaration of Professional Ethics*

0 cases of corruption that seriously violate the system

Over 2000 people attended online and offline integrity training

100% of anti-corruption reports responded and solved

Respecting IPR

As the mission reads, BOE is committed to ongoing innovation, providing compelling products, services, and experiences for our users, creating the maximum value for stakeholders and contributing to the progress of human civilization. We are not only the creator of a large number of cutting-edge technologies, invention patents and intellectual property rights, but also the advocate and promoter of property rights protection. For many years, we have strictly abided by IPR-related laws and regulations, respected the IPRs of all parties, and strengthened our IPR management. We have also raised the IPR awareness of employees and managers to ensure that they do not infringe upon the trademark, patent, copyright or other IPRs of other companies or individuals.

Upon their recruitment, employees are trained and educated on the IPR protection and conducts irregular assessment and re-education, so as to raise their awareness of IPR protection and risk control. BOE requires employees to obtain the necessary permission before using products and services with copyright or IPRs. In the external procurement, joint development and technical cooperation, BOE and the partners, under terms of IPR cooperation, have defined rights and responsibilities of patents to avoid related risks and to achieve win-win cooperation. Patents held by BOE in recent years are top-ranked across the industry globally, and the number keeps growing. As of the end of 2020, BOE has held more than 70,000 patents available for use. IPR protection is in line with the public interest as well as BOE's interest.

» Safeguarding Stakeholder's Rights

BOE is committed to the concept of symbiotic development with investors. The Company strives for an open, transparent, and win-win investor relationship with a solid bridge of good mutual trust, interaction and communication. BOE actively and extensively listens to the opinions and suggestions of investors, and creates sustainable market value for investors through scientific decision-making and effective management.

Investors Service

BOE has a professional investor relation management team to deliver corporate value to investors efficiently and promote the long-term coordinated development of the Company and the capital market. Also, BOE has continuously improved the communication system and established diversified, information-based, multi-tiered communication channels with the purposes of fairness, openness, transparency and efficiency.

BOE provides targeted services based on the characteristics and needs of different investors. Guided by investor needs, online meetings are held in a timely manner after major incidents to update the operating status through full exchanges with investors. In 2020, BOE continued to help investors keep abreast of the corporate development and information through multiple channels such as the "SSE e-Interaction" platform, regular online performance briefing, investor hotline, investor mailbox and field research. Meanwhile, BOE actively participated in the online and offline roadshows and promotion activities organized by the China Securities Regulatory Commission, Shenzhen Stock Exchange, industry associations, securities companies and their research institutions, etc., and also strengthened the publicity work for overseas investors. These efforts effectively promoted investor diversification.



BOE's online semi-annual performance briefing in 2020

In order to protect the rights and interests of investors, clarify risks and encourage cautious investment, BOE has set up an “Learn to Invest” column on the official website to further publicize relevant content related to investor protection.

BOE Services for Individual and Institutional Investors during 2018-2020

Year	2018	2019	2020
Number of Individual Investors Served (person time)	2530	1946	1638
Number of Institutional Investors Served (person time)	791	929	1255

Information Disclosure

BOE has formulated *Information Disclosure Management Measures* based on relevant regulations of listed companies and *Articles of Association of BOE Technology Group Co., Ltd.* The Company discloses information in a true, accurate, complete and timely manner and guarantees that there are no false records, misleading statements, or major omissions.

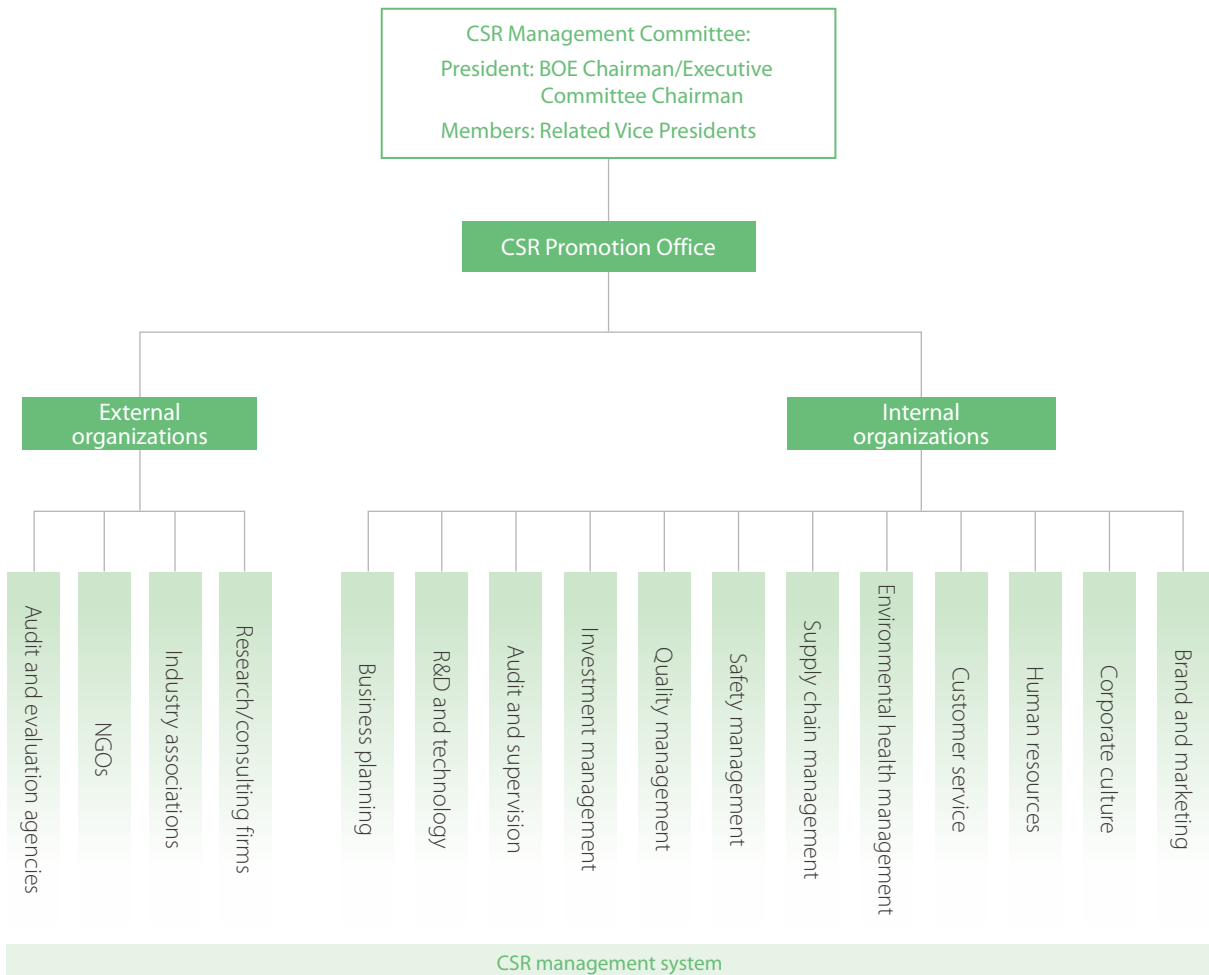
In addition to regularly disclosing relevant information through regular reports of listed companies, corporate social responsibility reports and other channels in accordance with the requirements of regulatory agencies, BOE also releases the latest company information in real-time on the official website, official WeChat public account, Weibo account and other channels to promptly update non-financial information in an all-round way.

CSR Management

»» CSR Philosophy and Governance

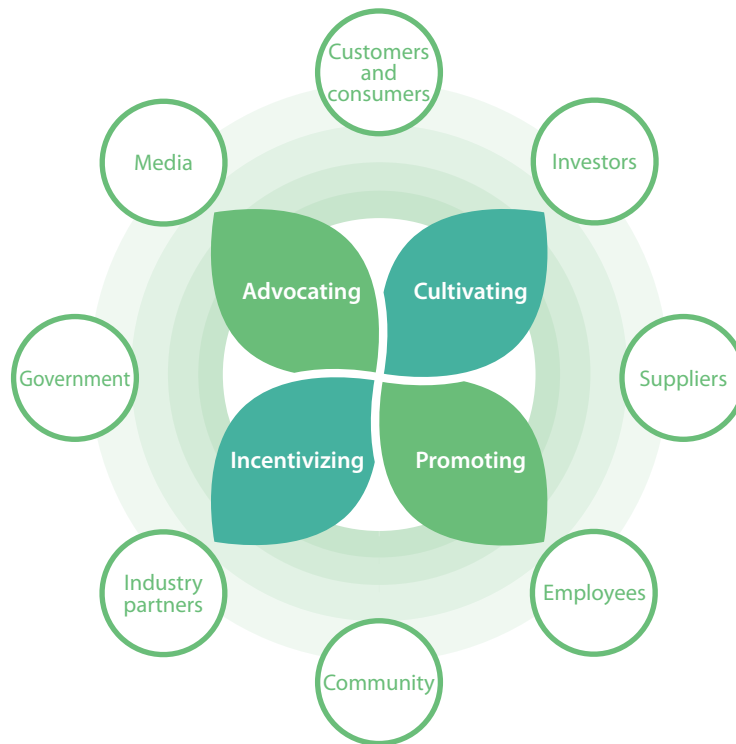
BOE has integrated CSR into the corporate management and development goals in the long-term business operations. We continue to improve the CSR philosophy and system, cultivate such a culture and environment full of responsibility, focus on CSR practices and capacity improvement of employees and establish a performance evaluation system that takes CSR performance into account. We encourage sustainable development and explore new ideas for CSR management.

In order to effectively promote the implementation of the CSR philosophy, we have established an independent CSR Management Committee, which is responsible for studying and establishing related strategies, visions, principles and policies, handling corporate CSR-related matters, and participating in decision-making on related topics. The chairman of the board (and executive committee chairman) serves as the president of the committee, and members include related vice presidents. As an independent CSR organization, the CSR Management Committee has a CSR promotion department, which is responsible for promoting the specific CSR practices and communicating with the CSR officers from relevant organizations of BOE. The annual CSR report of the Company is released after the final approval of the Board of Directors.



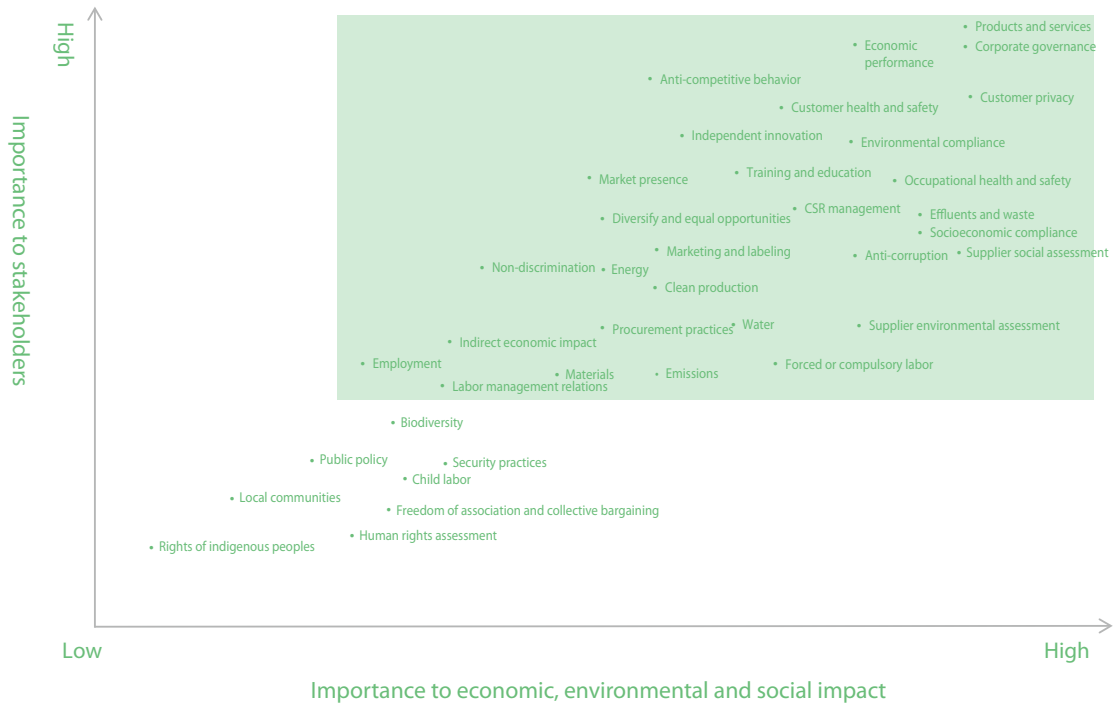
» Materiality Analysis

In accordance with the GRI Standards published by the Global Sustainability Standards Board (GSSB), the CSR reporting preparation team identified and prioritized BOE's stakeholders and material topics of social responsibility in 2020 through internal and external questionnaires. Based on the questionnaire survey and overall analysis, BOE identified eight categories of stakeholders.



Major stakeholders and CSR philosophy

In 2020, the CSR reporting preparation team identified 33 topics as specified in the *GRI Standards* (economic performance, market presence, indirect economic impacts, procurement practices, anti-corruption, anti-competitive behavior, materials, energy, water, biodiversity, emissions, effluents and waste, environmental compliance, supplier environmental assessment, employment, labor management relations, occupational health and safety, training and education, diversity and equal opportunity, non-discrimination, freedom of association and collective bargaining, child labor, forced or compulsory labor, security practices, rights of indigenous peoples, human rights assessment, local communities, supplier social assessment, public policy, customer health and safety, marketing and labeling, customer privacy, socioeconomic compliance). Based on the *Responsible Business Alliance (RBA) Code of Conduct and Guidance on Social Responsibility of Information and Communication Technology Industry* and other industry standards, BOE added five topics related to the industry from internal and external feedback (clean production, products and services, independent innovation, corporate governance and CSR management). With a total of 38 optional topics forming the questionnaire, the stakeholders and internal and external experts work together to determine the importance of these topics. The participants scored the importance of topics according to the two dimensions of "Importance to economic, environmental and social impact" and "importance to stakeholders' evaluation and decision-making", forming the following materiality matrix:



BOE Materiality Analysis

Ultimately, 30 topics of high or pretty high “importance to economic, environmental and social impact” and “importance to stakeholders’ evaluation and decision-making” were selected as major material topic in CSR report 2020 (the green area at the top right of the table above). They consist of 8 economic topics, 8 environmental topics and 14 social topics.




Economic		Environmental		Social	
Economic performance	Market presence	Materials	Energy	Socioeconomic compliance	Supplier social assessment
Indirect economic impact	Procurement practices	Water	Emissions	Non-discrimination	Customer privacy
Anti-corruption	Anti-competitive behavior	Effluents and waste	Environmental compliance	Customer health and safety	Occupational health and safety
Independent innovation	Corporate governance	Supplier environmental assessment	Clean production	Marketing and labeling	Employment
				Labor management relations	Products and services
				Diversify and equal opportunities	Forced or compulsory labor
				CSR management	Training and education

Major material topics of BOE CSR report 2020

»» Stakeholder Communication

In 2020, BOE had broad and in-depth communication with stakeholders such as customers, investors, suppliers, employees, governments, and communities through diverse interactions, sought to learn about their expectations and demands, and accepted their constructive suggestions, improving operation and management of BOE together with them.

Content and methods of major stakeholder communications

Stakeholders	Content of Communication	Main Methods of Communication
 <p>Customers and Consumers</p>	<ul style="list-style-type: none"> Compliant operations Product and service quality Customer needs Consumer rights and interests Customer health and safety 	<ul style="list-style-type: none"> Daily communication and visits Online real time customer service Customer satisfaction survey Customer service hotline Customer quality meetings Industry meetings and forums BOE Global Innovation Partner Conference
 <p>Investors</p>	<ul style="list-style-type: none"> Status of corporate operation Industry and market status and trends 	<ul style="list-style-type: none"> Investor service hotline On-site investigations, on-site visit General Meeting of Shareholders Investor interaction platform provided by Shenzhen Stock Exchange Online business performance meeting Investor service column on BOE's official website Investor mailbox BOE Global Innovation Partner Conference Organization strategy meeting Roadshow and anti-roadshow
 <p>Suppliers</p>	<ul style="list-style-type: none"> Compliance management and business ethics Attainment of quality targets Sustainability issues In-depth technical exchange Joint innovation Information sharing, business support, etc. 	<ul style="list-style-type: none"> Supplier training and seminars Supplier evaluation and audit Industry meetings and forums Suppliers Conference BOE Global Innovation Partner Conference Annual/semi-annual strategic review, quarterly business review, quarterly quality review and quarterly technical review

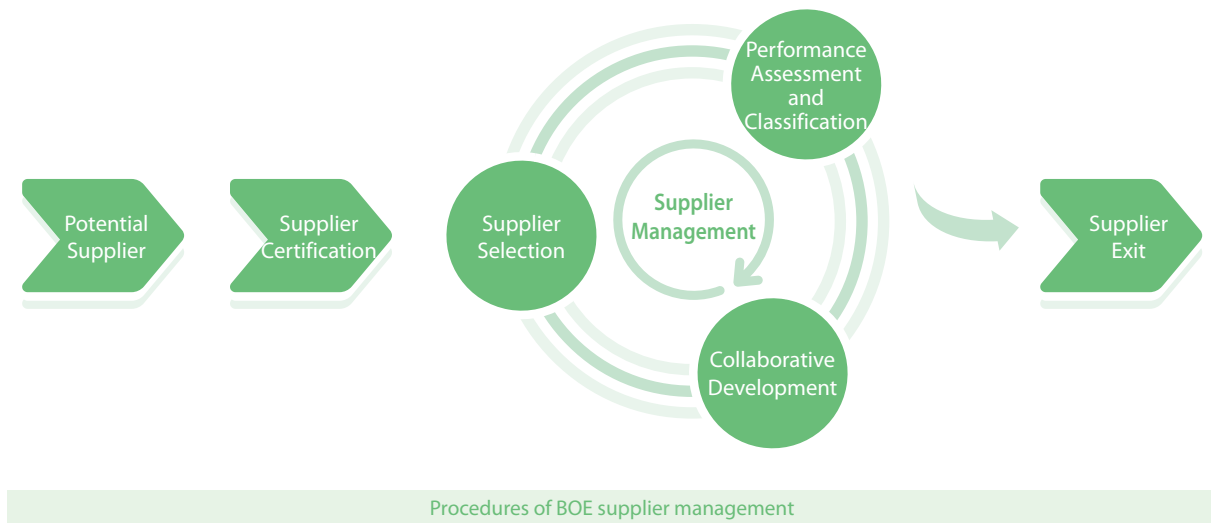
Stakeholders	Content of Communication	Main Methods of Communication
 <p>Employees</p>	<p>Employee engagement in corporate development Career development and training Occupational health and safety Employees' rights and interests Compensation and benefits</p>	<p>BOE Chairman's mailbox, Labour Union Chairman's mailbox, General Manager's mailbox, employee assistance mailbox and Complaints Box Meetings and interviews with employees Employee satisfaction survey Employee activities BOE periodicals</p>
 <p>Communities</p>	<p>Pollution prevention and control Resource recycling Support for education and environmental protection Charitable services Integration into communities</p>	<p>Information disclosure Field trip Questionnaire survey Charitable projects Community volunteer activities</p>
 <p>Industry partners</p>	<p>Technical exchanges Collaborative innovation Industry development</p>	<p>Industry conferences, seminars and other activities BOE Global Innovation Partner Conference</p>
 <p>Government</p>	<p>Policy implementation Industry development Corporate governance Regional economic development Employment Environmental protection Social charity</p>	<p>Seminars Correspondence Examination and self-examination Charitable projects</p>
 <p>Media</p>	<p>Corporate operations Corporate development CSR Information disclosure</p>	<p>Interviews and meetings BOE Global Innovation Partner Conference and other events Periodic reports and CSR reports</p>

Win-Win Cooperation

Building a responsible supply chain of sound, steady and sustainable development is the foundation for corporate development and an important part of CSR fulfillment. BOE understands that the sustainable supply chain requires the cooperation of enterprises and upstream and downstream partners. We incorporate CSR into all aspects of supply chain management, and help supply chain partners to continuously improve their production and management levels through systematic management, professional training, and experience sharing, laying a solid foundation for an industry ecological chain that features common contribution, win-win results and development.

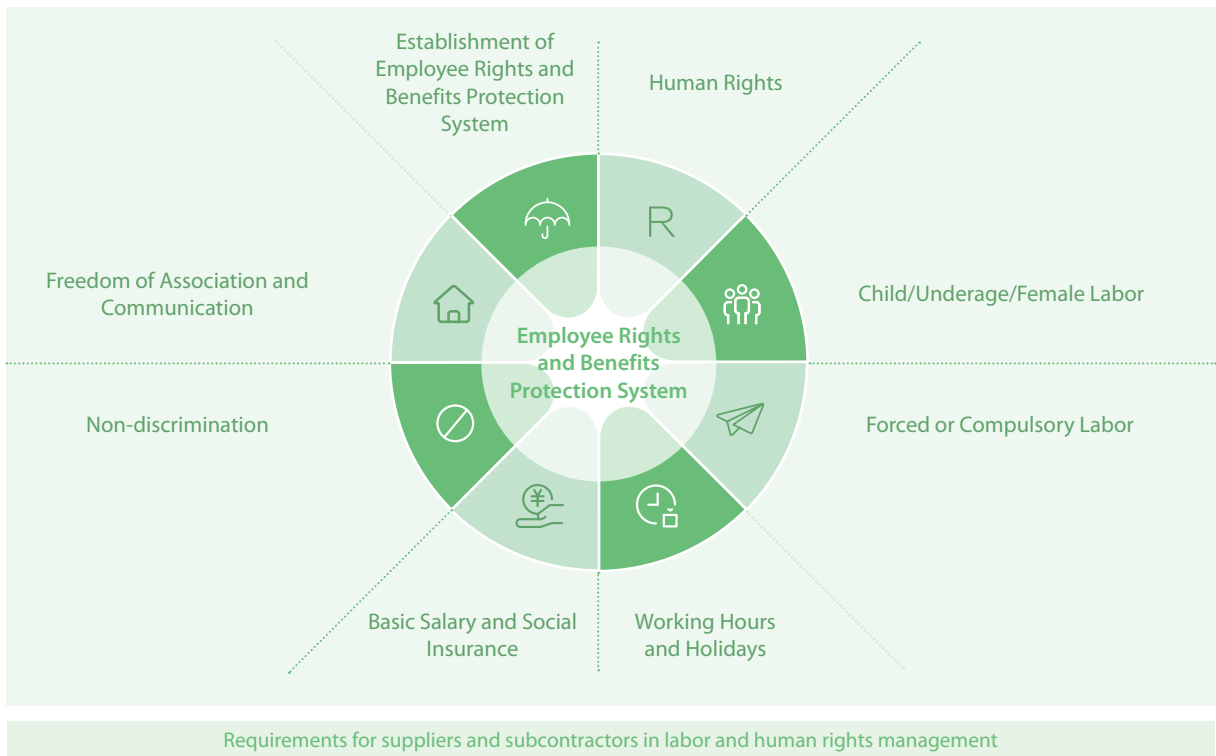
»» Enhancing Supplier Management

Suppliers are an important link and basic guarantee in the production and innovation chain of an enterprise. BOE has established a sound supplier management system. Through certification and regular evaluation of suppliers, we effectively manage supplier performance. Based on the system, suppliers are ranked and subdivided for targeted cooperation and training strategies to be formulated. We have also continued to improve supplier resources to ensure the healthy, steady and efficient development of the supply chain, enhancing the overall competitiveness of the supply chain.



CSR Management

Combining the *Responsible Business Alliance (RBA) Code of Conduct*, SA 8000, ISO 14001, ISO 45001 and other international standards, relevant rules and regulations, as well as supplier feedback, BOE has formulated the *CSR Management Regulations for Suppliers* and has put forward five aspects of specific management standards including CSR management system, labor, occupational safety and health, environment, business ethics. Moreover, we put forward clear requirements for suppliers and subcontractors in labor and human rights management, and strive to ensure that the rights and dignity of suppliers and workers are respected.



In 2020, BOE comprehensively promoted supplier CSR management among suppliers, with over 90% of the latter signing the confirmation letter. We organized CSR self-evaluation and on-site examination for suppliers that have signed confirmation letters and assisted suppliers in establishing or optimizing the CSR management system in accordance with relevant standards, laws and regulations, and customer requirements. We also promoted the improvement of suppliers in labor, safety and occupational health, environment and business ethics.

Besides, the *Regulations* also make clear requirements on the health and safety of supplier's workplace, including:

- The supplier shall identify, evaluate, and control the impacts of chemical, biological, and physical factors on employees, and shall adopt engineering or management measures to control the excessive exposure of hazards. When it is not possible to effectively control hazards in these ways, appropriate and well-maintained personal protective equipment should be provided to protect the health of employees.
- The supplier shall identify and evaluate possible emergencies and contingencies, minimizing the impact by implementing emergency preparedness and response procedures, including emergency reporting, employee notification & evacuation procedures, emergency training & drills, fire alarms and extinguishers, exit and recovery plans, etc.
- The supplier shall carry out a safety assessment on production equipment and other machinery, shall provide physical protective devices, interlocking devices and barriers for machinery that may cause employee injury, and shall properly maintain equipment.

Environmental Management

While attaching great importance to the supplier’s technology, quality, service, supply, and cost performance, BOE has also set strict standards for suppliers in terms of environmental and social impact. We implement access verification and regular evaluations on the environmental risk management of suppliers, and promote suppliers to continuously improve their environmental risk management level, so as to avoid sudden environmental incidents that affect the stability of the supply chain. Relevant management regulations include environmental licensing and reporting requirements, pollution prevention and resource conservation, hazardous substance management and control standards, as well as specific regulations on wastewater, exhaust gas, solid waste, and noise.

BOE has established a complete procurement process and green review system. We have formulated green review principles and review processes for selecting suppliers, to ensure that the suppliers meet the management requirements of the green supply chain. In order to reduce the environmental load from product life cycle, we strictly use products, parts and materials with low environmental load and asks suppliers to follow the RBA criterion, the ISO 14001 environmental management system, ISO 50001 energy management system, ISO 45001 occupational safety & health management system as well as other international standards. Suppliers are required to sign the *Guarantee of Green Products*, and provide third-party RoHS and halogen-free test on a regular basis, so as to meet the BOE hazardous substances control standard.

For incoming raw materials, the quality department of BOE conducts X-ray fluorescence spectral analysis and inspection regularly according to the high/medium/low-risk level. The supply chain and quality department also conduct environmental and hazardous material reviews on the material suppliers based on the *Quality Management Standards for Material Suppliers*. By formulating a green environmental management process from the purchase of raw materials, product development to manufacturing, BOE has ensured that the products meet the high standards of environmental protection requirements of customers and regulations. From 2018 to 2020, we have achieved 100% green procurement for three consecutive years.

Supplier Environmental Impact Assessment Indicators	Assessment of Pass Rate in 2020
<i>Standards for the Control of Hazardous Substances in the Environment</i>	
European RoHS Directive and REACH Regulation	
<i>Administrative Measures for the Restricted Use of Hazardous Substances in Electrical and Electronic Products</i>	100%
<i>Whether to Sign the Supplier’s Guarantee of Green Products</i>	
European Union WEEE Regulation	

Supplier Certification Audit

In line with the concept of fair procurement and equal opportunities, BOE selects suppliers based on the integrated optimal principle of technology, quality, service, supply, cost, environment, social responsibility and information security, ensuring that all transactions are conducted according to strict management and the principle of integrity, compliance, transparency and responsibility.

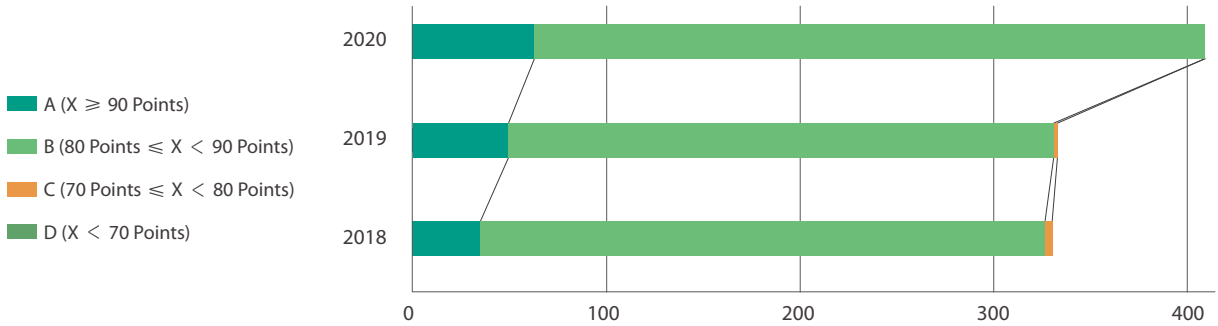


BOE's certification and audit of suppliers can be divided into two parts - the system certification and the product certification. In order to ensure that the supplier evaluation system is reasonable and effective, BOE's supply chain management department collaborates with the departments of development, quality, legal, finance, etc. to formulate and update the supplier evaluation standards.

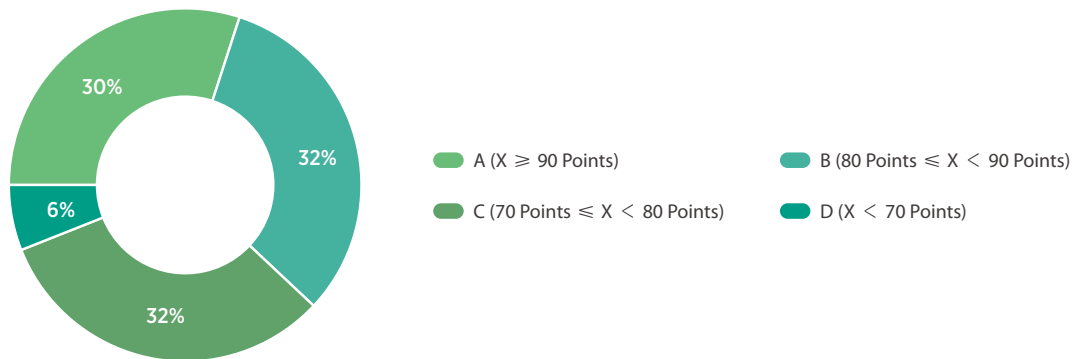


Supplier Performance Assessment

To effectively manage the existent suppliers and keep the competition orderly in supply chain, BOE assesses the performance of suppliers quarterly and annually, mainly focusing on five aspects of technology/ innovation, quality, responsiveness, delivery and cost (TQRDC). The performance evaluation results are divided into four grades of A, B, C and D. Based on the regular evaluation results, we emphasize the TQRDC cooperation concept and thus take incentive measures for high-performance (grade A) suppliers, provide improvement counseling or disqualify suppliers with poor performance, and conduct annual factory audits for suppliers whose annual performance evaluation grade is C. In response to the problems found in the audit process, we urge suppliers to improve the supply system. Suppliers with a performance of grade D or C for 2 consecutive years shall be eliminated.



Performance rating of BOE's core suppliers from 2018 to 2020



CSR performance evaluation of suppliers in 2020

Risk Management of the Supply Chain

To ensure that the price comparison in bidding is fair, transparent and traceable, BOE promotes digital transparent procurement and adopts electronic bidding to reduce risks in bidding. In order to share responsibilities and risks with suppliers, we have established strategic partnerships with trustworthy core material suppliers to conduct in-depth cooperation in innovative technology, management, and quality. In addition, we fully evaluate the supplier's development, procurement, production and delivery cycle, establish a scientific and reasonable early warning system for raw material inventory, and improve the delivery efficiency of suppliers.

To further strengthen risk control, we have formulated the *Supply Risk Prevention and Control Management Benchmark*, which requires the Company to pay attention to the environment protection policy of purchasing goods and to strengthen the compliance management of suppliers. We select suppliers with excellent CSR performance, and seek alternative solutions for materials in the polluting industry.

BOE supply chain risk identification and response

Supply Chain Risk Identification	Response
Macro Environmental Risk	<ul style="list-style-type: none"> Conduct research and analysis on laws, regulations and environmental protection policies in key regions in advance, and convey the analysis results to suppliers, so as to prevent suppliers from stopping production or limiting production due to changes in laws, regulations and policies, thus affecting the supply.
Management Risk	<ul style="list-style-type: none"> Carry out an annual evaluation on the general operating conditions of suppliers, covering legal, financial and other aspects; Review suppliers' CSR management, including CSR management system, labor, safety and occupational health, environment and business ethics, to ensure the sustainability of suppliers' production and operation.
Transport Risk	<ul style="list-style-type: none"> Select responsible brand logistics suppliers and conduct KPI assessment to ensure the transportation safety of logistics suppliers; Require suppliers to use a combination of multiple modes of transportation to respond to emergency supply and ensure a stable supply.
Moral Risk	<ul style="list-style-type: none"> Establish a sound bidding process. When there are major engineering projects and procurement of important materials and equipment, BOE Audit and Supervision Organization and legal department, etc., carry out whole-process follow-up supervision, and separate bidding from bid evaluation, evaluation from bid selection, so as to ensure compliance and legality of the bidding process; Conduct integrity system certification and review on new suppliers. When signing purchase contracts, all suppliers are required to sign integrity agreements and are informed procurement red lines to avoid actions that violate business ethics and damage the Company's honest image.

»» Building Responsible Supply Chains

BOE is committed to building responsible supply chains. We continuously improve the supply chain management and provide all sorts of training to promote the overall governance of the supply chains. Meanwhile, we adhere to responsible mineral procurement and support regional development. With solid and steady steps, we support and assist the suppliers and join hands with them to build responsible supply chains.

Supplier Training

While setting strict requirement in the environment impact during supplier access and audit, BOE has also developed a professional supplier training plan, which is jointly promoted from the technical end and the management end. BOE holds the supplier GP training conference every year, on topics including the latest national environmental laws and regulations, regulations for the control of hazardous substances, GPM system operating procedures, as well as basic structures, test principles and samples of XRF equipment.

In 2020, BOE organized GP training for more than 350 qualified suppliers through online live broadcasts. Suppliers can scan the QR code and log in to enter the live broadcast room, and interact with lecturers online, which saves time, cost, travel expenditure, and venue fees. The training was followed by an online test, which effectively improved the effectiveness of the training.



BOE carries out supplier related training activities

BOE supplier trainings

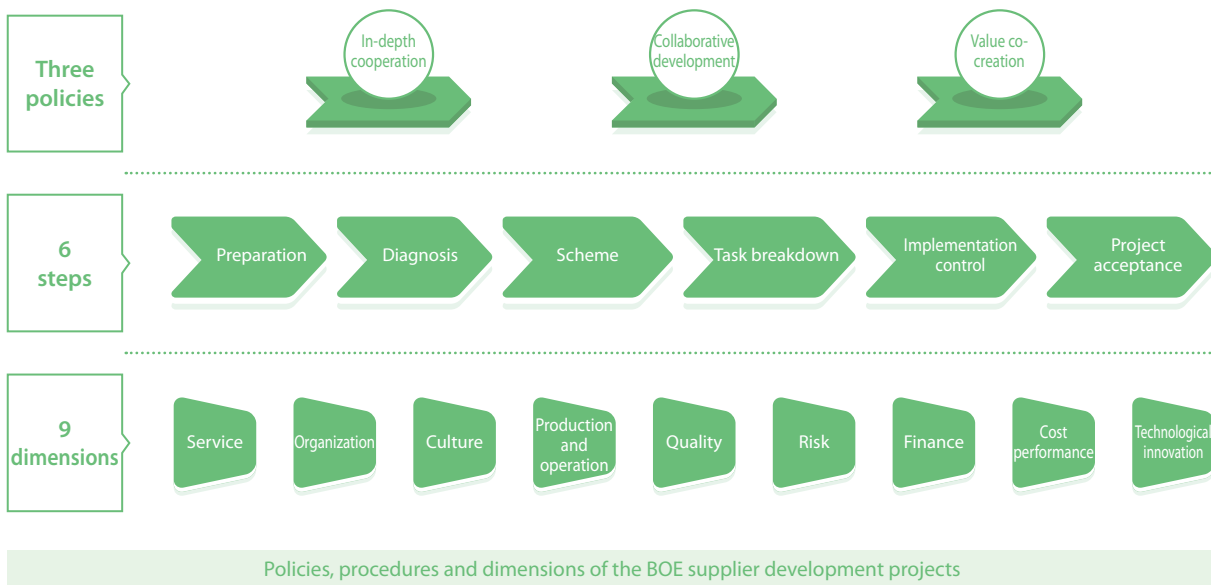
Objectives	Training (as of 2020)	Topics
Strengthen the management of new suppliers and quickly integrate them into BOE	Held 7 training courses on "Procurement Philosophy and Requirements", involving nearly 230 trainees from 180 suppliers	Clean government building, process notification, environmental protection control, quality and legal requirements
Enhance the procurement management capabilities of the supplier partners, and help both sides to achieve a win-win cooperation	Held 3 training courses on "Procurement Managers", involving nearly 110 trainees from 93 suppliers	Procurement strategy, supplier management, and supply chain risk management and control
Provide quality training and advocacy for suppliers	Organized a training course every year; carried out supplier management manual training in 2020 via video link to ensure 100% participation of project teams of suppliers	Supplier management, new product management, and mass product management



BOE holds training courses on Procurement Concepts and Requirements

Supplier Capability Development

BOE stays committed to a supply chain system featured by co-creation, win-win and development. In 2020, BOE launched a supplier development plan that helps the suppliers analyze and solve the pain points in business management, to promote the supplier capability of operation and management and empower the industry ecological chain. Capability development projects targeted at online counseling, on-site training, regular review and fruit cultivating were provided in line with the actual demands of the suppliers. BOE summed up more than 60 aspects for improvement, creating a business system driven by sales and innovation, as well as a well-structured management system with a clear division of labor for the suppliers. It has greatly improved the operation and management of the suppliers and has deepened the partnership.



Responsible Minerals

BOE enhances risk identification, supports local procurement and promotes the responsible supply chains with suppliers. To practice the responsible mineral procurement, in the implementation of the raw materials procurement policy, BOE complies with the RMI, *OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas* issued by UN and OECD. BOE and all suppliers and outsourcers shall purchase only from smelters, refineries approved or certified by RMI, LBMA or the Responsible Jewellery Council (RJC), and shall not purchase and support the use of any conflict minerals, directly or indirectly, in areas affected by armed conflict. BOE will ensure that all suppliers procure minerals in a responsible manner and respect human rights and the environment in areas affected by conflicts.



BOE uses the Conflict Minerals Reporting Template (CMRT) developed by the Responsible Minerals Initiative (RMI) to conduct conflict mineral surveys of suppliers every year. In 2020, BOE investigated 104 suppliers of resistors, inductors, capacitors, IC, LED, connectors, metals and other products that may contain gold, tantalum, tungsten, tin or cobalt. According to the research results, the minerals mentioned above in BOE's raw materials meet BOE's supply standards, and come from 249 RMI qualified smelters (cobalt comes from 35 of them).

Suppliers shall ensure that the gold, tantalum, tungsten, and tin used or contained in the products and packages delivered to BOE are not "conflict minerals" from the areas controlled by any armed forces in the Democratic Republic of the Congo or its neighboring countries.

Suppliers shall develop the policies on conflict minerals in accordance with *OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas*, and convey the policies to next-tier suppliers.

Suppliers shall investigate the supply chain in detail, identify and trace the sources of gold, tantalum, tungsten and tin, ensuring the legitimacy of the raw materials source. Suppliers shall truthfully fill in and submit the CMRTs or other documents.

BOE conflict mineral management policy

Regional Contribution

BOE has invariably contributed to the social and economic development of the operation cities and has attracted a number of supporting enterprises to build factories in the same area during construction and operation, forming an industrial cluster effect, which not only saves social resources, drives tax revenue and social-economic construction, but also promotes local employment and talent cultivation.

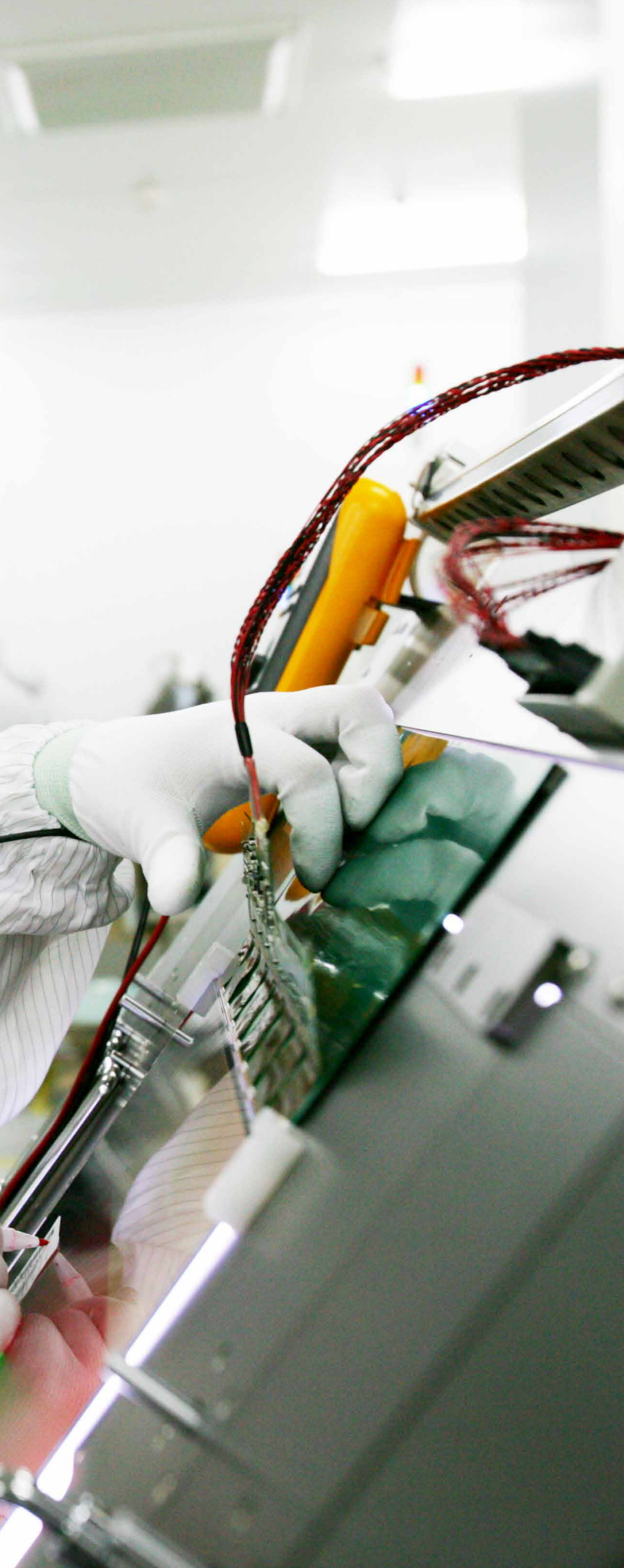
In addition, BOE keeps strengthening local procurement on the basis of ensuring production efficiency, so as to reduce the environmental impact of transportation and other links, and decrease carbon emissions. The localized procurement rate was 70% in 2020. BOE gives full supports to local suppliers in terms of technology, quality, and production, helping local suppliers improve the technical capabilities, goods quality, and efficiency. Meanwhile, BOE is dedicated to building a competitive industrial ecology and creating greater value space hand in hand with the upstream and downstream of the industry chain.



Case Study: BOE assists the resumption of work in the industry during COVID-19

While devoted to its development during COVID-19, Fuzhou BOE Optoelectronics Technology Company also realized interconnection, interaction and efficient collaboration between upstream and downstream enterprises through the solution of industrial internet, and promoted the coordinated resumption of work across the entire industry chain. BOE took the initiative to open the BOE industrial internet system to upstream and downstream enterprises, which greatly shortened the time required for each process, and mitigated the impact of factors such as logistics, personnel, and material supply during the pandemic. The effort also achieved the goal of efficient information linkage and reasonable optimization of production. As a result, more than 300 upstream and downstream enterprises resumed work collaboratively.





Technology: Shaping the Smart Future

Aspiring to become the global leader in IoT solutions, BOE is committed to creating value for customers. Here, technological innovation is consistently regarded as the first growth driver. We carry out research and development around core businesses, introduce top talents and technological resources, improve the strategic decision-making and innovation capabilities, and launch multi-dimensional innovative products to unleash the potential for social development.



Technology-Driven Development

For BOE, technological innovation is the foundation of development. From day one, we have adhered to the principle of “respect for technology and persist in innovation”. We have laid a solid technical foundation with innovation, and have supported the continuous expansion of our business and market share with science and technology.

In recent years, the number of BOE's patent has topped the industry globally. In 2020, BOE held over 70,000 patents available for use. Among the new patent applications in 2020, more than 90% were for invention and over 35% were overseas patents, covering the United States, Europe, Japan, South Korea and other countries and regions.

By 2020, BOE has led and promoted projects on a total of 72 international and domestic standards, including standards of International Electrotechnical Commission (IEC) and International Telecommunication Union (ITU), China National Standard (GB & GB/T), and standard of the electronics industry (SJ/T) and group standards. BOE has participated in formulation and revision of around 169 pieces of international and domestic technical standards, such as organic self-luminous displays (OLED), flexible, Mini LED, transparent display, eye-care display, smart retail, fingerprint recognition, IoT and mobile healthcare services. Among them, two IEC international standards for “LCD multi-screen display terminals” led by BOE have been officially launched, serving as international authoritative standards for splicing screen product trade worldwide. The international standard proposal “IoT - IoT application in electronic shelf labels” initiated by BOE has been approved by the International Organization for Standardization / International Electrotechnical Commission (ISO / IEC). Also, BOE initiated the application for formulating three electronic industrial standards for flexible display, including “Detail specification of outward foldable flexible display module”, for which the Ministry of Industry and Information Technology has issued a research and development plan. These standards will lead the industry's technological development and promote the wide range and standardized application of flexible display products.

Through ongoing technological and product innovation, BOE has maintained competitiveness and market position as the industrial leader. According to the 2020 annual statistical report released by IFI Claims, the world's leading patent service organization, BOE ranked 13th in the world in the US patent list, with 2,144 patents authorized, making it the third consecutive year that BOE has been one of the world's TOP20. In the 2020 global international patent application rankings published by the World Intellectual Property Organization (WIPO), BOE ranked seventh in the world. This is also the 5th consecutive year that BOE's patent application has entered the global TOP10 of the Patent Cooperation Treaty, fully demonstrating its determination and strength to continue its science and technological innovation.

Innovation in Display Technologies

»» An 8K System Solution

BOE has launched an 8K system solution consisting of BOE 8K image service cloud platform, BOE 8K decoding player and BOE 8K display terminal. The BOE 8K image service cloud platform effectively strengthens the weak link of the 8K industry by providing a platform for display, sharing, and trading of ultra-high-definition content. BOE has successfully created a series of 8K ultra-high-definition display products. Collaborating with the upstream and downstream of the industrial chain, we have further promoted the development of the 8K industry.

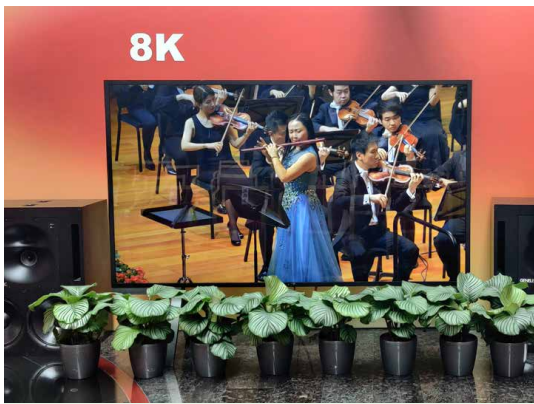




Case Study: BOE joins hands with the NCPA to present an “8K+5G” ultra-high-definition feast

BOE has contributed to the world's first live-streamed stage art featuring “8K+5G”. On August 8, 2020, the first performance of “Bright Autumn Cadenza”, the online concert series, was staged in the National Centre for the Performing Arts (NCPA) Concert Hall. We presented the live streaming of “8K+5G” ultra-high-definition together with our partners, creating an audiovisual feast of the perfect combination of technology and art.

In the meantime, the world's first “8K+5G” ultra-high-definition video full-service broadcast vehicle has been equipped with BOE's 8K broadcast-grade display products, and successfully realized 8K video broadcast from shooting, transmission, production to display. In the NCPA and many shopping malls in Beijing, people can enjoy concerts on the BOE's 8K ultra-high-definition display, and feel every wonderful moment as if they were on the scene. As BOE's 8K solutions are more used in the fields of art, sports events, telemedicine, and remote education, etc., people will experience a richer and more intelligent life beyond imagination.



BOE joins hands with the NCPA in the “8K+5G” ultra-high-definition live streaming.

»» BD Cell Display Technology

High contrast is one of the important performance indicators of high-definition TVs. The higher the contrast of the display screen is, the better the details of the low-brightness picture are displayed, and the more realistic and natural the images are. BOE's BD Cell series display products, based on the unique ADSDS super hard screen technology, has designed a double-layer cell of the black and white and color of the display innovatively. The pixel partition technology and micron-level ultra-fine light control technology are used to achieve more precise control, enabling a million-level ultra-high contrast and a viewing angle as large as 178°. While restoring the most natural colors, the display also features much lower power consumption than other OLED products of the same size. With both high image quality and cost-effectiveness, it can be applied to TVs, laptops, monitors, etc.



Folding screen TVs of 98 inches, 75 inches and 65 inches with BD Cell from BOE

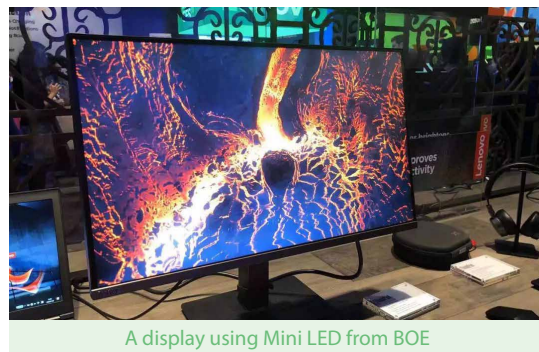


Case Study: The innovative display technology of BOE makes a stunning appearance on the international stage

On January 7, 2020, BOE's 8K, Mini LED, BD Cell, BOE iGallery and other innovative technologies and products made a stunning appearance at the Consumer Electronics Show (CES 2020). Many domestic and foreign companies have exhibited a series of new TV products equipped with BOE's 8K ultra-high-definition display. The clear details and the immersive ultra-high-definition effect have brought an exceptional visual experience to the visitors. BOE also demonstrated an integrated solution that can realize ultra-thin, ultra-high brightness, and ultra-high partition-Mini LED display technology. At present, BOE's world's first Mini LED product that can achieve a 1000-level partition has been officially launched on the market.



An 8K display product using BD Cell from BOE

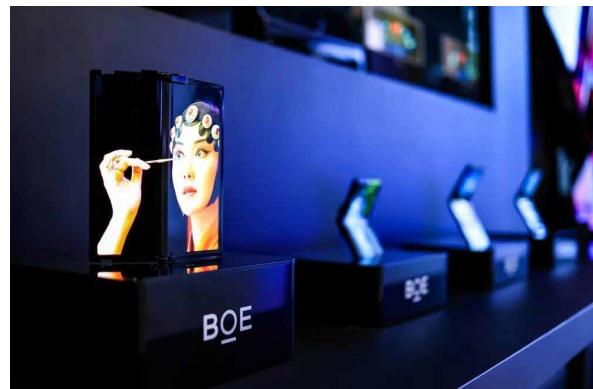


A display using Mini LED from BOE

Flexible AMOLED Display

Based on flexible display technology, mobile phones can be worn on the wrist, tablets can be folded into a small notebook and put in the pocket, and TVs can also be rolled freely like a scroll. It has broad application prospects in smart phones, wearables, transparent A-pillar of smart cockpits, as well as automotive fields including car displays and flexible vehicle taillights. As a leading company in the global semiconductor display industry and a global IoT innovation company, BOE has achieved the first large-scale mass production and product launch of OLED flexible folding screens in China, and has launched a number of global leading flexible folding models including internal and external folding products. At present, BOE has deployed the world's leading Generation 6 flexible AMOLED production lines in around the country to further enhance the international competitiveness of China's display industry with its technological edge.

In terms of technology, we have developed the industry's exclusive 360° internal and external bidirection folding, with a flexible folding screen with the industry's smallest internal folding radius of 1mm. BOE's "R&D and industrialization of high-resolution flexible bendable AMOLED display technology for mobile applications" won the special prize of Beijing Municipal Science and Technology Progress Award, and our flexible OLED full-screen display technology won the Gold Award of Innovative Display Technology granted by the Internationale Funkausstellung (IFA) in Germany. At present, BOE punch hole displays, waterfall displays and folding screens have been mass-produced, and they have been applied by world famous mobile phone brands such as HONOR, OPPO, Motorola, LG, and Nubia.



Mobile phones with folding screens



Scroll displays



Transparent A-pillar

»» Microdisplays

BOE focuses on the microdisplay market and is dedicated to the research and development of microdisplay technologies. We have made a series of achievements in the fields such as LCD microdisplay and OLED microdisplay, and successfully applied those to VR/AR display products.

In the field of LCD microdisplay technology, BOE, with the solid technological foundation and ongoing technological innovation, already has a variety of VR LCDs such as 3.5-inch 1845 PPI and 2.1-inch 2300 PPI. The products are equipped with a pixel design scheme with BOE's independent intellectual property rights. With ultra-high resolution, they also have the characteristics of high transmittance and low power consumption, meeting the unique performance needs of head-mounted display products.

As a self-luminous display technology, OLED technology has the advantages of high color gamut, wide viewing angle, and fast response. Through continuous technological innovation, BOE has designed glass-based OLED microdisplay products and silicon-based OLED microdisplay products. The product has been used in AR headsets, which can realize the superposition and interaction of virtual 3D images and real scenarios, and has broad application prospects in the fields of education and training, games, and home improvement.

»» Paper-Like Eye-Care Displays

BOE has a number of core technologies in the field of paper-like eye-care displays, including non-destructive Gamma display patents, low blue light, anti-glare, no flicker, smart photosensitive technology and smart matching technology. Compared with ordinary displays, the paper-like eye-care displays provides a reading experience as natural as reading paper, which can restore the cultural and artistic content to the greatest extent. At the same time, the superposition of multiple eye-care technologies can effectively reduce the harmful effects of blue light, screen flicker, and ambient light interference on vision. Many of the products have obtained the authority certification of TÜV Rheinland and VDE in Germany. Combining eye-care technologies, BOE applies paper-like eye-care display technology to BOE iGallery, Funbooks and other smart terminals and digital art IoT solutions to provide people with a healthier visual experience.

Six Eyecare Display Technologies

- TPatent technology of nondestructive Gamma
- Low blue light technology
- Anti-glare display technology
- Flicker-free technology
- Intelligent photosensitive technology
- Smart image matching technology

Scientific eyecare functions

- Software eye protection mode
- Time control
- Parent mode
- Watching distance reminder
- Screen shaking reminder
- Bad gesture reminder

Authoritative international "eyecare" certification

- ITU-T H.629.1
- International standards in digital art display
- The certification of TÜV Rheinland, Germany
- Eyecare certification of VDE

Features of paper-like eye-care displays

»» BOE iGallery

Relying on the world's leading digital art display standards and digital cultural big data platform, BOE iGallery products have been widely used in industries and personal consumption, including education, cultural tourism and commercial exhibitions. Empowering application scenarios, they have formed a “software and hardware Platform + content + application scenarios” ecosystem, and also played their roles in many national events and theme commemorations. To date, the BOE iGallery APP has been adopted by more than 260 art institutions, covering more than 7,800 artists and practitioners and more than 2 million pieces of digital art work. The number of content posts has reached 36 million. BOE iGallery has won the Gold Award for 2019-2020 CES Annual Innovative Application of Displays, Award of 2019 People's Ingenuity Product for the People granted by People's Daily Online and many other honors.



Application scenarios of BOE iGallery



Case Study: BOE iGallery passes on heroic spirits through a vivid manifestation of martyr stories

In November 2020, the exhibition “Remembering the Great Victory and Defending Peace and Justice - Thematic Exhibition to Commemorate the 70th Anniversary of the Chinese People's Volunteer Army to Resist the US Aggression and Aid Korea” was officially launched at the Military Museum of the Chinese People's Revolution. BOE iGallery products were of great use in “The Loveliest People - Themed Video Exhibition of Veterans from Chinese People's Volunteer Army”, which vividly displayed more than 100 photos and videos of the veterans in an energy-saving, environmentally friendly and digital way. With the technological innovation of BOE, people have appreciated the image of revolutionary martyrs and felt the spirit of heroic struggle.



More than 100 images and videos of veterans displayed on BOE iGallery

Smart IoT

As we enter the era of intelligence, BOE seizes the opportunity to establish IoT with intelligence. We have creatively proposed the IoT strategy of "open up technologies and application platforms to create value through ICPST". With a focus on smart finance, smart retail, smart medicine and engineering integration, industrial internet, intelligent vehicle and smart city public services, we are committed to creating an open ecosystem.



Case Study: BOE develops a world-leading intelligent system innovation center

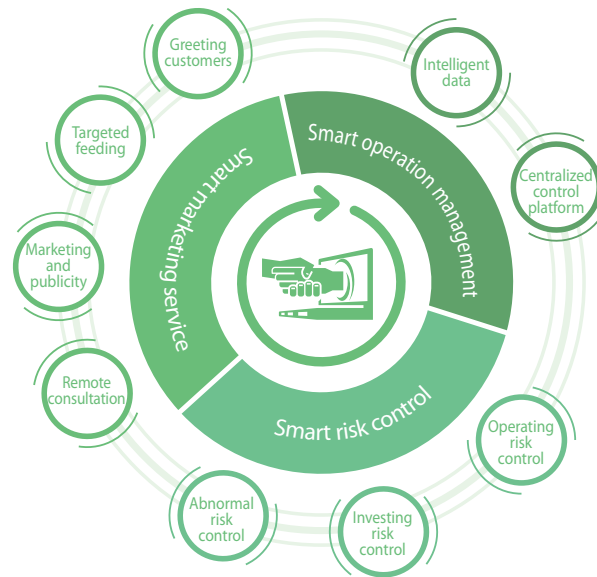
In recent years, with the rapid development of 5G, AI and big data technologies, the application of IoT has penetrated into various fields. On June 24, 2020, BOE signed investment cooperation agreements with the Chengdu High-tech Industrial Development Zone Management Committee and the Chongqing Liangjiang New Area Management Committee to build the BOE Smart System Innovation Center in the two cities. The BOE (Chengdu) Smart System Innovation Center and the BOE (Chongqing) Smart System Innovation Center will develop cutting-edge technologies such as AI, big data and cloud computing and focus on intelligent vehicle, smart retail, smart finance, smart medicine and engineering integration, industrial internet and smart city public services. We will establish five major platforms including software and hardware integration technology development, new materials and equipment transformation, product and service marketing promotion display, international talent exchange and training, open technology and market cooperation. We will also create a world-leading intelligent system innovation center and build a multi-dimensional innovation ecosystem that integrates technology development, achievement transformation, industry incubation, talent exchange and display transactions.



The groundbreaking ceremony of the BOE (Chongqing) Smart System Innovation Center project

Smart Financial Solution

Driven by technological innovation and customer experience, BOE Smart Finance improves the customer experience from interactive perspectives including vision, hearing and touch. We simplify the banking business process and make banks comprehensive platforms integrating online and offline services incorporating business, experience and marketing. The solution is based on a number of cutting-edge technologies such as AI, big data, and cloud computing.



The BOE smart financial solution

BOE's smart financial solution has been engaged in profound cooperation with Industrial and Commercial Bank of China, China Construction Bank, Agricultural Bank of China, Bank of Communications, Postal Savings Bank of China, China Merchants Bank, China Minsheng Bank, China Everbright Bank, China CITIC Bank, Ping An Bank and Industrial Bank, etc. At present, the BOE smart financial solution has covered more than 1,500 bank outlets.



Smart flagship stores built by BOE for bank customers

Smart Park Solution

Smart park operation and management platform is the core of BOE's smart solutions. BOE adopts new technologies such as IoT, big data, cloud computing and AI in scenarios such as industrial parks, cultural tourism parks and business parks. The four-tier digital capabilities of infrastructure, digital platforms, application services, and interactive display, help connect people, things and scenarios and thus production, life and ecology can be integrated, forming a digital and smart park solution that provides parks suitable for work, life, commerce and tourism.



BOE smart park solution



Case Study: BOE establishes an IoT ecosystem with partners with the smart park solution

Taoxichuan, located in Jingdezhen, the capital of porcelain, is an urban complex integrating cultural creativity and cultural preservation, ceramic culture appreciation, leisure shopping, dining and entertainment. It is an important strategic partner of BOE in the business development of smart parks. In the process of Taoxichuan's smart park construction, BOE helped with the digital and intelligent transformation of Taoxichuan's operation and management through the integration of devices and technologies such as the IoT, AI and big data.



The cultural and creative district of Taoxichuan, Jingdezhen

Smart Transportation Solution

On the foundation of BOE IoT, AI and other technologies, BOE smart transportation solution covers application scenarios such as public transportation, rail transit, and airports. It builds a city-level smart transportation network, and provides professional IoT solutions for the transportation field.



BOE smart transportation Omni-media management and control platform

At present, BOE smart transportation solution focuses on the smart transportation Omni-media management and control platform, which includes media publishing and equipment management and control systems, customer group analysis data management systems, and Omni-media convergence data visualization systems. The platform adopts a flexible micro-service architecture design that can support media content with 8K resolutions and above. It increases equipment control and inspection as well as environmental monitoring functions to ensure the safety of equipment and content. Based on existing AI and big data algorithm, it automatically quantifies media asset value, monitors multi-system fusion data, and recommends operating strategies.



Case Study: BOE smart display helps with the upgrading of informatized rail transit of Moscow

As the largest comprehensive city in Russia, Moscow is also an important hub for railways, roads, river transport and aviation throughout Russia. In order to alleviate the traffic pressure in the city center and solve the problem of insufficient capacity of the existing railway network, Moscow opened five rail lines from the suburban satellite city to the urban area - Moscow Central Diameters (MCD) line 1-5. An urgent task in the construction and operation of the rail is to provide passengers with accurate train information such as arrivals and transfers in a complex rail transit network, so as to create a good and comfortable ride experience.

BOE's smart display solution for rail transit not only covers three application scenarios, five specifications of display terminals and traffic information provided by multiple windows, but also uses diversified customized displays and multimedia functions, which solves the problems facing the construction of Moscow rail transit MCD line. At present, hundreds of new IVOLGA trains with thousands of BOE on-board displays have been put into operation one after another. In the future, BOE will continue to provide more innovative display solutions for Moscow Rail Transit. We are committed to improving the passenger traffic travel experience by improving traffic efficiency and convenience and enhancing travel comfort and entertainment.

» Smart Education Solution

BOE's smart education solutions take smart classrooms and smart campuses as its core scenarios, and are committed to preschool education, basic education, higher vocational education, as well as education and training industries. The digital education solution for students at all grades uses intelligent software and hardware fusion products to connect teaching resources between teachers and students and provide products and services suitable for full-cycle faculty informatization.



Smart classroom	Smart campus	Resource application	Configuration management
<ul style="list-style-type: none"> ● Courseware design ● Content distribution ● Testing and examination ● Educational resources 	<ul style="list-style-type: none"> ● Building of campus image ● Campus information release ● Campus security ● Home-school interaction 	<ul style="list-style-type: none"> ● Courseware and course resources ● Online courses ● Learning tools ● Test resources 	<ul style="list-style-type: none"> ● Personnel and authority management ● Class management ● Equipment management ● Configuration management

BOE's smart education solutions



Case Study: BOE customized smart education solution makes teaching more digital and informatized

BOE provides a smart education solution for Beijing 21st Century International School (Chengdu). Focusing on the six aspects of the smart environment, digital resources, information literacy, integrated innovation, support and guarantee, and characteristic development, the solution helps the school to realize intelligent development and "one-stop service".

In terms of hardware, BOE provides smart blackboards with teaching resources and smart classroom labels with comprehensive class information. In terms of software, BOE helps to transit real-time UHD teaching content by utilizing self-developed video coding algorithms and video compression technologies and combining with corresponding transmission technologies. A smart campus platform system covering all businesses of school management, teaching, teaching research, and services are developed. While enriching the digital cultural content of the campus, it also enables the effective use of various information and data, making campus management more centralized and convenient.

The solution is based on a unique digital art big data platform, which quickly distributes digital art content, campus cultural content, learning, education and publicity content to various display terminals through an intelligent information release system. It can facilitate a digital and informatized school.



Smart blackboard with teaching resources provided by BOE



Case Study: BOE's full-scenario smart education solution helps make education more intelligent

On October 23, 2020, BOE smart education solutions were presented at the 78th China Education Equipment Exhibition. BOE demonstrated customized smart education solutions in an immersively deep and comprehensive way to empower scenarios of smart classrooms, campus culture display walls, online class scenarios, family scenarios and reading space for preschool children.

The smart applications of BOE iGallery, Funbook and other "paper-like eye-care displays" in different scenarios as well as the rich campus digital cultural content of the convergence media display platform have attracted many visitors. Through the "paper-like eye-care displays + campus convergence media display platform" and a wealth of IoT products, BOE is able to provide the integrated solution of full-scene design, customized software and hardware product services, project implementation and after-sale service for education departments, vocational colleges, primary and secondary schools, kindergartens, educational institutions, and industry partners, making education more intelligent.



"Smart classroom" with "paper-like eye-care displays" series and other products

»» Urban Light Space

Using an intelligent display terminal and an intelligent control system, BOE creates beautiful and spectacular night scenes. With light and shadow dancing in the city at night, the urban nightlife is vividly presented, boosting the urban night-time economy.



BOE urban light space solution



Case Study : BOE urban light space solution illuminates the Twin Towers in Chengdu, creating a must-see

With the world-leading display technology, BOE has provided the urban light space solution for the Twin Towers of the Tianfu International Financial Center in Chengdu, which becomes a must-see landmark. The solution, customized and developed for buildings with irregular shapes, strives for the best display effect with perfect compatibility with the buildings.



The Twin Towers of the Tianfu International Financial Center in Chengdu

The towers, with a display area of about 52,000 square meters, boast high-definition display of 7.155 million pixels, and they are both waterproof and dustproof. Combined with the self-developed messaging software system, an IoT solution of "display + communication + algorithm" is formed in the two independent buildings. The high synchronization of videos and the perfect presentation of images create an immersive and integrated environment for the senses with exceptional visual effects. This not only enriches people's leisure life, but also provides an advertisement platform with great visual impact for businesses.

» Smart Retail Solution

BOE has provided a variety of IoT retail solutions for retailers based on professional knowledge and technology in retail IoT. Through the development of diverse products such as electronic shelf label system, self-service terminals and digital signage, BOE helps retailers, such as supermarkets and retail financial services, with price management, shelf management and customer behavior analysis, etc., achieving digitalization in stores and improving business efficiency and user experience.

Under the leadership of BOE, the international standard proposal of *IoT - IoT Application in Electronic Shelf Labels* and *The General Requirements for IoT Electronic Shelf Label System* have been approved and implemented. These two standards have refined the specific parameters of electronic shelf labels used in various industries, phased out non-compliant products in the electronic price tag industry, strengthened standardization and facilitated management in the industry. Also, they have consolidated the foundation for further development of the electronic shelf labels industry.

The solutions have already reached out to more than 60 countries. Professional and diversified retail IoT services have been provided for more than 20,000 outlets of over 100 well-known brands, including JD.com, Yonghui, China Resources Vanguard, Watsons, Walmart and Carrefour, connecting online and offline services.



Case Study: BOE launches an intelligent online order picking system to help partners improve efficiency during COVID-19

BOE's retail business segment has added application software required for retail scenarios to the traditional electronic shelf label hardware business. In response to the huge surge in online orders caused by COVID-19, we released a smart online order Pick to light system called (PTL). The electronic map generated by the system can display the shelves of the ordered goods in real time, and LED flashing lights of the electronic shelf labels can help find the location of the designated products. The entire picking process could be completed in a short time, improving the operating efficiency of the store. We also developed a brand-new information release system for larger display in the store's, which have greatly reduced the operating costs.

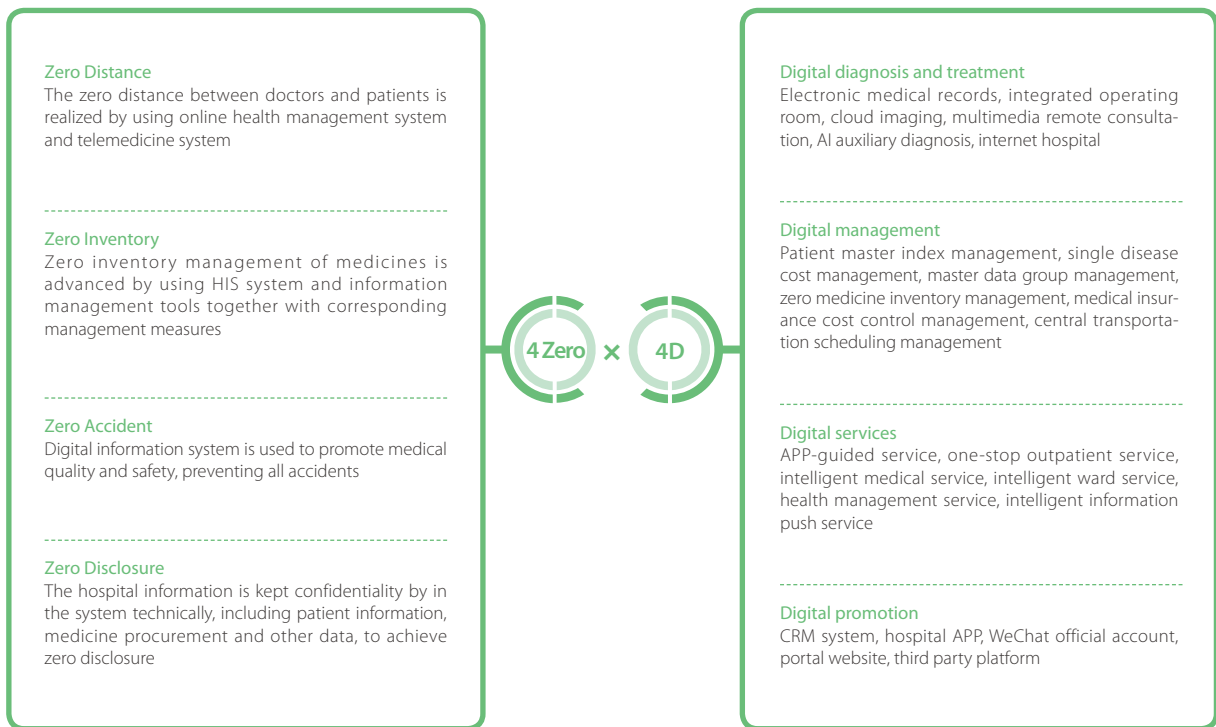


BOE smart retail solution

According to the experiment results toward partial customers, the use of the PTL can reduce the time of each order by 38% and increase the efficiency by 33% in the experimental group. The average order picking time has been reduced from 6 minutes to less than 4 minutes, and the average daily picking volume has increased by 10%. A single store saves RMB 219,000 in labor costs per year, which greatly reduces operating costs.

For a Healthier Life

BOE's smart medicine and engineering integration combines technology and medicine. With the innovative integration of medicine, engineering and a person-centered approach, it focuses on the three major scenarios of home, community and hospital. It has established a healthy IoT platform to connect testing equipment, medical staff and customers, forming a smart health management ecosystem. It provides the closed-loop full-cycle health service with health management as the core, medicine and engineering integration terminals as tools and the Internet hospitals and digital hospitals as the underpinning. Our goal is to build three major digital hospital platforms— member health management platforms (Internet hospitals), innovative product incubation platforms in medicine and engineering integration, and "4 Zero 4D" (see chart below) digital medical services, providing people with high-quality and convenient health and medical services.



Digital Human Body APP is the core of BOE's health management ecosystem, and BOE has released the version 3.0 of the app, a more accurate and personalized member health management platform. It collects multi-dimensional health data from members, analyzes and integrates all the information, and generates "the 3D digital twin", forming a new form of industry-leading 3D health files. On the basis of data, BOE uses "Brain Analysis", the medical AI analysis model, to provide users with personalized and accurate health management plan suggestions, and improves doctors' efficiency in safeguarding the health of members.

In terms of the innovative product incubation platform, BOE created a fully automated microfluidic nucleic acid detection system based on the microfluidic chip R&D and production platform in response to COVID-19 at the beginning of 2020. It enables rapid on-site nucleic acid detection within 30 minutes. After the medical device certification is completed, the system is expected to become a smart terminal for the prevention and control of infectious diseases and play an important role in digital urban health management and public health. Since communities are of great significance in public health, building a healthy community is indispensable to promote the Healthy China strategy. To this end, BOE deeply integrates display technology, 5G, AI, big data and other technologies to launch smart healthcare solutions. With a focus on people's livelihood, BOE enables people to perform health tests without leaving their homes and enjoy professional medical health management service, meeting the needs of the people for better health and a better life.



Case Study: BOE joins hands with BioChain to build an ecosystem for early diagnosis and intervention of cancers

In October 2020, BOE and BioChain signed a strategic cooperation agreement. Both sides will give full play to our respective advantages in product technology development, equipment research and development, health management services, joint efforts of specialist diagnosis & treatment, and health park operations, etc. With profound cooperation, both sides will achieve mutual benefits and win-win results, and build a leading brand together in the field of early diagnosis and intervention in China.



The signing of strategic cooperation agreement between BOE and BioChain

BOE and BioChain are mutually complementary in technology, products and resources. BOE will utilize its core advantages such as biochips, non-invasive/minimally invasive detection, industrial design, new materials and circuit design, and BioChain will make use of its technologies in cancer gene methylation site research and nucleic acid methylation detection. In-depth cooperation will be carried out in the field of early diagnosis and detection of cancers and tumor companion diagnostic tests, including the diagnosis of multiple cancers and the R&D of molecular diagnostic automation equipment. We will jointly transit the public health awareness from the past pattern of diagnosing and treating cancer after the symptoms to early diagnosis and intervention. An entire industry chain of early cancer diagnosis and treatment will be built to safeguard people's health.

Digital hospitals form an important underpinning for the closed-loop health services of BOE's smart medicine and engineering integration. BOE's digital hospital platform adheres to the principle of "leading in technology, innovative in patterns and driven by digitization". We build an interconnected 4D platform through the establishment of Center of Excellence (COE) and coordination of human, financial, and material data. The platform supports the extension of high-quality health services to communities and families, and provides customers with the best "pre-hospital, in-hospital and post-hospital" experience. We have developed a number of digital hospitals in cities such as Beijing, Hefei, Chengdu and Suzhou, and cooperated with world-class medical institutions to apply the world's top medical technology and operating concepts to digital hospitals.

To respond to the national hierarchical medical system, the BOE medical consortium system provides business coordination support for medical institutions of different levels through information technology, so as to achieve the goal of "preliminary consultation in the primary hospital, two-way referral, upper and lower linkage, and separate treatment for acute and chronic diseases". At present, we have carried out in-depth cooperation with partners such as China Unicom, Health Daily and Alibaba Cloud to explore new scenarios for applying the R&D of 5G, IoT, AI, Internet medical care and personalized cell factory in smart medical care. We work to build a health management network that connects communities and families and a smart service platform for the future community.

While fighting COVID-19 in 2020, BOE used patented technologies accumulated over the years to launch the smart low blue light eye-care display solution, the temperature early warning solution, the smart office solution, telemedicine, the high-sensitivity virus detection technology, and other IoT products and solutions that meet market needs.



Case Study: BOE launches online healthcare to help with the COVID-19 response

In order to reduce the risk of cross-infection, optimize the allocation of existing medical resources and improve the efficiency of diagnosis and treatment, remote diagnosis and treatment has become one of the important methods used in COVID-19 prevention and control. BOE launched an online healthcare platform, which can achieve remote medical services such as remote consultation and image diagnosis. The experts can participate in the discussion of the patient's condition immediately, offering opinions, and guiding the on-site medical staff to perform diagnosis and treatment, which effectively improves the efficiency of medical services. During the fight against the virus in early 2020, BOE donated a group of All-in-one Interactive Display for Video Conference to the Cabin Hospital at Wuhan Sports Center. The machine supports whiteboard, wireless transmission and video conference combined with high definition display, which enabled the medics from inside or outside to talk "face to face" with patients through video at all times. BOE uses technology to help improving efficiency of anti-pandemic work, creating a safer working environment for the "angels in white".



The All-in-one Interactive Display donated by BOE to the cabin hospital in the Wuhan Sports Center

In addition, people with initial symptoms such as fever, cough, or patients with chronic diseases can also conduct real-time online consultation with doctors through the BOE telemedicine platform to reduce the number of visits to the hospital and the risk of cross-infection. Hefei BOE Hospital opened an "Online Fever Clinic" immediately after the outbreak (January 24, 2020), providing online diagnosis and treatment services for more than a thousand patients. The application of BOE telemedicine solution allows patients to obtain professional, high-quality, convenient and efficient medical services in a timely manner no matter where they are.



The webpage of Hefei BOE Hospital



Case Study: BOE temperature early warning system facilitates the reopening of over a thousand companies

BOE temperature early warning system uses mask-wearing face recognition and mask detection technologies. The accuracy of face temperature detection is $\leq 0.3^{\circ}\text{C}$. While wearing a mask, the accuracy of face recognition is as high as over 99%. It can also be connected to the back-end management system to achieve intelligent data analysis, greatly reducing the risk of cross-infection. At present, the system has helped more than 1,000 companies around the world to resume production and work efficiently, and has played an important role in pandemic response during the National People's Congress (NPC) and the Chinese People's Political Consultative Conference (CPPCC) for two consecutive years.



BOE temperature early warning system used in Beijing Hotel during NPC and CPPCC





Society: Sharing a Great Life

BOE is committed to working with stakeholders to create a better life. For customers, we strictly control quality and provide sincere services. For employees, we protect their rights and interests with attention paid to their personal progress. For communities, we promote development and contribute our strength. With a high sense of responsibility, we take solid steps to embark on a road of harmonious unity and coordinated development between the Company and the society.



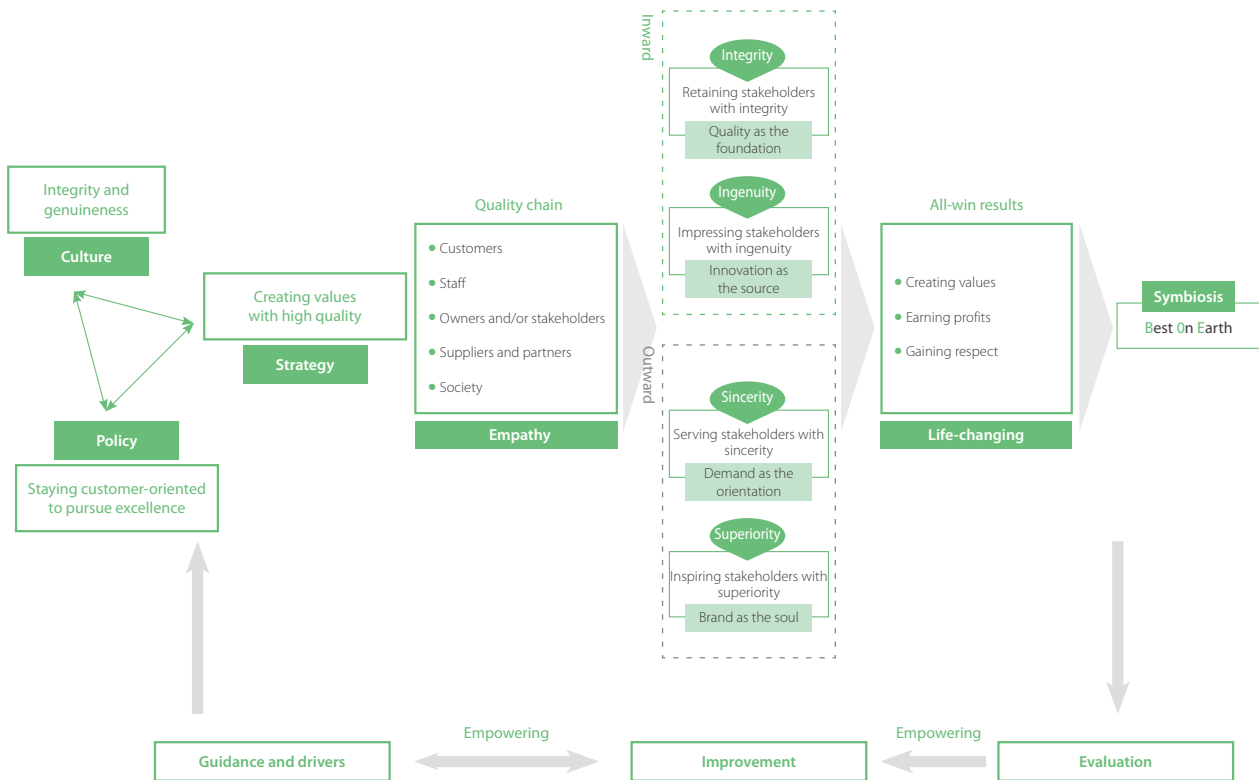
Better Customer Services

BOE's development has always been driven by customer experience. We continuously improve the level and quality of customer services through strict quality management and high-quality services, striving to provide customers with a reliable and trustworthy high-quality experience.

»» Creating Values with High Quality

BOE abides by the ecological quality management philosophy of "quality as the foundation, innovation as the source, demand as the orientation, and brand as the soul". Across the whole company and the whole process, we encourage all employees to stick to the ecological quality management model featured by "integrity, ingenuity, sincerity, superiority and symbiosis". The model is led by the culture of "integrity and genuineness", guided by the policy of "staying customer-oriented to pursue excellence", and driven by the strategy of "creating values with high quality". Also, the adherence to such a model empowers the four core capabilities of "managing quality, innovation, demand and brand". All in all, BOE is dedicated to creating values, earning profits and gaining respect by "retaining stakeholders with integrity, impressing stakeholders with ingenuity, serving stakeholders with sincerity and inspiring stakeholders with superiority".

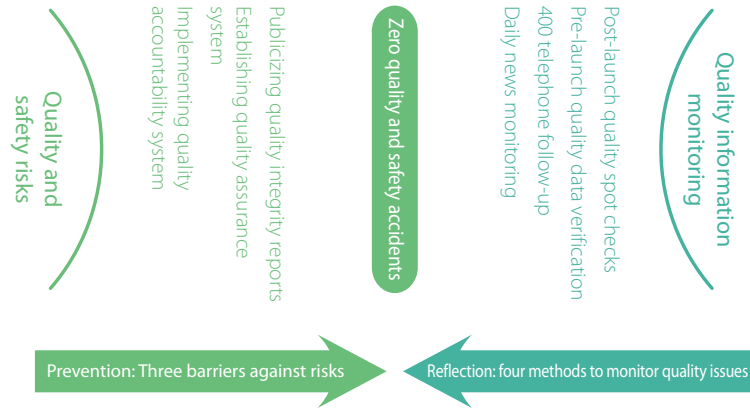
BOE has been widely recognized by many customers in the past year, and has won many awards regarding quality innovation, trustworthy supply, and great partnership.



The ecological quality management model featured by "integrity, ingenuity, sincerity, superiority and symbiosis"

Quality and Safety

In terms of quality and safety management, BOE has erected three barriers for risks. We have implemented an accountability system, established an assurance system “based on ISO 9001 and focusing on the requirements of various product certification systems”, and have prevented accidents by publicly releasing quality integrity reports. Moreover, we monitor quality of products in the life cycle through multiple channels including the “BOE daily news monitoring report”, “400 telephone follow-up”, “pre-launch product quality data verification”, and “post-launch product quality spot checks” to deal with and solve the problems in a timely manner. The 2020 saw no quality and safety issues of BOE.



Quality Promotion

In terms of quality promotion, BOE has ensured high-quality production through a series of measures such as benchmarking management, incentivizing innovative projects, and building shared platforms, which ensures the high-quality, satisfactory and trustworthy products for the customers, and facilitates the transformation and upgrading of IoT strategy. In 2020, through more than 130 communications in benchmarking, we effectively produced 276 improvement measures. With events such as the quality month and quality knowledge contests, we extensively promoted BOE’s quality management philosophy and deeds of the outstanding teams and individuals. Through project launching and management, we motivated more than 40 key projects, covering six aspects including lean management, quality and efficiency improvement, customer orientation, prior management, interception capabilities, and quality refinement through difficulties tackling. With the help of platforms such as the Expert Lecture Hall, Quality Knowledge Contest, Quality Technology Exchange Meeting, Brilliant Ideas, and LCD Engineering Competition, we shared more than 100 times of quality management experiences and effectively promoted more than 800 improvement projects throughout the year.



Quality promotion activities in BOE

BOE

Leading in Quality

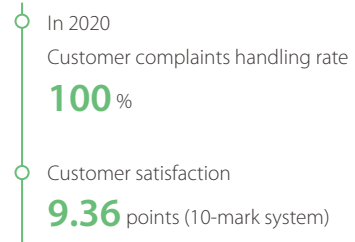
BOE is aspired to become a global model in terms of quality management. By deepening the superior performance management model, we facilitate the implementation of the strategy and comprehensively enhance the quality of operation, bringing success to all. In 2020, we organized the review of the 4th BOE Quality Award and summarized more than 600 outstanding cases, of which 47 best management practices were included into the 2020 case collection, providing knowledge support for all subsidiaries to comprehensively improve their quality management capabilities.



2020 Best Management Practices Collection

» Staying Customer-Oriented to Pursue Excellence

BOE adheres to the policy of “Staying customer-oriented to pursue excellence”. We incessantly innovate in service methods, strengthen communication, maintain good relationships with customers and respond to their demands in a timely manner, improving customer satisfaction. Also, we put the protection of customers’ rights and interests first, and safeguard their health and information security.

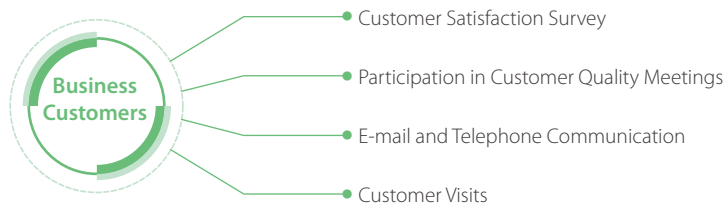


Innovative Service Methods

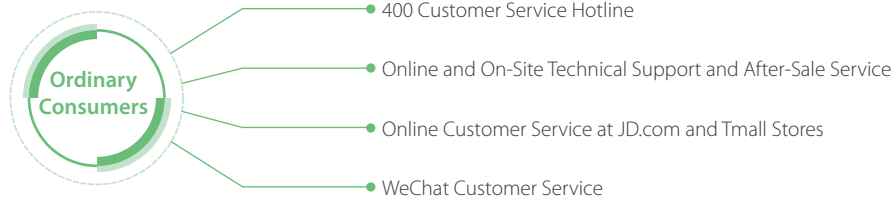
BOE regards customer satisfaction as the goal of service quality improvement, and ensures the best customer experience through service model innovations such as communication modes, response mechanisms, and satisfaction surveys.

Innovative Customer Communication

In order to provide more accurate services, BOE has innovated in the communication model with customers, and adopted various online and offline methods for different customer groups to broaden communication channels and improve customer satisfaction.



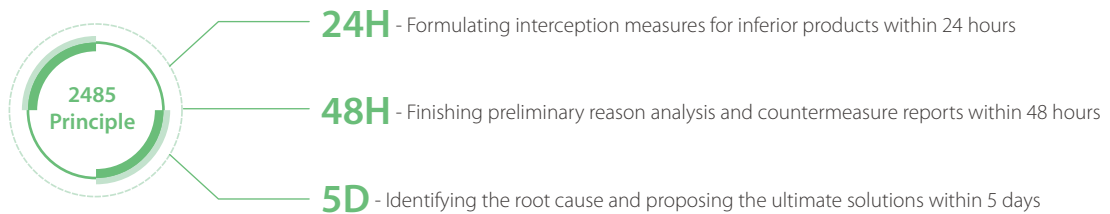
BOE communication mode for business customers



BOE communication mode for ordinary customers

Increasing Customer Satisfaction

BOE is customer-oriented and continuously improves customer satisfaction in terms of response timeliness, customer relationship management, and feedback on problem solving. Adhering to the principles of "early knowing, early responding, early handling, and early resolving", BOE has established two major guarantee systems, namely, a customer service outlet covering all regions and BOE services and a 2485 timely response mechanism. In response to the problems raised by customers, a user feedback and a product quality improvement mechanism are established for prompt reports. Regarding to user feedback, the responsibility is down to the individual. The improvement time and plan are clearly defined, and they are tracked in the management system. We have set up permanent customer service outlets in 22 cities in Chinese mainland, Taiwan Province and 11 countries overseas to provide convenient services to local customers.



2485 response principle

BOE handles customer inquiries, complaints, and technical service requests through the customer relationship management (CRM) system, and connects with cooperative service providers via this system. The service order is automatically transferred to the service provider system after it is generated in the CRM system by the customer service staff. Then the personnel of the service provider send the order to the service engineer through the system. The service engineer provides timely feedback on the on-site service situation through the handheld terminal system, and feeds back to the BOE CRM system through the system docking port. The progress of the entire service process is fed back in real time through the docking system of both parties to realize the systematic monitoring and management of the whole process.

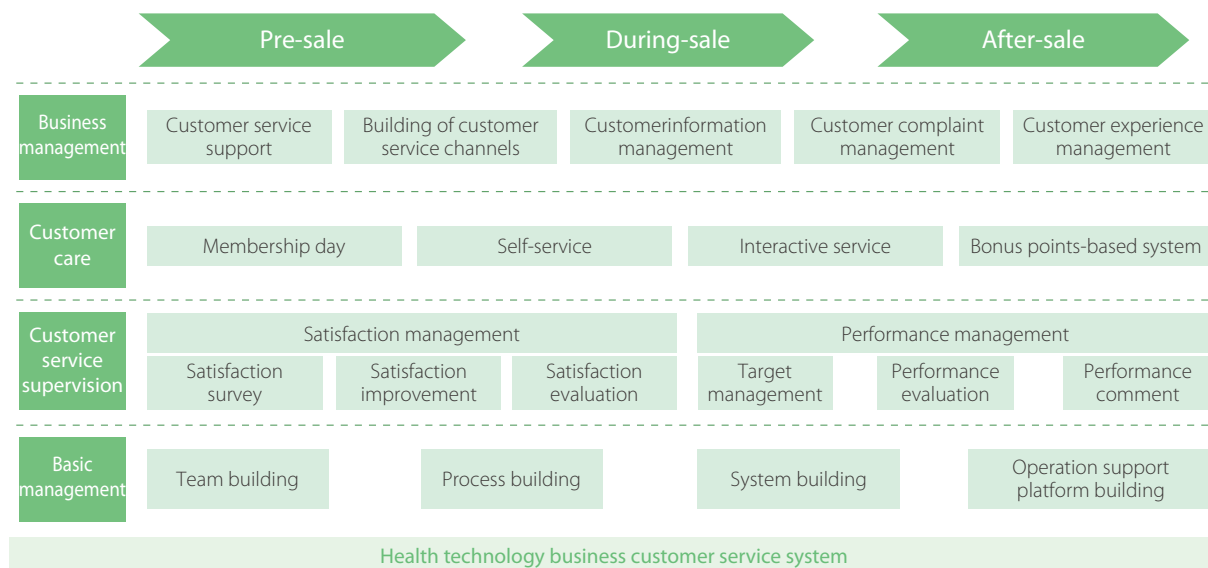
BOE proactively identifies customers' needs in advance, and actively reviews improvement projects with customers, making joint improvements to enhance customer satisfaction. Through WeChat, email, telephone, on-site visits, customer quality meetings and customer satisfaction surveys, we understand customer expectations and demands to improve management processes promptly. We carry out customer service training on a regular basis to enhance the service awareness and ability of our employees, providing customers with the best experience.

BOE customer satisfaction survey

Surveyed Aspects	Customer Satisfaction in 2020	Customer Feedback	Plans for Improvements
Quality	9.23	Sudden quality issues and unstable quality at the early stage	Sudden quality problems: set up a special improvement team to quickly respond to analysis, effectively intercept and improve products; provide management prior to the problem to ensure that problems in the certification stage are resolved before mass production Unstable quality of new products: Research technical improvement plans, optimize evaluation systems and examination method to ensure stable quality of new products
Service	9.50	The timeliness of some customer reports and after-sale processing needs to be further improved	Analyze resource gaps and replenish them in a timely manner, speed up the after-sale processing speed, promote improvement for the pain points of some after-sale processes, and establish a good communication mechanism with customers
Prices and supplies	9.20	The delivery of some products is affected by the timeliness of delivery	Adjust the product mix in time according to the market dynamics, prepare the production capacity in advance, and improve the delivery schedule
Environment and safety	9.52	None	---
Overall satisfaction	9.36 (10-mark system, the goal is 9 points)		

Innovative Health Technology Services

Since BOE stepped in health industry, health technology has become important for the Company. BOE has established a complete customer service system and management systems such as the *Customer Experience Procedure*, *Consumer Satisfaction Survey Process* and *Customer Complaints Handling Process* in order to standardize service procedures, and strictly abide by customer information management and confidentiality mechanisms.



Protecting Customer Rights

BOE abides by policies, relevant laws and regulations. We integrate the maintenance of customers' legal rights and interests into corporate governance, culture and business development. We maintain customer health and safety via strict product quality inspections and clearly identify the source of ingredients and the name of the supplier in the product and service information. In line with China RoHS regulations and identification requirements and the SJ/T 26572-2011 standard, products are indicated "whether they contain hazardous substances". At the same time, we always adhere to the highest standard of business ethics, and strictly manage all private information of customers by improving the information security management protection mechanism and establishing employee professional ethics.

Facilitating Transformation Through Innovating and Sharing

In-depth cooperation, collaborative development, and value creation are the core of BOE's customer relationship management. While serving customers, BOE is also committed to strengthening cooperation with various industries, achieving resource and value sharing. With our own technology, we seek to promote the intelligent transformation of the industry, and inject new vitality into the development of the industry.

High-quality development is inseparable from the integration and sharing of various industries. Only by combining technological advantages and industry resources can mutual benefits be achieved. In 2020, BOE reached strategic cooperation with China Construction Bank, Peking University Third Hospital, BioChain and many other institutions, covering many fields such as science and technology, medical care, finance, and public services.



Case Study: ICPST. Intelligence Leads the Future - BOE IPC 2020

On November 18, 2020, the BOE Global Innovation Partner Conference 2020 (BOE IPC 2020) centered around the theme "ICPST. Intelligence Leads the Future" was held both online and offline. We exchanged innovative achievements in IoT with global partners and discussed future industry trends. During the conference, we comprehensively demonstrated display technology, as well as solutions for smart parks, smart education, smart retail, smart first aid, and industrial internet. We also held the Interface Device Forum, Intelligent System Innovation Forum, Smart Engineering Medicine and Engineering Integration Forum, and Industrial Internet Forum. Discussions were unfolded over topics such as "innovative display", "IoT scenario empowerment", "industrial digitalization", "AI" and "health management". We jointly explored the technologies, products and applications of various sub-fields of IoT.



BOE IPC 2020

While carrying out industrial cooperation, BOE also focuses on promoting industry transformation. Through exchanging in cross-industry, holding and participating in industry conferences, we actively share and deliver our own innovative technologies and ideas, promote the intelligent transformation and high-quality development of traditional industries, and work together to create a better and more convenient future life.



Case Study: Digital art enables new business formats for culture and technology

On November 9, at the 2020 China Digital Art Industry Summit jointly organized by BOE and China Animation Comic Game Group, BOE joined forces with content producers, technology developers and application providers including the National Art Museum of China, the Chinese Academy of Art, the National Library of China, Beijing University of Posts and Telecommunications, Migu cultural technology Co., Ltd, China Animation Comic Game Group, and Visual China Group Co.,Ltd., We officially launched a plan on building millions of digital art scenarios. With the continuous growth of the International Standard Industrial Alliance in digital art display and the success of the plan, a new business format that integrates culture and technology will come into being, and a new model of content, technology, and application that yields all-win results is expected to take shape, accelerating high-quality integrated development of the cultural and tourism industry.

Staff Development

In accordance with the philosophy of “enhancing value and effectiveness”, BOE aims to “retain talents, vitalize organizations, and improve effectiveness”. Through digital transformation, BOE builds and continuously improves the human resource management system. We reward those who make outstanding achievements, and encourage value creation. Also, we are person-oriented and strive to create a comfortable, healthy, equal and inclusive environment for talents, so that employees can give a full play to their value while balancing work and life, and being respected and cared for.

» Safeguarding the Rights of the Staff

BOE strictly conforms to laws and regulations, continuously enhances the awareness of rights protection of managers and employees, and conducts business operations that respect human rights. We protect the rights and interests of the staff, unplug democratic communication channels and improve the compensation and benefits system, allowing employees to become the builders and masters of the Company.

Equal Employment

BOE strictly abides by the *Labor Contract Law* and other applicable laws & regulations, and enforces them in collective contracts, labor contracts and all kinds of management rules and regulations. Upholding the principles of equality, openness and inclusiveness, BOE actively recruits talents, eliminates discrimination, and lets every talented employee play their role on a fair platform. BOE pays special attention to protecting the rights and interests of female employees, formulates and strictly implements the *Special Agreement for the Protection of Female Employees' Rights and Interests*. We strive for equal pay for equal work to men and women, and take solid steps to better exert the role of female employees in the company's development.



Protection of Rights and Interests

BOE effectively protects the basic rights and interests of employees. We prohibit all forms of discrimination in employee recruitment, promotion, development, sanctions, welfare distribution, and termination of labor contracts due to race, color, nationality, language, wealth, social origin, social status, age, gender, sexual orientation, ethnicity, disability, pregnancy, beliefs, political affiliation, as well as participation in associations or marital status. Child labor and forced labor are strictly prohibited in the operation process. The use of violence, threat or illegal restriction of personal freedom to force employees to work or restrict their freedom to work or resign is not allowed. Corporal punishment, intimidation, harassment, abuse and any discrimination against employees are strictly prohibited.

Democratic Communication

BOE has established an equal and democratic communication mechanism to understand employees' demands in a timely manner, and provide employees with open and effective communication and grievance methods such as suggestion boxes, chairman mailboxes, and online platforms, so that their feedback can be heard. In 2020, BOE launched an employee satisfaction survey, showing the sustainable engagement scored 88, which is significantly higher than the average of domestic high-tech industry. Based on the survey results, we organized focus group interviews to identify the root causes of the problems reported by employees, formulated and implemented targeted improvement plans in order to form a closed management loop and improve employee satisfaction.

Compensation and Benefits

BOE's remuneration is aligned with achievements and competence. Our principle is "pay for posts, abilities, and performance". In 2020, we fully tied organizational performance to individual performance. All employees were evaluated semi-annually or annually, with the external competition and internal fairness taken into account. Also, BOE boosts the enthusiasm and creativity of employees through equity incentive plans.



Case Study: Motivating employees with a stock-based incentive plan

In August 2020, the Board of Directors and the Board of Supervisors of BOE reviewed and approved the *2020 Stock Options and Restricted Stock Incentive Plan (Draft)*. The first equity incentive plan was officially implemented and the first grant was completed in December.

This incentive plan grants a total of approximately 918 million shares for the first time to 2,781 people including core members of the management team and technical team. Among them, 596 million stock options were granted to 1,988 employees, and 322 million restricted stocks were granted to 793 employees. Among the recipients, R&D and engineering and technical personnel account for 64%, marketing personnel account for 15%, and young and middle-aged backbones under 40 years old account for 80%. It fully reflects BOE's value orientation towards technology and market, young talents and our future development. The implementation of stock-based incentives complements the Company's short-term incentives, enriches the compensation system and meets the mid- and long-term development strategy and the need of market-oriented talent management. It effectively combines corporate development, employee growth, and investor returns, demonstrating BOE's confidence in the long-term development.

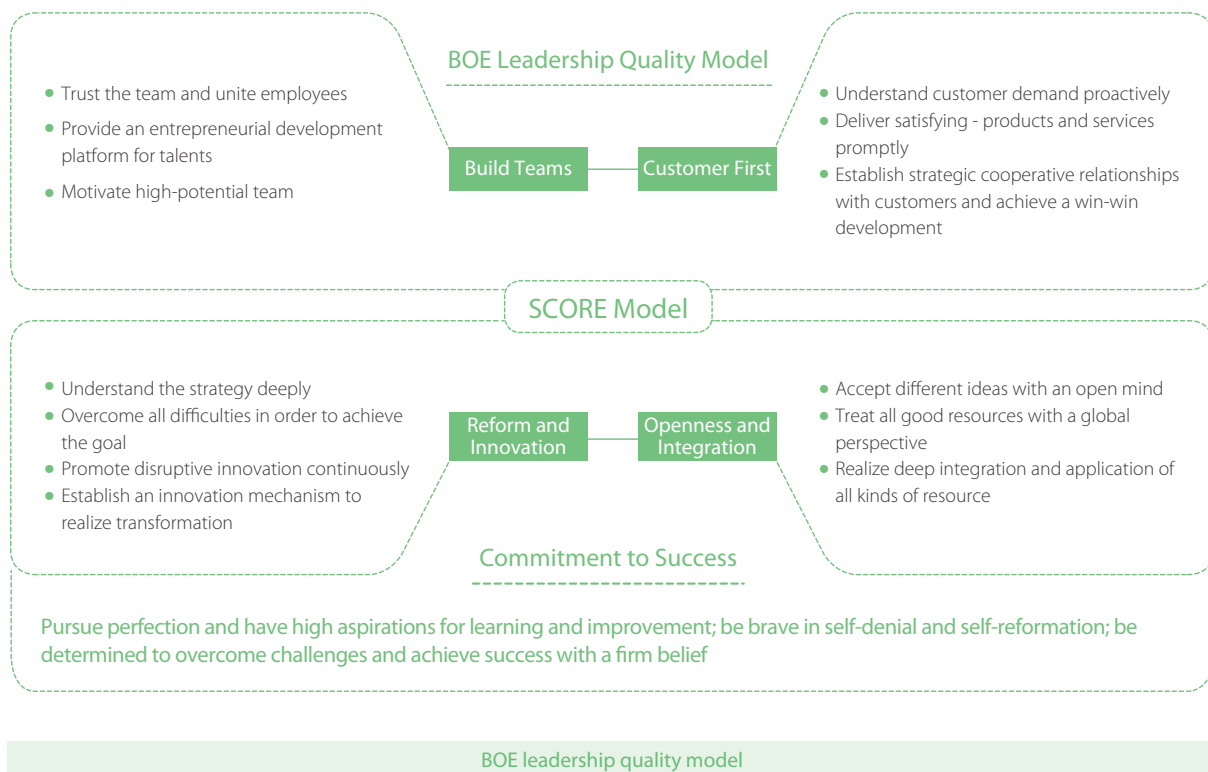
BOE strictly abides by the national social insurance system. We do not only pay for the social security and provide other welfare guarantees for employees on time, but also offer commercial insurance and corporate annuities to employees, including personal accident insurance, critical illness insurance, medical insurance and business travel insurance. Moreover, we provide employees with dormitories, paid family leave, team building fees, free shuttle bus, free parking and other benefits, so that employees can feel the warmth and care from the Company.

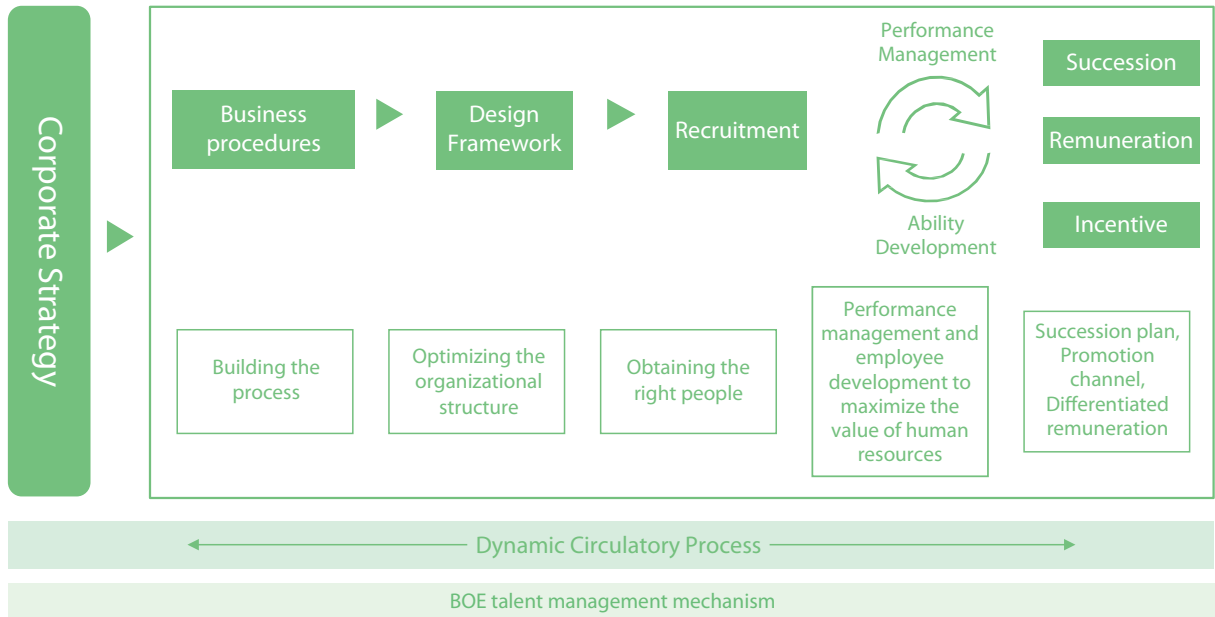
» Supporting Personal Development

In the strategic transition, BOE develops the team of staff by recruiting experts and cultivating talents, underpinning the fast progress of various businesses. Following the philosophy of “prioritizing talent cultivation over profit growth”, we implement the plans for organization and talent development to elevate efficiency, and utilize reserve forces at all levels, aiming to build a market-oriented and world-class professional team.

Scientific Management

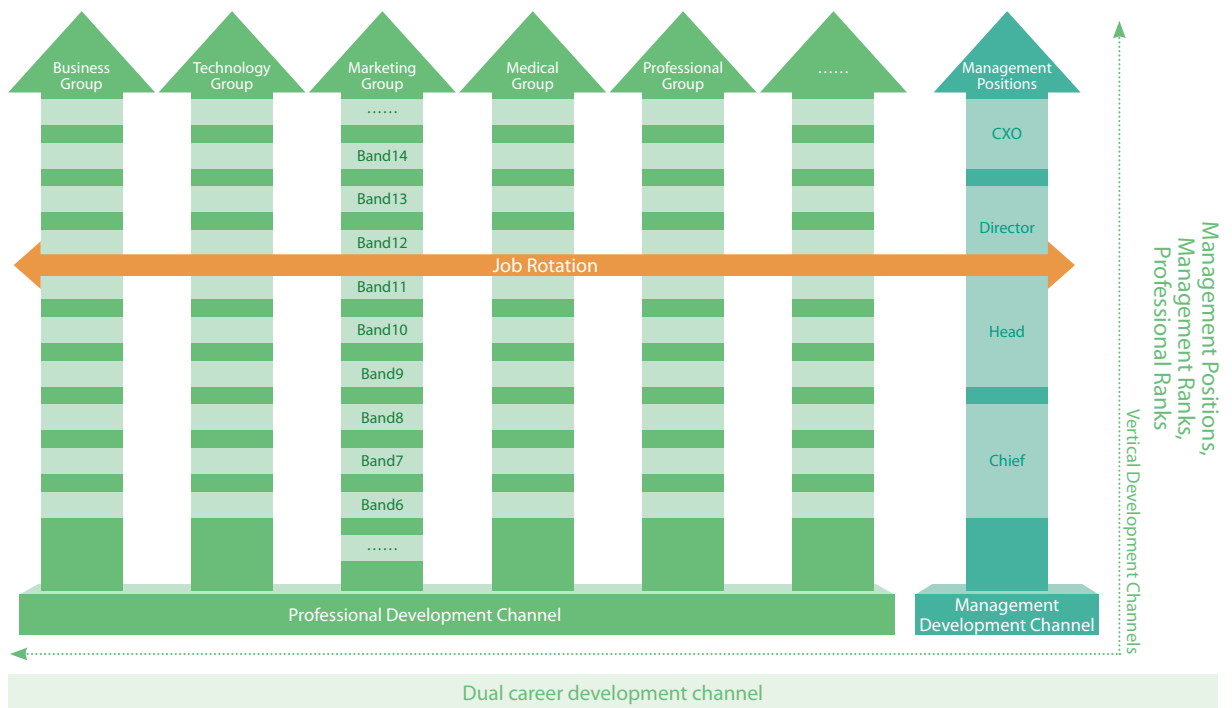
BOE carries out the Organization & Human Development Plan (OHDP), analyzes and optimizes the organizational structure and talent status on a regular basis, with a leadership SCORE model generated. The plan conducts performance, ability, and potential assessments of existing talents, which formulates and improves the annual action plan and the Individual Development Plan (IDP) in accordance with business development goals. It has been continuously improved during the implementation process to accelerate the growth of talent as well as corporate value.





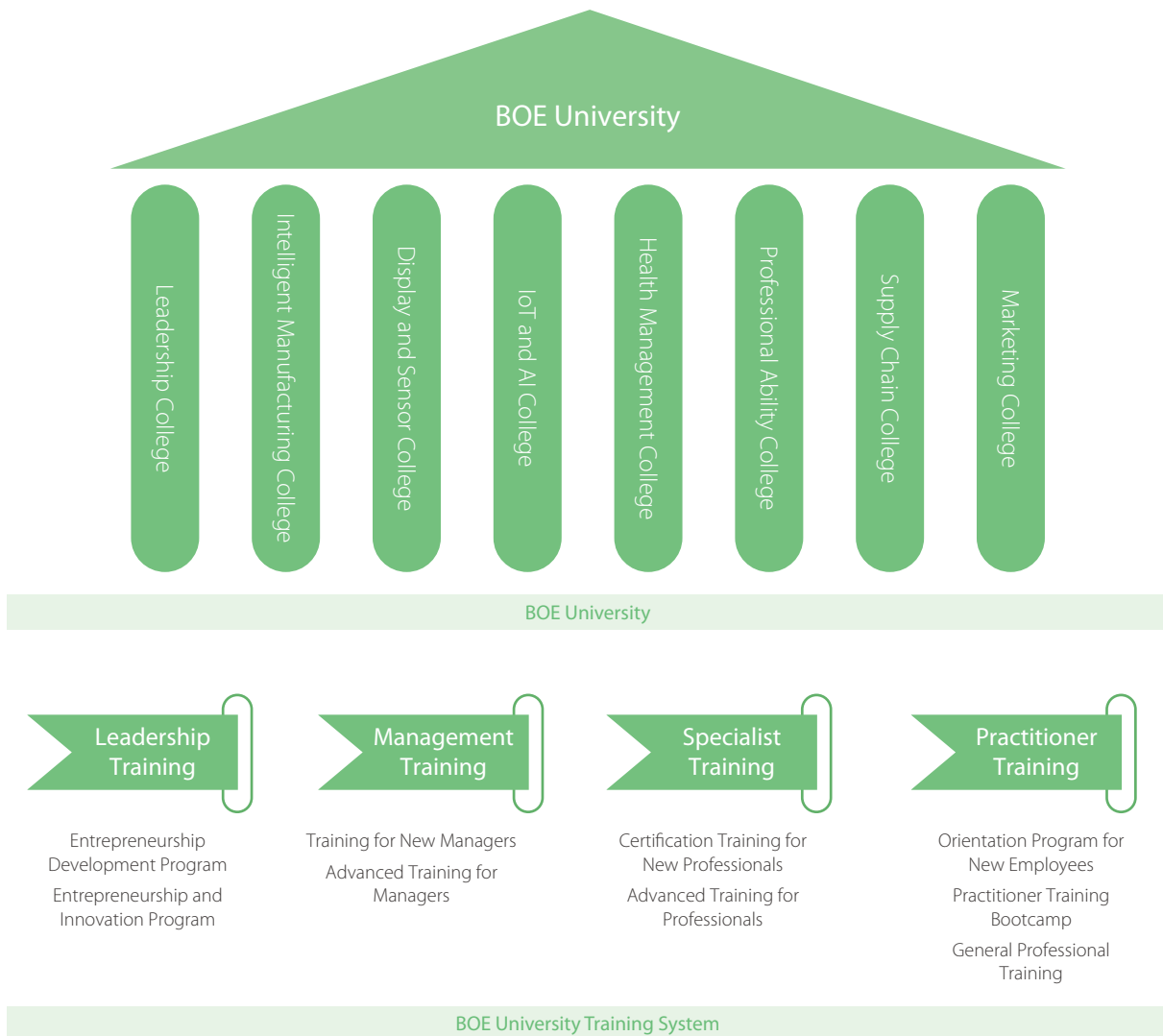
Career Planning

BOE provides diversified development paths for employees. In order to help employees speed up the improvement in their profession and management skills, BOE has built a two-way development platform of profession and management. We also implement a job rotation mechanism to promote the flow of talents and enable employees to better choose career paths based on the personalities and majors, and tap into their own potential.



Diverse Employee Training

In order to enhance training empowerment, BOE has established a talent platform - BOE University, based on integrated corporate sources. The professional and personalized training model is thus generated. In 2020, BOE University formulated the work policy of "thinking like a user, creating values, making breakthroughs, and improving quality and efficiency". Resources are focused on leadership training and development, innovators and entrepreneurs training, senior marketing talent training, professional talent job certification training, professional ability shaping and professional ability improvement. Through professional training combined with practices, BOE provides support for the training of core and reserve professional talents. Focusing on future business development, BOE launched the "Wolf Warrior" program to unleash the potential of talents born between 1985 and 1999, and cultivate young reserve talents with outstanding performance.





Case Study: BOE holds TopCoder Innovation and Entrepreneurship Competition

On July 14, 2020, BOE held the 4th BOE TopCoder Innovation and Entrepreneurship Competition. The competition follows the tenet of “facilitating practices, upholding integrated innovation and creating an ecosystem”. Based on business scenarios such as software and hardware integrated innovative applications and industrial IoT, the competition attracts participants from companies, colleges and universities. It has also introduced external investment institutions and college judges to increase the value of the event and promote value conversion. As an ecological platform for the integration of BOE’s internal and external innovative talents and product proposals, the competition has exerted a good demonstrative and driving effect for an innovative organizational atmosphere. Meanwhile, it has cultivated a group of outstanding talents and selected a group of outstanding models, facilitating the building of BOE innovative and entrepreneurial ecosystem.



The 4th BOE TopCoder Innovation and Entrepreneurship Competition

»» Caring for Employee Safety and Health

BOE is dedicated to providing employees with a secure and healthy working environment. We have continuously promoted the establishment of a safety risk prevention and control system, equipped employees with complete safety facilities and equipment, as well as strengthened education in safety and health. Moreover, we pay attention to the mental health of employees and provide psychological counseling services for every employee.

Safety and Occupational Health

By creating a safe workplace for employees and implementing strict health management, BOE avoids risks that threaten health and safety at work, as well as enhances employees’ awareness and ability to maintain health.

Creating a Safe Environment

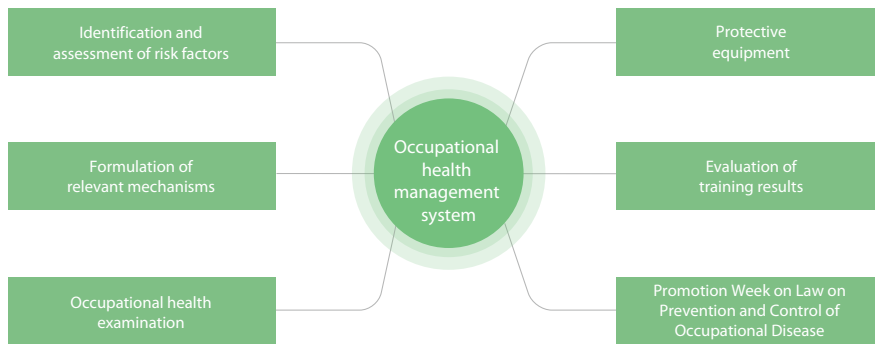
BOE has carried out basic work in terms of organization and responsibilities, systems and procedures, hidden hazard investigation and management, equipment and facility management, safety training and emergency handling, and issued four manuals of the *Emergency Management Guide*, *Implementation of the Four Principles of Rectification and Reform of Hidden Dangers*, *Safety Education and Training Instruction Manual* and *Relevant Party Safety Management Instruction Manual*, detailing specific safety management requirements. We have established a safety work committee to build a thorough work safety responsibility system, configured safety/fire-fighting equipment and facilities in the workplace, and provided employees with personal protective equipment that meets national standards. We have conducted activities of “involving everyone in the investigation of hidden dangers”, and “golden ideas” for work safety, in a bid to enhance the enthusiasm of all employees to participate in safety management. In 2020, many BOE subsidiaries won the honorary titles of “Safety Culture Building Demonstration Enterprise” and “Outstanding Company of Work Safety”.

- Organized **5,365,037** hours of safety training, involving **1,003,520** trainees
- 2,924** emergency drills
- 8,237** on-site safety checks
- 0** work safety accident causing serious injury and above

Improving Occupational Health Management

BOE strictly abides by occupational health laws and regulations and improves the occupational health management system. We have conducted occupational health management in terms of leadership and responsibilities, laws, regulations and documents, identification, evaluation and testing of hazards, training and education, occupational health examination, protective equipment configuration, as well as inspection and evaluation, aiming to achieve long-term management of occupational health.

- Employees physical examination coverage **100%**
- Incidence rate of occupational disease **0**



BOE occupational health management system

Mental Health

In order to provide employees with a secure and healthy working environment and help them cope with psychological pressure from work and life, BOE has established Employee Assistance Program (EAP), providing professional services of mental health for all employees and immediate families. The services include 24/7 consultation hotline, telephone & on-site & online consultation, mental health assessment, WeChat public account, EAP column on the staff portal, psychological training, online mini-class and emergency intervention. BOE has also set up the Heart Oxygen Bar in 12 factories in Beijing, Hefei, Gu'an, etc., bringing one-to-one and face-to-face psychological consulting services.



Case Study: Special psychological hotline safeguards mental health of employees during the COVID-19

During the outbreak of COVID-19 in 2020, BOE paid close attention to the physical and mental health of employees as well as their families, and immediately launched a special psychological hotline for the epidemic to help employees ease their emotions. In accordance with the changes in employees' psychology and needs, we launched a total of 67 themed micro-classes at different stages of the epidemic, such as common negative emotions and responses in the early stage of COVID-19, how to improve home office efficiency in the middle of the challenge, and how to adapt to work resumption in the later stage, helping employees pull through the extraordinary period with more positive attitudes.

») Caring about Employee Life

BOE cares about the work and life of every employee, and always backs up employees as a close friend. We carry out a variety of cultural and sports activities for employees, and build a platform for employees to enjoy themselves and showcase themselves. Employees enrich their life and develop hobbies in these activities, which further enhances satisfaction with the Company and increases sense of belonging.



Cultural activities and sport events

Charitable events held by BOE in 2020



In December 2020, BOE carried out the theme activity of "Illuminating the Growth Path-Exercising for Better Health" at Taiji Elementary School in Zhong County, Chongqing. BOE volunteers accompanied the children in sports games and conveyed the concept of health. Also, doctors from the Chengdu BOE Hospital provided the oral health science lectures and basic physical examinations for the students, bringing warmth and health to the children.



In 2020, BOE continued the Rain and Dew Plan (a sub-project of "Illuminating the Growth Path") supporting students from disadvantaged families at the Muer Elementary School in Xiangshui Township, Xichang City. We sponsored 113 students, and donated more than 30 boxes of stationery and sports supplies. Doctors from Chengdu BOE Hospital checked the eyesight and oral health of the children, aiming to enable children to thrive in a warm and comfortable environment.



In November 2020, BOE donated 30 iGallery E1 to 30 local primary schools in Guizhou, encouraging children to learn, read and grow up healthily.



In June 2020, BOE launched an activity titled "Illuminating Yourself and Your Dream" in Fuzhou. Volunteers helped children fulfill their wishes, and also accompanied them in fun activities and to local education bases.



In 2020, BOE carried out the Stellar Project, a charity project for children with autism in Suzhou. Caring employees participated in the sensory integration training of children with autism to help them improve their self-care ability, external communication and social cognition.

Cultivating Innovative Talents

BOE actively develops university/school-enterprise cooperation, vocational guidance, campus competitions and other projects with major colleges and universities to help graduates with the transformation of their roles and growth of professional thinking. We provide support for cultivating technical and innovative talents to boost the growth momentum of the society.

Cooperation projects between BOE and universities in 2020

Project Name	Form	Coverage	Cumulative Achievements
BOE Club	Holding activities and publishing articles on the WeChat public account	26 domestic colleges and universities	BOE Clubs have been built in 26 universities for six consecutive years, covering more than 200,000 people.
Openday (Online)	Inviting teachers and students to visit company and brief them on products, businesses and industry developments	Nearly 20 domestic colleges and universities	Both online and offline events are held, visits and alumni exchanges are adopted, covering more than 60 colleges and universities, with a total of 10,103 participants
School-enterprise Partnership (BOE Courses)	Setting up internship and employment classes in vocational schools, and integrating them into the corporate curriculum to enhance the professional skills	118 vocational schools	Since the initiation of the school-enterprise partnership project (BOE courses) in 2013, a "three-in-one" three-dimensional cultivation system that combines online courses and offline training, theoretical knowledge and mental guidance, and enterprise lectures and on-campus lectures has been formed. 432 classes have taken shape with more than 23,000 talents cultivated. We provided teaching materials for BOE courses and schools, and held various student-themed activities to enrich students' after-school life
2020 BOE Career Guidance Road	Free and live-streamed career guidance lectures for students during the COVID-19	26 vocational schools	10 lectures given for free in 122 live-streaming sessions, attracting 24,400 viewers.
2020 BOE Innovative Competition	Collecting outstanding creative and innovative technology products from colleges and universities across the country	90 prestigious universities from home and abroad	Affecting over 1.15 million people cumulatively, covering 90 prestigious universities at home and abroad with nearly 3,900 student participants and almost 1,200 technological works collected.
The Third Marketing Competition	Conducting preliminary competitions at universities which set up BOE Clubs and public evaluations for more than 70 key recruitment colleges	Over 70 colleges and universities from home and abroad	Affecting over 200,000 people cumulatively, covering more than 70 colleges and universities at home and abroad, with nearly 1,300 student participants and almost 500 technological works collected.
The Fourth BOE Intelligent Manufacturing Competition	Assessing the core technologies of intelligent manufacturing and IoT in the form of competition that combines theory and practice and with industrial simulation robots as the carrier	Vocational schools in China	Hosted by the Talent Exchange Center of the Ministry of Industry and Information Technology and co-hosted by BOE; covering nearly 200 schools, with over 32,000 student participants and more than 1 million clicks.

»» Focusing on Healthcare

BOE pays attention to the social healthcare. While successfully develop the medical and health business, we shoulder the responsibility of maintaining public health and well-being. Based on the advanced medical resources and talent advantages, BOE has gone deep the community to organize various forms of medical inclusive public welfare activities to popularize health knowledge, spread love, and establish a safe and healthy life concept. We have made medical donations in poverty-stricken areas and strengthened local medical poverty alleviation, helping more people in difficulties.

Fighting COVID-19

COVID-19 raged in 2020. Answering to the emergency in Wuhan with no time wasted, BOE sent two medical teams to the frontline and carried out epidemic prevention and control. We set up emergency teams to go deep into the community to carry out nucleic acid testing and sampling for people in quarantine to ensure stable control of the epidemic. We formulated scientific prevention and control procedures, produced publicity videos, offered guidance for multiple companies, and prepared the *COVID-19 Prevention and Control Manual*, thus effectively helping not only enterprises in the communities, but also ourselves, to resume work and production smoothly. We donated RMB 10 million to the Red Cross Society of China Wuhan Branch, supporting the frontline fight against the epidemic and related prevention and control work in the epicenter and surrounding areas. We donated epidemic prevention supplies, including 10,000 surgical masks to students stranded in Russia. Free consultations and diagnosis were offered to people with special conditions. All in all, BOE contributed to the prevention and control of COVID-19, as well as the maintenance of social order and stability.



BOE helps with COVID-19 prevention and control



Combating Floods

In 2020, southern China suffered continuous heavy rainfall and severe floods. Hefei BOE Hospital organized a flood-fighting and disaster relief medical team to the front line to support medical and health protection work. We donated medical supplies and disinfection supplies, provided free consultation services for thousands of victims, and gave free medicine for cold, inflammation, and trauma, etc., to help flood relief and post-disaster reconstruction in disaster-stricken areas.



Free consultations and diagnosis



Donating medical supplies and disinfection supplies

Free Diagnosis and Popular Science Lectures

BOE pays attention to public health. We carry out various activities such as medical donations, free consultations, and popular science lectures to raise public health awareness.

BOE charitable health events

Institution Name	Event Name	Description
Hefei BOE Hospital	99 Charity Day Fundraising Event	We provided medical assistance to 268 impoverished patients, and set up the "Illuminating the Life of Babies with Congenital Heart Disease" project hand in hand with the Red Cross Society of Anhui •BOE Health Fund, which has been launched on the 99-charity platform of Tencent.
	Free Screening for Congenital Heart Disease	Free screening for congenital heart disease was provided for impoverished children in Huoqiu County, with surgical subsidies for two children diagnosed with surgical indications. The children had fully recovered after surgery.
	Blood Donation	We carried out public welfare activities through voluntary blood donation on a regular basis, and organized three large-scale voluntary blood donation activities for employees in the whole hospital and the Hefei regional plant since the outset. The total blood donation volume exceeded 120,000 ml.
Chengdu BOE Hospital	Targeted assistance from Chengdu BOE Hospital to County, Ganzi Tibetan autonomous prefecture	We provided one-month medical assistance for Dege County, Ganzi Tibetan autonomous prefecture, offered medical services to Tibetans, publicized health knowledge, and trained local medical teams.
	Health Visit to Aba	Multidisciplinary experts went to Malkang City, Aba Prefecture to carry out MDT free consultation activities for patients, with more than 500 free consultations given.
	Health Visit to Liangshan	We went to Meigu County, Liangshan Yi Autonomous Prefecture, the national poverty-stricken county to conduct oral, ophthalmology, blood pressure and other physical tests for more than 1,200 local students.
OASIS International Hospital	Caring for Mothers and Babies	We carried out maternal and child welfare lectures and taught perinatal knowledge, postpartum rehabilitation, infant care and other popular science knowledge. A total of 976 people participated in the activities. We held charitable activities, and donated 19 child safety seats and 20 infant beds in cooperation with the Beijing Women & Children's Development Foundation.
	Student Physical Examination Charity Activities	Free physical examinations for students
	Caring for Workers in Heat	To pay tribute to the workers outdoor in hot summer, we have provided free mineral water, functional drinks, among others, for delivery men and couriers, serving more than 100 people.



A maternal and child welfare lecture in OASIS International Hospital



Medical experts from Chengdu BOE Hospital give health consultation in Maerkang

»» Support Cultural Inheritance

As a high-tech enterprise that focuses on innovation, BOE uses our own technology to help innovate in the form of cultural exhibitions and contribute to the inheritance of culture. BOE applies intriguing scientific digital display solutions to museum exhibitions, allowing visitors not only to see the collections more clearly, but also to learn more about cultural relics through interaction. In addition, BOE has continued to support the public welfare project, Culture Volunteer Service Action of Chinese Ancient Books Census, to promote the process of the Chinese ancient books census and promote cultural inheritance.



Smart cultural museum solution



Case Study: BOE facilitates traditional culture protection by supporting ancient book census

Since 2017, BOE has supported the Culture Volunteer Service Action of Chinese Ancient Books Census initiated by the Ancient Books Preservation and Conservation Association of China. As of 2020, this activity has engaged with 209 institutions in 20 provinces (or autonomous regions and municipalities) across the country, with a census of more than 200,000 ancient books with nearly 1.61 million volumes (pieces), which has effectively promoted the national census of ancient books. Volunteer activities in 2020 covered 9 provinces (or autonomous regions and cities). A total of 210 university student volunteers as well as industry and social volunteers have been trained and sent to 26 primary institutions with book depository to help sort out and register 155,000 ancient books.



BOE supports the Culture Volunteer Service Action of Chinese Ancient Books Census





Environment: Pursuing Green Development

With the vision of leading green development and creating a better life together, BOE is dedicated to effective environmental protection in all parts of production and management. We continue to improve the environmental management system, resource utilization efficiency, and green competitiveness. At the same time, we keep researching and developing green products and technologies, and work with stakeholders to explore the use of new technologies to deal with new environmental problems and challenges, so as to achieve a virtuous circle of symbiotic development between BOE and the environment, and build a green ecosystem.



Environmental Management

As an advocate and practitioner of the environmental sustainability concept, BOE strives to minimize the impact of enterprise operations on the environment through continuous improvement of each link of production and operation. BOE continues to establish and improve the environmental management system, provides environmental protection training for employees, and strives to achieve environmentally friendly development from top to bottom. Also, with the awareness of environmental management to prevent problems before they happen, the Company strives to timely identify, prevent and control environmental risks and to build an efficient, clean and sustainable ecological environment through sound management.

»» Upgrading Management System

The foundation of building a sustainable, environmentally-friendly enterprise is a complete green management system and to achieve green management across the entire chain. Focusing on the green development vision of "leading green development and creating a better life together", BOE has continuously improved the environmental management system and environmental risk prevention and management.



Green development vision: leading green development and creating a better life together

Basic principles

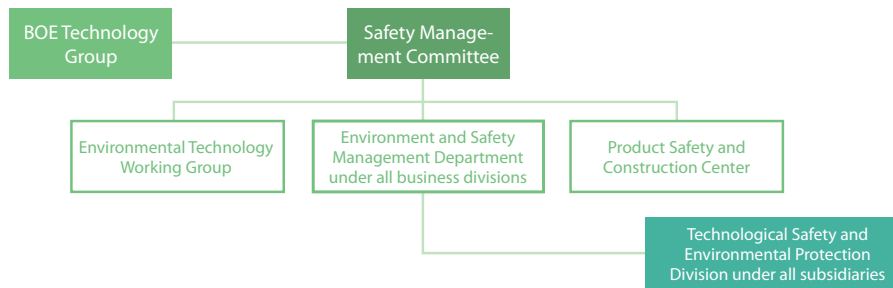
- To improve the environment is an integral part of the operation
- Minimize the environmental impact of products and services in the full life cycle
- Make partners pay attention to and reduce the environmental impact of products and business activities, improve the environmental risk prevention and control management system, and avoid environmental pollution incidents
- Establish environmental risk prevention and emergency management system to avoid and deal with environmental pollution incidents in a timely manner
- Provide environmental impact information related to business activities in an objective and open manner
- The top management of BOE is responsible for formulating and implementing an action plan based on the above principles

Main tasks

- Improve green performance and build green factories
- Build a green supply chain and lead the green development of the industry
- Establish green standards and databases to form a green management and control system
- Develop clean energy
- Improve the environmental risk prevention and control management system to avoid environmental pollution incidents

Environmental Management System

BOE improves the environmental management structure from top to bottom, and ensures the improvement of overall environmental performance, with a sound environmental management system based on ISO 14001. We strictly conform to the national laws and regulations including the *Environmental Protection Law of People's Republic of China*, *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution*, *Law of the People's Republic of China on Prevention and Control of Water Pollution*, and *Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste*, and respond actively to the policies on environmental protection. We have also created a green environment management system in line with the requirements of ISO 9001, QC 080000, ISO 14001, OHSAS 18001 and ISO 50001.



BOE environmental management structure

Environmental Information Disclosure

To make the public understand our environmental management comprehensively, BOE releases environmental data to relevant departments and the public in a timely manner through a variety of channels, and accepts supervision and suggestions from all walks of life. Meanwhile, through environmental cost management, we further optimize the environmental strategy and management process, accurately grasp environmental expenditure and better know the achievement of environmental improvement measures. In 2020, the environmental management expenditure amounted to RMB 548.3433 million.

监测方式	监测点位	监测时间	监测项			是否达标	超标倍数	评价标准	排放方式	排放去向
			监测项	污染物排放浓度	污染物排放限值					
手工监测	生活废水排放	{ 日监测 } 202...	化学需氧量	21	500mg/L	达标		《北京市水污...	经处理后排入污...	开发区金源经开...
手工监测	生活废水排放	{ 日监测 } 202...	氨氮	0.872	45mg/L	达标		北京市水污染...	经处理后排入污...	开发区金源经开...
手工监测	生活废水排放	{ 月监测 } 202...	pH	7.42	6.5-9	达标		《北京市水污...	经处理后排入污...	开发区金源经开...
手工监测	生活废水排放	{ 月监测 } 202...	悬浮物	12	400mg/L	达标		《北京市水污...	经处理后排入污...	开发区金源经开...
手工监测	生活废水排放	{ 月监测 } 202...	总磷	0.5	8mg/L	达标		《北京市水污...	经处理后排入污...	开发区金源经开...

The BOE Environmental Protection Case column

- The column on BOE's official website discloses daily/monthly/quarterly environmental monitoring data of BOE's key pollutant discharging subsidiaries in Beijing.

Report to the departments of ecological environment online

- According to the requirements of the local departments of ecological environment, each subsidiary shall report the environmental monitoring data of wastewater and exhaust gas from online monitoring system to the local departments of ecological environment every 5 minutes, every 2 hours and every day.

Report to the local departments of ecological environment

- In accordance with the requirements of the local departments of ecological environment, each subsidiary shall report and register hazardous waste, declare a hazardous waste management plan and report environmental pollutant monitoring plan to the local departments of ecological environment every year.

Self-monitoring Information Release Platform for Key Monitoring Enterprises

- The environmental monitoring data of the BOE subsidiaries are disclosed daily on the "Self-monitoring Information Release Platform for Key Monitoring Enterprises" in relevant provinces and cities.

Channels and methods of BOE environmental information publicity

»» Environmental Risk Prevention

Global environmental issues have become increasingly prominent and unpredictable. During product expansion and diversification, BOE has continuously taken measures to strengthen risk identification and control, and enhanced employees' environmental awareness through systematic environmental protection training, so as to minimize the impact of production activities on the ecological environment and surrounding communities.

Risk Identification and Prevention

In order to continuously improve prevention and management on environmental risk, BOE has adopted various measures and established a self-evaluation and mutual evaluation mechanism. Specifically, we pay attention to new technologies, techniques and equipment, utilizing them in pollutant treatment; we have identified important environmental factors, transformed and upgraded environmental risk prevention and control equipment and facilities, improved emergency plans, and configured adequate emergency materials and environmental emergency monitoring equipment, as well as further improved environmental risk emergency response capabilities. We have also strengthened the prevention and control of toxic and hazardous chemical leakage and emergency measures, and resolutely avoid environmental pollution incidents of water, atmosphere, and soil.

In 2020, we improved the *BOE Environmental Risk Prevention and Control Management and Evaluation Measures* and its *Implementation Rules*, as well as formulated the *BOE Environmental Risk Prevention and Control Management Requirements* as a supplementary document. We inspected and evaluated 13 key units on the environmental risk prevention and control management, and also completed the audit for the commissioning of 2 new projects with more than 70 problems have been corrected.

Based on WRI's Aqueduct Water Risk Atlas, BOE analyzes and evaluates the existing water resources risks for the production water used in factories, and implements targeted strategies on water resource risk management. In 2020, BOE's factories participated in the training of the Alliance of Water Stewardship (AWS) at the invitation of customers, and carried out water management system reviews, which improved the factory's water resource risk assessment and management mechanism, contributing to improve water resources management with customers.

Water risk management

- Reduce the use of water
- Improve water reuse rate
- Use recycled water to replace municipal freshwater supply
- Set up as large a raw water storage tank as possible

Water quality risk management

- Add a conservative pretreatment step to the water purification system
- Make the processing capacity of the wastewater treatment system 20% higher than the actual demand

Regulatory risk management

- Make the discharge concentration of wastewater pollutants 70% lower than the legal standard
- Set up a procedure for wastewater discharge emergency recovery and reprocessing
- Set up an online monitoring system for the pollutant concentration of discharged wastewater

BOE's targeted water resources risk management strategy

Education and Training on Environmental Protection

BOE calls on all employees to participate in environmental management and construction, and helps employees understand the issues and goals of corporate sustainable development through systematic and scientific training, to enhance their environmental awareness, and to establish a correct concept of sustainable development. We have established management ledgers for key positions of environmental risk prevention and control, and have carried out regular training and assessment to ensure that all employees at the key positions, including the treatment and discharge of wastewater and waste gas pollutants, hazardous waste collection, storage and transfer, chemical storage and logistics, and special gas storage and operation, master everything they need to know about the environmental risk prevention and control. BOE has organized training courses for 1,538 employees, with the total attendances of 5,545, and has carried out 588 emergency drills, effectively improving environmental risk prevention and control and emergency response capabilities.

Internal and external training on environmental protection organized by BOE amounted to **9,894** hours.



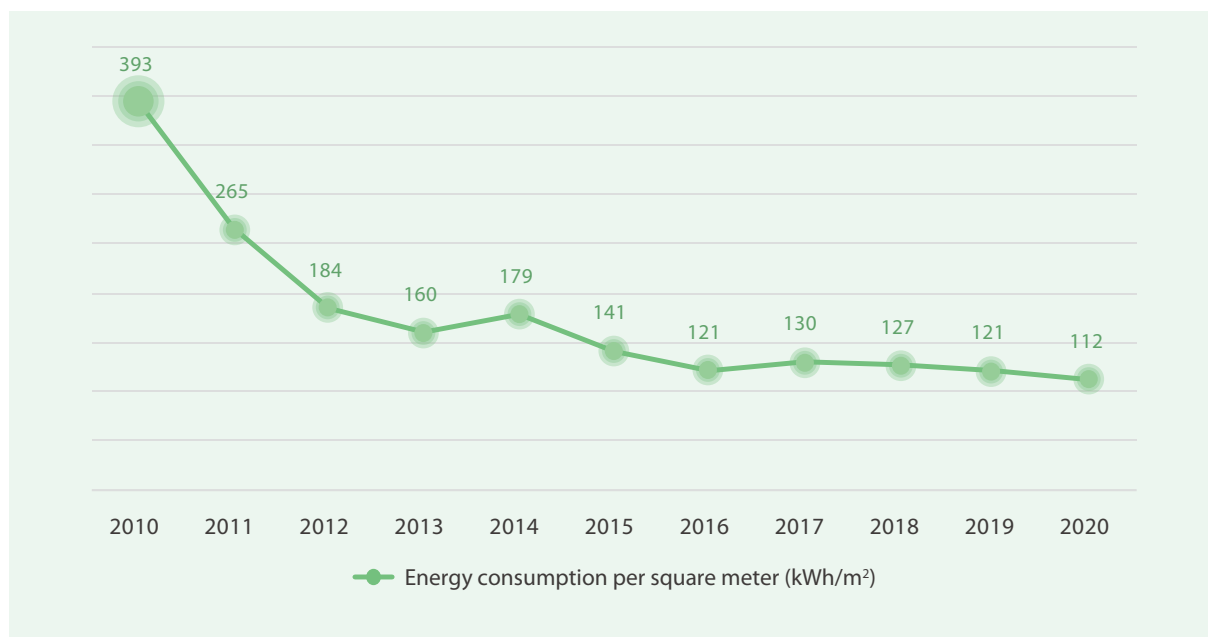
BOE employees attend environmental management training

Green Operations

BOE conserves the environment and resources during the business operation, and adopts a low-carbon operation mode. We continuously redouble the investment in environmental protection. Through high resource efficiency, energy saving technologies, and clean energy in response to climate change, we reduce greenhouse gas (GHG) emissions and control hazardous waste, minimizing the impact of business operations on the environment.

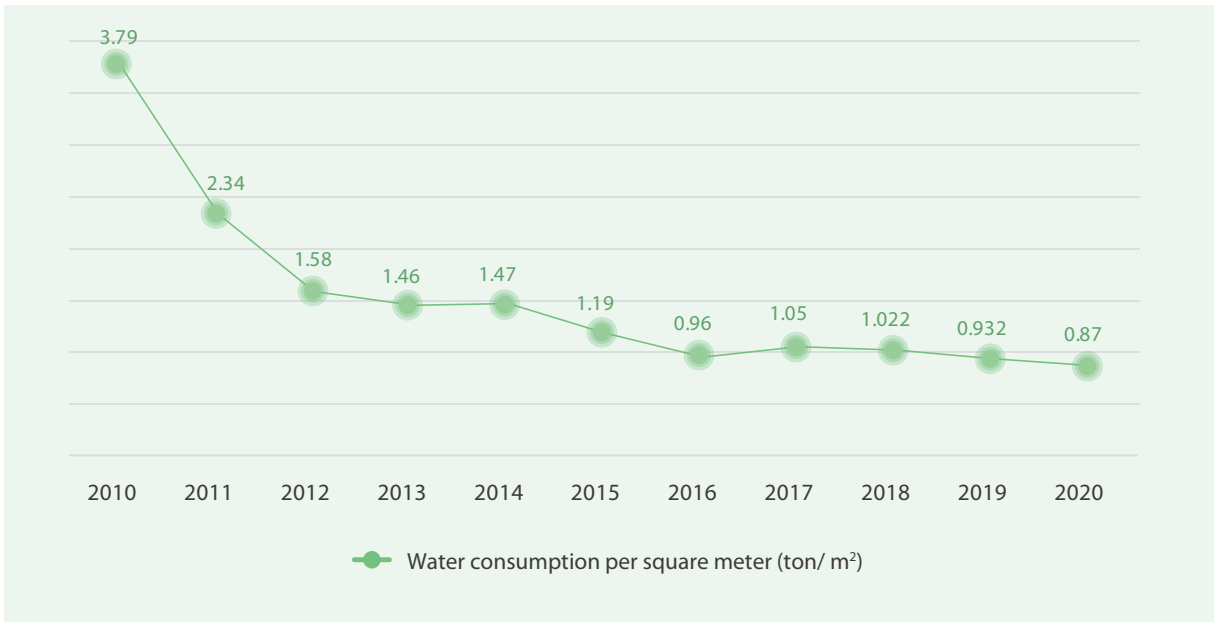
» Utilizing Resource Efficiently

To raise resource and energy efficiency, BOE has formulated a series of internal environmental management policies, including *Energy Management Policy*, *Energy Conservation Policy*, *Energy Management System Internal Review Policy*, and *Energy Consumption Reduction Rules*. The Company has invested substantially both capital and technologies in energy conservation programs, and managed to control energy, water resources, gas emissions and solid waste through reasonable planning and strict management, effectively reducing resource consumption. Both the energy consumption and freshwater consumption of BOE per square meter dropped in 2020.



Energy consumption of BOE per square meter from 2010 to 2020³

³Calculation based on the energy consumption of main products. Energy consumption includes electricity, natural gas and steam. All energy consumption is converted into electricity consumption.



Water consumption of BOE per square meter from 2010 to 2020⁴

Energy Conservation

BOE has built an energy management platform for delicacy management. By running the ISO 50001 system and encouraging energy-saving programs, the Company has achieved energy-saving and emission-reduction goals. In 2020, we carried out 316 energy-saving projects and upgraded 15 projects of renovating relevant equipment and facilities, including “clean production performance review”, “cooling tower energy-saving renovation project”, “the energy-saving project on low-nitrogen renovation of boilers”, and “energy-saving renovation project on compressed air post-processing”, reducing the use of resources such as water, electricity, and natural gas.



Electricity saved: 278.4213 GWh



Steam saved: 650.51 tons



Water saved: 3.3485 million m³



CDA/N₂ saved: 3.6617 million Nm³



Natural gas saved: 297,600 Nm³



Chemical drugs saved: 1,100 L

Fruitful results from the energy consumption reduction measures in 2020

⁴Calculation based on water consumption of main products.



Case Study: BOE reduces energy consumption through renovation of the compression system

Compressed air is supplied by the high-pressure system and the low-pressure system respectively. Compressors and driers consume a large portion of electricity. A high-pressure compressor consumes large amount of energy because its actual working pressure is not set as the best. To solve the problem, BOE has renovated the pipelines, replaced the high-pressure compressors with low-pressure ones based on the actual situation, and added air supply lines and control valves from the low-pressure compressor to the pipeline network of the high-pressure system. Through these methods, 1.02 GWh of electricity is saved annually.



Case Study: BOE implements compressed air project of overall depressurization and partial pressurization

The overall survey of the factories showed that, if the compressed air system fails to achieve differentiated pressure supply due to equipment differences, waste will ensue since some equipment does not require high-pressure compressed air. BOE has adjusted the pressure of the compressed air pipe network, reduced the supply pressure of the compressed air pipe network as a whole, and boosted pressure only for the equipment which uses high pressure in the process. This adjustment has saved 4 GWh of electricity annually.



Case Study: Innovative energy-saving project of BOE

The BOE factories in Hefei have adopted return vent filter project in clean buildings to reduce power consumption. It facilitates airflow adjustment, mitigates the impact on the airflow around the equipment, and improves the control of the temperature and humidity. With the economical side panels and floor opening arrangements, it is no longer necessary to resort to the traditional method of controlling the airflow direction by increasing the number of filters and air volume. Also, the problem of over placement of filters is solved. Based on the improvements, just one factory in Hefei saves about 3.8 GWh of electricity annually. To date, the return vent filter project has been successively carried out in all factories as a mature energy-saving project.



The on-site installation of the return vent filters

Saving Water

To save water, BOE has improved water recycling rate with recycling and treatment technologies. With advanced cleaning methods including counter-current rinse, a majority of high-purity water and chemicals are reused, minimizing consumption of high-purity water and chemicals, and cutting the discharge of wastewater and pollutants. According to the principle of reusing water based on its quality, part of the reverse osmosis (RO) system's wastewater with a high salinity concentration produced in the preparation process of initial pure water is treated through certain equipment and reused in the pure water preparation system, while the rest is discharged into the factory's reclaimed water utilization system and used for waste-gas washing, circulating cooling water, wastewater treatment system's water replenishment, factory's toilet flushing. Water discharged from the preparation process of ultra-pure water is collected and used for humidifying the whole factory's air conditioning system. Based on these measures, 3.3485 million cubic meters of water is saved annually.



Case Study: BOE is committed to production wastewater recycling as well as high-quality reclaimed water

BOE is committed to improving the recycling rate of production wastewater and promoting the use of high-quality reclaimed water. High-quality reclaimed water is imported every day and kept running stably by the BOE factory in Beijing. The average daily use of high-quality reclaimed water reaches 27,000 tons, realizing a 100% replacement for municipal tap water. The factory in Ordos continues to carry out production wastewater recycling and grading. Through the transformation of the organic wastewater recycling system, the treated water of the effluent organic wastewater is recycled to the high organic system, so that the effluent can be reused for production. The wastewater discharge is reduced by approximately 1.15 million tons per year, lowering COD by 30 tons per year, and successfully cutting wastewater discharge and tap water usage.

Resource recycling

BOE follows the 4R principle (recycle, reduce, renew and responsibly) when processing raw materials. Striving for comprehensive utilization, while treating the chemical waste, which is produced during our operations, we first consider the reuse of raw materials for production. If reuse is not feasible, we will have the company who does liquid waste recycling purified the waste into industrial-grade raw materials before they enter the market. Only when the waste is completely useless, or the utilization value is much lower than the cost of the purification, will we opt for incineration.

For the stripping liquid, electronic grade purification and reuse in the factory have been adopted by all factories, and now the same process for the diluting liquid is tested step by step

Self-utilization (water treatment) has been enabled for ITO-etchant (low-concentration sulfuric acid), and the extraction of industrial grade phosphoric acid is made possible for Al-etchant

Rework liquid of color film and cell is of a small amount, which accounts for about 2% of the total chemical waste liquid. With complicated composition, this part is handed over to a third-party hazardous waste disposal company for incineration.

BOE measures for recycling and utilization of raw chemical materials

In terms of solid waste, BOE recycles 100% of hazardous waste through a qualified third-party professional organization. The Company disposes of hazardous waste, medical waste and general waste in accordance with prescribed procedures, and supervises and manages third-party organizations. In 2020, BOE's comprehensive utilization rate of hazardous waste reached 96.69%.

Green Packaging and Transporting

In order to mitigate the impact of transportation on the environment, BOE and our partners continue to improve the transportation management system, to rationally arrange and plan transportation stations and routes, so as to improve delivery efficiency, and reduce GHG emissions. In 2020, BOE improved the logistics of bulk chemical materials through projects such as transforming air transportation to sea transportation, replacing land-sea joint transportation with rail-sea joint transportation, and optimizing rail-sea joint transportation route optimization, so as to achieve a win-win situation for environmental and economic benefits. At the same time, the Company continues to improve packaging to reduce resource consumption.



Case Study: Efficient and eco-friendly transportation achieved by replacing air transportation with land transportation

The production factory of BOE VUSION electronic shelf label (ESL) is located in Chongqing, one of the important cities of the "New Silk Road" economic belt. Road and rail link this city with Europe. On October 16, 2020, trucks loaded with VUSION ESL departed from the Chongqing factory, and completed transportation by land for the first time. It increased the delivery speed of VUSION ESL to Europe by 3 times, and reduced carbon emissions by 10 times compared with air transportation.



Efficient and eco-friendly land transportation



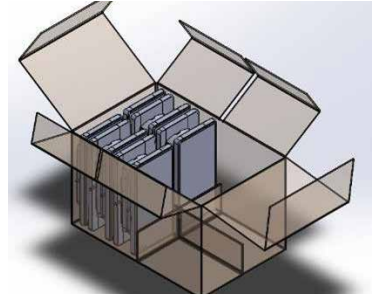
Case Study: Facilitating resource reuse with recyclable packaging materials

For the line-up of the whole products, BOE advocates making external components with post-consumer recyclable plastic materials to promote the recycling of resources. The buckle design facilitates the dismantling, sorting and recycling of products after scrapping, and increases the recyclable ratio of the whole products from 65% to over 80%, leading to sustainable development.



Case Study: Improving packaging strategy and elevating transportation efficiency

To reduce the carbon footprint of packaging and inventory, BOE strives to improve product packaging strategies of the ESL products by removing unnecessary packaging elements, decreasing the size of the box, and reducing the use of plastic packaging, as well as elevating the efficiency of packaging materials. It can effectively increase the packing rate and transportation quantity of containers, thereby optimizing transportation efficiency.



Making all packaging materials recyclable by removing internal plastic packaging

»» Managing Hazardous Materials

BOE adopts the full life-cycle management for green products, actively participates in the formulation of national codes and testing standards for green products, and seeks for safer alternatives to harmful materials. We have set up the BOE Green Product Analysis Center to improve the ability of testing hazardous materials and to ensure that products meet hazardous material control standards. All the raw materials used by BOE meet the requirements of relevant national environmental laws & regulations and the policies of chemical registration, evaluation, licensing and restriction. In production, we strictly abide by the provisions in the *Measures for the Control of Pollution from Electronic Products*, which requires that manufacturers shall take measures to reduce and eliminate the content of lead, mercury, cadmium, hexavalent chromium, polymeric brominated biphenyls (PBB), poly brominated diphenyl ethers (PBDE) and other toxic or hazardous substances contained in electronic products.



Case Study: BOE Green Product Analysis Center

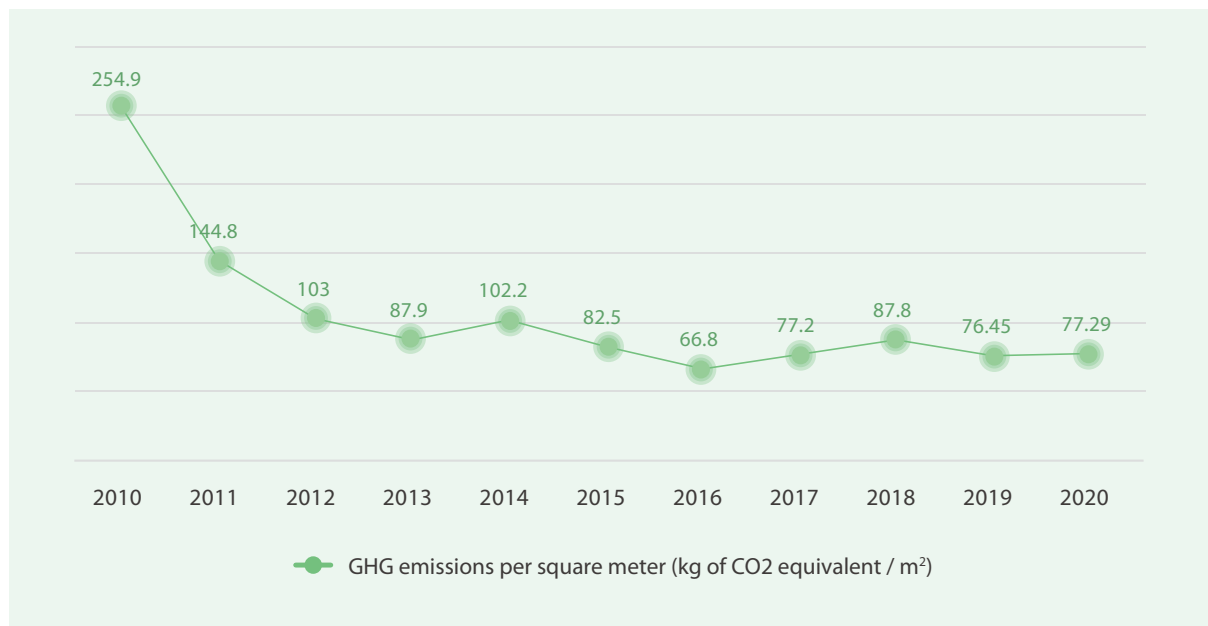
The professional BOE Green Product Analysis Center consists of 13 laboratories, including inorganic pretreatment lab, organic pretreatment lab, ion chromatography lab, organic instrument lab, inorganic instrument lab, sample preparation lab, and reagent storage room. The center is equipped with soxhlet extraction equipment, solid phase purification equipment, rotary evaporator and other sample pretreatment equipment, as well as X-ray fluorescence spectrometers, ion chromatographs, gas chromatography-mass spectrometers, online combustion ion chromatographs, high-performance liquid chromatographs and other test instruments, which are able to test RoHS 2.0, halogen and PAHs. The center has greatly improved BOE's ability to analyze hazardous substances in products, and was named Collaborative Promotion Center for Green Manufacturing Engineering of Electrical and Electronic Products by the Chinese Electrical and Electronic Products Green Manufacturing Committee.

»» Addressing Climate Change

As one of the Sustainable Development Goals of the United Nations, climate action has become a global consensus. In 2020, China announced the resolution to peak carbon dioxide emission before 2030, and to achieve carbon neutrality before 2060. As a responsible enterprise, BOE is actively involved in the action.

Reducing GHG Emissions

In order to reduce GHG emissions, BOE has formulated standards such as *Carbon Emission Management Benchmarks* and *Carbon Emission Source Identification Management Benchmarks* to identify and manage carbon emissions during operations. The Company responds to environmental development goals and practices effective energy management through practical measures, including a series of energy-saving and emission-reduction projects and an energy monitoring platform. Since 2010, BOE has increased the production capacity while lowering GHG emissions per square meter. As a market-based means to control GHG emissions, carbon emission rights trading has the advantages of lower emission reduction costs for the whole society compared with administrative means and the ability to provide flexible choices for enterprises to reduce emissions. The national carbon trading market is about to open. In response to the challenges and opportunities brought about by carbon trading, BOE factory in Beijing has taken the lead in implementing carbon trading across the country, effectively increasing carbon reserves through carbon emissions trading, CCER replacement allowances, etc.



BOE GHG emissions per square meter from 2010 to 2020⁵

⁵ Note: 1. GHG emissions (scope 1+2) are calculated according to the emission factors of various grids of all regions published by the National Development and Reform Commission. Scope 1 refers to GHG emissions generated in the combustion of natural gas during organic waste gas treatment and the use of diesel while launching generators. Scope 2 is GHG emissions indirectly produced by enterprises when using electricity.
2. The calculation is based on major products of BOE.



Case Study: BOE reduces GHG emissions to address climate change

The international and domestic communities, customers and consumers are increasing their voices for preventing climate change risks and reducing GHG emissions, and policy efforts are intensifying. Against such a backdrop, BOE completed the reports of Carbon Disclosure Project (CDP), Electronic Product Environmental Assessment Tool (EPEAT), as well as review and approval for various types of customers at home and abroad in accordance with the *IPCC Guidelines for National Greenhouse Gas Inventories* in 2020. All TFT LCD factories of BOE have installed POU GHG removal equipment.

BOE properly handles with perfluorinated compound Greenhouse gases (PFCs) used in the process. These gases include nitrogen trifluoride (NF₃), sulfur hexafluoride (SF₆) and carbon tetrafluoride (CF₄). The treatment efficiency is in line with IEEE Std 1680.1 and meets the requirement of the treatment efficiency of at least 90% of PFCs. NF₃ with a lower heating potential coefficient is also gradually used in place of SF₆ with a higher coefficient to reduce GHG emissions. BOE will continue to achieve the goals of GHG emissions reduction through ISO 50001 system operation and energy-saving solutions.

Using Clean Energy

BOE is one of the earliest domestic enterprises to develop and utilize clean energy and clean technology. In recent years, based on the industry development trend of “new energy + Internet”, with the help of AI and big data, BOE regards energy IoT platform as the core, developing the multi-energy supply, energy construction, energy trusteeship, energy efficiency management, energy trading, carbon trading and other business for customers including governments, industrial and commercial companies. The business fields include smart operation and maintenance, construction, energy conservation, electricity selling and plants factories, etc.

In the field of smart operation and maintenance business, BOE owns a 385MW photovoltaic power plant with an annual power generation of 410 GWh and a carbon dioxide reduction of about 420,000 tons. On the basis of the operation and maintenance of self-owned power plants, the Company has also made every effort to expand the external operation and maintenance business. In 2020, a project contract with a capacity of 236 MW was expected to be concluded. The self-developed B-iSolar (BOE photovoltaic power plant operation and maintenance system) is able to perform all-weather, intelligent, and unmanned monitoring of photovoltaic power plants to ensure stable operation of the power plant.

In the field of energy construction, BOE has 11 years of experience in photovoltaic EPC engineering construction. The Company has innovated in the “EPC+” model, and provided customers with general construction contracting services integrating development, design, construction, management, operation, maintenance, investment and financing. As of 2020, BOE has undertaken the construction of photovoltaic power plant projects with a capacity of more than 350 MW. The Company is also actively expanding GW-level photovoltaic power plant projects.

In the field of power trading, the Company has actively deployed smart electricity sales in places including Beijing, Tianjin, Hebei, Anhui, Sichuan, Fujian and Jiangsu. As of 2020, the Company has gained electricity sales access in 18 regions. Electricity transactions throughout the year reached 8.6 TWh, and carbon trading amounted to 62,000 tons.

In the field of energy conservation, BOE has developed energy-saving businesses in places including Beijing, Anhui, and Jiangsu, with the experience and advantages in energy consumption management in high-end manufacturing. B-EMS, the self-developed energy efficiency management system, can help customers build “green factories”, “smart cities”, and “green schools”.

In the future, BOE will enhance the “technology + application” strategy. Centering on the BOE Smart Energy Operating System (BSEOS), the Company will provide sub-solutions in terms of multi-energy supply, energy construction, energy efficiency management, smart operation and maintenance, and low-carbon services for typical energy application scenarios such as industry, commerce, parks, public facilities, and households.

Green Products

While designing products, BOE is committed to recyclability, universality, and minimization principles, and strives for the full life-cycle green management of products. Product structure is adjusted, and more high value-added, low-emission, and environmentally friendly products are developed, in a bid to minimize energy and resource consumption, mitigate the impact on the ecological environment, and maximize the rate of renewal. We have also effectively promoted the certification of the PAS 2050:2008 Greenhouse Gas Emission Evaluation of Goods and Services within the Life Cycle.



Electronic shelf labels

BOE has launched ESL and relative technologies to “provide smart solutions that support the digitalization of physical retail”. The ESL system features simple operation, high display efficiency, and low management cost, which can bring consumers a better shopping experience. BOE’s VUSION ESL is backed up by hardware technologies such as E-ink displays, temperature sensors, NFC payment, and LED flashing lights. BOE ESL is waterproof, anti-fog, anti-freeze, and dust-proof, while paper shelf labels or ordinary ESL can easily get wet, blurred, or cracked in cold weather. It can also update information about prices and promotions with no time lag, and supports multiple display templates such as black, white and red texts and pictures, with extremely low product energy consumption.



Electronic table labels for conferences

BOE has newly launched the green electronic table labels for conferences, which can be directly controlled via mobile APP, Bluetooth or NFC and can respond to the directions within seconds. Each use of the labels helps reduce the consumption of one A4 paper. Assuming that 10,000 electronic table labels are used twice a day, then 5 million A4 papers can be saved throughout the year, which is equivalent to saving 1,670 12-meter-high trees and 2,700 tons of water.

Green Factories

Factories are actors of green manufacturing and important participants of the green manufacturing system. The Ministry of Industry and Information Technology has put forward the goal of building a thousand green factories by 2020. BOE has been granted the title of the green factory by practicing the standard of the *Green Factory Evaluation Requirements*, following the guidance of which the Company uses energy-saving and environmentally-friendly building materials, adopts energy-saving and consumption-reducing measures, recycles and reuses rainwater and wastewater, installs photovoltaic solar energy on the roofs, manages waste, and designs, develops and produces green products. As of the end of 2020, a total of 10 BOE factories have been awarded the title of National Green Factory.



Case Study: BOE factory in Ordos gains the title of National Green Factory with a focus on water recycling

The 13th Five-Year Plan covers a critical period for the implementation of the strategy of empowering China with manufacturing, and a crucial stage for the green development of industries. To realize green manufacturing, BOE promotes green development, and has made good achievements in intensified land use, harmless raw materials, clean production, waste recycling, and low-carbon energy. BOE factory in Ordos conducts green control of raw materials and recycles liquid waste. It uses solar power to generate electricity, makes full use of waste heat, and carries out a number of energy-saving renovation projects. In response to regional water shortages, the factory has charted a new course with the industry's first case of recycling fluorine-containing wastewater, recycling organic color films and phosphorus-containing wastewater with a biological method, and transforming cooling water circulation from tap water to washing water, which will increase the water recycling rate to 91%.



Reverse osmosis water filtration system

Honors and Awards in 2020

★ Ranked the 88th among Fortune China 500 companies

★ Brand Finance Tech 100

★ BrandZ Top 100 Most Valuable Chinese Brands

★ Sina Finance 2020 Annual Sustainable Development Award

★ 2020 China GoldenBee CSR China Honor Roll • GoldenBee Enterprise Award

★ 13th Chinese Management Model Research Excellence Award

★ 2020 Industrial Beauty Annual Innovation Award

★ Top Employers China 2020

★ Best Practices in Digital Human Resources Management 2020

★ CDP China: Excellent Supplier Performance in Response of Water Security

★ 2019 Special Prize of Beijing Municipal Science and Technology Progress Award -- High-Resolution Flexible Display

★ IFA: Innovative Display Technology Gold Award 2020 -- Flexible OLED

★ SID: Displays of the Year 2020 -- BD Cell

★ The Innovative Display Application Product Award 2019-2020 -- BOE iGallery S3

★ Beijing BOE Health Technology Co., Ltd has been granted the Zhongguancun High-tech Enterprise Certificate, becoming a technology enterprise with the dual certifications of national + Zhongguancun levels

★ Chengdu BOE Hospital was awarded the Outstanding Team in Fighting COVID-19 by Shuangliu District of Chengdu and the Outstanding Team in Fighting COVID-19 by the Sichuan Provincial Hospital Association.

★ Hefei BOE Hospital was granted the honorary title of Hefei Harmonious Labor Relations Demonstration Enterprise.

Expert Opinion



BOE CSR Report 2020 discloses its CSR performance information from the four aspects of governance, technology, society, and environment. With a clear structure and rich data, it systematically displays the Company's annual CSR performance concept, practice and achievement, fully demonstrating BOE's opening-up spirit through continuous communication with stakeholders to enhance the corporate transparency, incessant breakthroughs and innovation, and pursuit of excellence. Based on the industry of its own, BOE makes the city warmer and more energetic through technological innovation, and actively promotes employee to fulfill social responsibility, inspiring the thoughts about CSR. BOE has truly presented integration and symbiosis and aligned principles with actions. This is a CSR report full of sincerity. We look forward to the bright future of BOE, and believe that it will continue to uphold the new development concept, strengthen the path of sustainable development, and lead the intelligent IoT industry to make greater contributions to the sustainable development of China and the world.

Han Bin, Deputy Director of Employer Work Department, China Enterprise Confederation



2020, the year full of unknowns and challenges, witnessed BOE's determination and resilience in shouldering due responsibilities to all stakeholders. As the eleventh CSR report released in a row, the *BOE CSR Report 2020* is as rich and detailed as ever, showing BOE's pragmatic and innovative business attitude, and its sincerity to benefit the public with development results. From the four perspectives of governance, technology, society, and environment, this report is divided into four chapters titled "consolidating development foundation, shaping the smart future, sharing a great life, and pursuing green development", which concisely and powerfully highlights the core of each chapter and reflects BOE's attitude and actions to actively work with stakeholders to create a better future. We hope that in future development, BOE will continue to integrate sustainable development and corporate operations, and further promote the vitality of society through technological innovation.

Yu Zhihong, President and Editor-in-Chief of *China Sustainability Tribute*



CSR is the foundation of an enterprise. Looking at BOE from the CSR perspective, we can better understand the success of this tech company, which has enjoyed a growing business model and boasted global leading technologies. BOE has consistently upheld technological innovation since its establishment in 1993, providing society with rich, high-quality and personalized products and services. With the principles of managing the enterprise with integrity, driving development with innovation, leading green development and creating a better life together, BOE has proven the mission and responsibility of technological innovation in social contribution with concrete actions. The 11th CSR Report fully demonstrates BOE's social responsibility concept and practices with sound management, rich practice, wonderful stories, and high praise. CSR has been deeply integrated into BOE's capability, character and culture in terms of both philosophies and actions. I believe that in the future, BOE will continue the original aspiration and better contribute to the civilization, harmony and progress of society.

Zhang Shaoping, Vice President and Director General of China Committee of Corporate Citizenship, China Association of Social Workers

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