高陽科技(中國)有限公司*
HI SUN TECHNOLOGY (CHINA) LIMITED

(於百慕達註冊成立之有限公司)
(Incorporated in Bermuda with limited liability)

(股份代號 Stock code: 00818)

2019
Environmental, Social and Governance Report
環境、社會及管治報告

* For identification purpose only
僅供識別

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About This Report

Hi Sun Technology (China) Limited ("Hi Sun" or the "Company", together with its subsidiaries, collectively the "Group" or "we") is pleased to present the Environmental, Social and Governance Report for the year of 2019 ("this Report"), for the purpose of summarising our approach and performance in respect of our sustainability efforts the sustainable development in the past year.

Reporting Period and Scope

The reporting period of this Report (the "Reporting Period") is from 1 January 2019 to 31 December 2019. Unless otherwise stated, the scope of this Report covers the major subsidiaries of the Group engaged in the five key businesses, including:

- Payment processing solutions - VBILL OPCO ("VBILL");
- Information security chips and solutions - Megahunt Microelectronics Technology (Beijing) Company Limited ("Megahunt");
- Platform operation solutions - Hunan Hisun Mobile Pay IT Limited ("Hunan Hisun");
- Financial solutions - Beijing Hi Sun Advanced Business Solutions Information Technology Limited ("ABS"); and
- Electronic power meters and solutions - Hangzhou PAX Electronic Technology Limited ("Hangzhou PAX").

Reporting Standards

This Report makes disclosures of the Group's environmental, social and governance performance in accordance with "comply or explain" provisions and recommended disclosures as set out in the Environmental, Social and Governance Reporting Guide ("ESG Guide") in Appendix 27 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited ("HKEx").

Reporting Principles

In accordance with the ESG Guide, this Report has been prepared based on the following four reporting principles:

Principle	Definition	The Group's response
Materiality	The issues covered in this Report should reflect the significant impacts of the Group on the economy, environment and society, or the aspects that affect the assessments and decisions of stakeholders.	Through communication with stakeholders, as well as taking into account the Group's business nature and development, material sustainability issues have been identified.
Quantitative	This Report should disclose key performance indicators that are measurable.	The Group discloses its key environmental and social performance indicators with quantitative measures as far as practicable.
Balance	This Report should present all information of the Group in an objective manner, to reflect the sustainable development performance of the Group.	The Group has identified and disclosed the environmental, social and governance issues that have material impacts on the Group's business in this Report, including its achievements and challenges.
Consistency	The Group should confirm that the method used in preparation of this Report is consistent with that of previous years, or state the revised reporting methods, or illustrate other relevant factors that will affect meaningful comparison.	The reporting scope and reporting method are substantially consistent with those of prior year. This Report also contains year-to-year data for comparision where applicable.

Access to This Report

The board of directors (the "Board") of Hi Sun has reviewed and approved this Report, which is available in both Chinese and English on both the HKEx's website and the Group's website.

Your Opinions

Every opinion from stakeholders is valuable to us. We believe that appropriately taking into account opinions from stakeholders will benefit the Group's business and sustainable development. If you have any comment and suggestion on this Report and our sustainability performance, please feel free to contact us or email to info@hisun.com.hk.

About Hi Sun

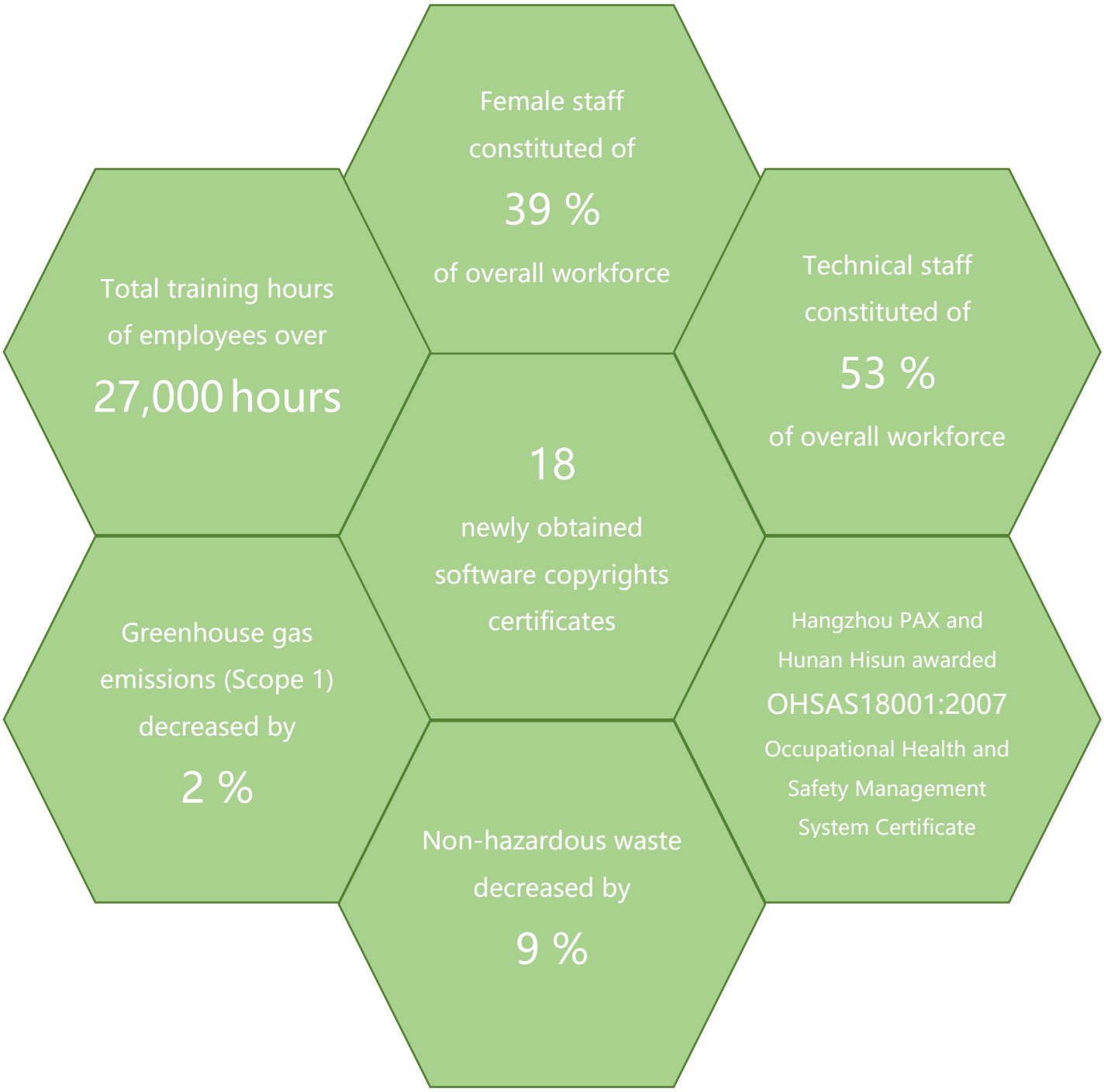
Listed on The Stock Exchange of Hong Kong Limited, Hi Sun is a leading provider of integrated payment, finance and communication system solutions in the People's Republic of China ("PRC"), providing payment processing solutions, financial solutions, electronic power meters and solutions, platform operation solutions and information security chips and solutions to major clients such as merchants, major banks, financial institutions and telecommunications operators, as well as offering payment services, system support, application development, terminal supply and other diversified services to the finance and payment industry chain.

Awards, Honors, Memberships and Certification

The Group	2019 Golden Hong Kong Stocks Awards - Best Small-and-Medium Market Capitalisation Company
	Business Partners - Digital Ecosystem 2019 Top 500
VBILL	01 Caijing (零壹財經) New Finance Annual Conference - Science and Technology Innovation Award
	01 Caijing New Finance Annual Conference – Offline Scene Smart Payment Leader
	Hurun New Finance Report (胡潤新金融百強榜) 2019 – New Finance Top 50
	2019 China Finance Summit Winter Forum- Industry Leading Brand
	Beijing AAA Credit Rating Company
	Beijing Communication Industry Association
	National Trustworthy Enterprise
	Credit Rating Company Certificate
	China Financial Authentication - Technology Certificates
	Beijing Integrity Establishment Enterprise
	Outstanding Corporate in Social Responsibility of the Year

Our Approach to Sustainability

2019 Sustainability Overview



Principles of Sustainable Development

Sustainable development is the core principle for the operations of Hi Sun. We will shoulder corporate social responsibilities at all levels of our business and earnestly implement the policies in the Environmental, Social and Governance Policy on environmental protection, protecting employees' rights, anti-corruption and maintaining business ethics etc. In this way, we expect to continue the creation of long-term values for the Company and our stakeholders, and thus build a better future for the next generation. We promote the sustainable development mainly through the following four dimensions:

Value Created for Employees	Value Created for Customers	Value Created for Environment	Value Created for Community
•Maintain employees' well-being and welfare	•Provide customers with high-quality products and services, continue to innovate, and become a pioneer in the industry	•Promote green operation concepts and reduce greenhouse gas emissions	•Actively participate in community activities and give back to society

Stakeholders' Engagement

Stakeholders' engagement is indispensable when effectively implementing the above principles of sustainable development. Stakeholders' opinions can facilitate the Group's continuous improvement of its operating policies and strategies, and allow us grasp the opportunities in the market. We will reach different stakeholders through one-way or two-way channels to understand their concerns and expectations. Besides, we will consider issues from their perspectives and take their opinions as references for continuous improvement of the Group's business and sustainability performance. The ways we communicate with our stakeholders are as follows:

Employees

- Social media
- CEO mailbox and online message board
- Internal communication platform
- Trainings
- Annual dinner and staff activities

Customers

- Company website and mobile application
- Online customer service
- Opinion survey
- Customer service hotline
- Face-to-face customer support

Shareholders and investors

- Shareholders' meetings and annual general meetings
- Investor relations website
- Non-deal roadshow
- Investor conference and teleconference
- Annual and interim reports

Suppliers and partners

- Site visits
- Regular review
- Product sampling
- Suppliers' websites

Governments and regulators

- Meetings and visits
- Qualification assessment
- Policy consultation
- Disclosures and announcements

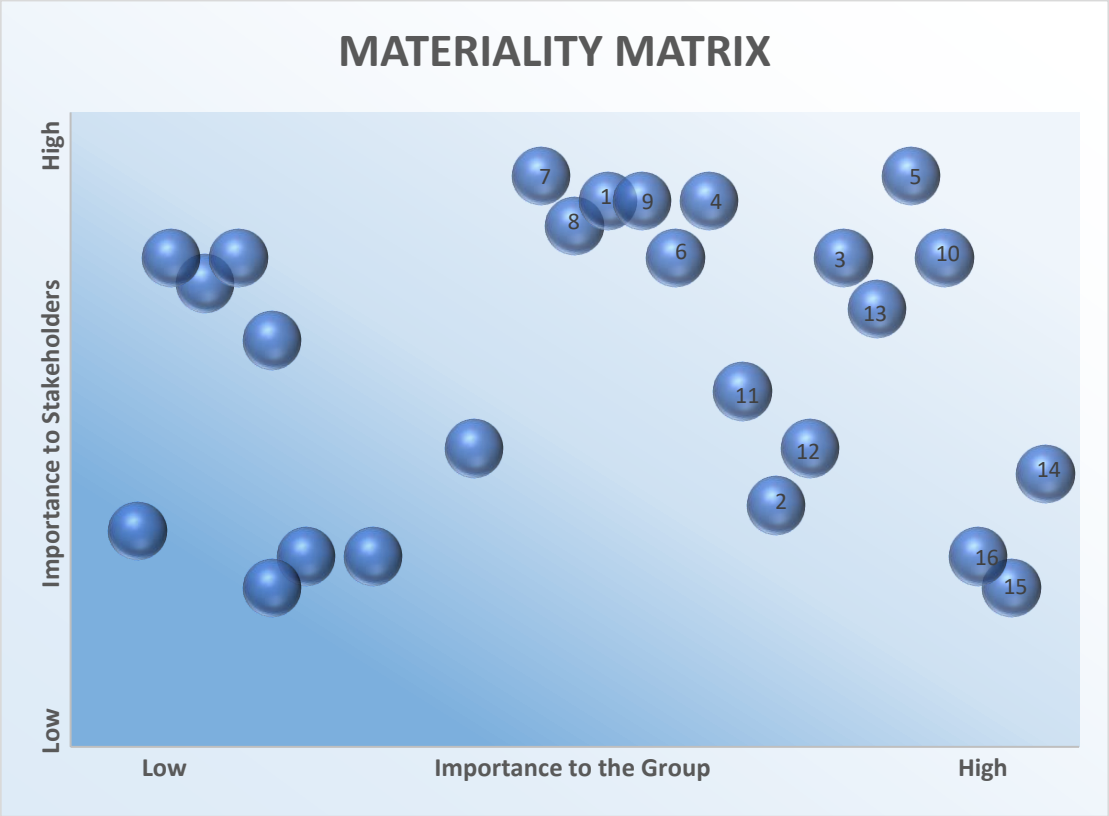
Community and public

- Group's official website
- Internet and traditional media
- Community visits
- Charity activities

Materiality Assessment

In addition to our daily communication, we conducted materiality assessment during the Reporting Period by inviting stakeholders to express their opinions on various environmental, social and governance issues including employee rights, customer protection, corporate governance and social responsibilities through questionnaires. We then conducted analyses based on the collected data to understand the degree of concern of stakeholders and the Company regarding various aspects and identified important ones.

The following materiality matrix lists 16 aspects with the highest degree of concern among stakeholders and as identified by the Group for this materiality assessment, which forms the basis of:



A) Employee rights	1) Employee relations and staff communications 2) Participation of leisure activities 3) Anti-discrimination and equal rights 4) Occupational health and safety 5) Employee benefits and protection 6) Training and development	***C) Corporate governance***	11) Fair operation and competition 12) Anti-corruption and anti-fraud 13) Compliance with laws and regulations
B) Customer protection	7) Reliable products and services 8) Compliance of products and services 9) Internet data and system safety 10) Data and privacy protection	***D) Social responsibility***	14) Energy saving measures 15) Recycling and renewable energy 16) Good use of alternative and sustainable resources

Corporate Governance

Corporate Governance and Supervision

The Board assesses environmental, social and governance risks and opportunities, and ensures that the Group considers issues of concern of its various stakeholders. At the same time, the Board determines the values that are material to the Group, and collects opinions from the various stakeholders through different channels. The Group formulates environmental, social and governance-related control measures to cope with major environmental, social and governance risks, and appropriately applies such control measures to effectively operate its businesses. The Board monitors environmental, social and governance issues and strives to create benefits for stakeholders. For more details on the corporate governance of the Group, please refer to the "Corporate Governance Report" section of the 2019 Annual Report.

Anti-corruption

Hi Sun has always implemented the stringent concept of business ethics and integrity in carrying out its operation. We adopt the principle of "zero" tolerance on all illegal acts such as corruption, bribery, extortion, money laundering and fraud, and strictly abide by the Anti-Unfair Competition Law of the PRC (《中華人民共和國反不正當競爭法》), the Criminal Laws (《刑法》), Interim Provisions on Prohibition of Commercial Bribery (《關於禁止商業賄賂行為的暫行規定》) and other related laws and regulations. To this end, each business segment formulates a series of policies and measures based on such laws and regulations, in order to strengthen internal control, guide employees to identify relevant risks in business operation and take preventive measures. At the same time, employees are encouraged to report and present evidences to the Company if they suspect any cases of violations of laws or regulations or unethical business practices. We are committed to conducting timely investigations and follow-up actions in the most stringent manner to safeguard the corporate governance and integrity of the Group.

As the Group's main business has a close relationship with the financial industry, there will be higher risks of money laundering and terrorist financing. As a result, VBILL established the Anti-money Laundering and Anti-terrorist Financing Internal Control System (《反洗錢和反恐怖融資內部控制制度》) and set up a working group to perform its duties in accordance with the three principles of "lawful prudence, confidentiality and full cooperation", including but not limited to:

- formulate relevant internal control systems and rules;
- establish customer identification system and risk-level management system, verify and record customers' identities and conduct regular verification;
- establish an identification and reporting system regarding suspicious transactions and report such cases in a timely manner;
- keep record of customers' identities and transactions;
- assist in anti-money laundering and anti-terrorist financing investigations;
- offer trainings and promotions to employees and the general public to raise awareness of anti-money laundering and anti-terrorist financing; and
- keep anti-money laundering efforts confidential.

The above systems can ensure that our business is in compliance with the Anti-Money Laundering Law of the PRC (《中華人民共和國反洗錢法》), Administrative Measures for Payment Services of Non-Financial Institutions (《非金融機構支付服務管理辦法》), Administrative Measures for Anti-Money Laundering and Anti-Terrorist Financing of Payment Institutions (《支付機構反洗錢和反恐怖融資管理辦法》), Administrative Measures for Financial Institutions' Reporting of Large-Amount Transactions and Suspicious Transactions (People's Bank of China Order [2016] No. 3) (《金融機構大額交易和可疑交易報告管理辦法》（中國人民銀行令[2016]第 3 號）), Opinions of the General Office of the State Council on Improving the Anti-money Laundering, Anti-Terrorist Financing and Anti-Tax Evasion Supervision Mechanism (《國務院辦公廳關於完善反洗錢、反恐怖融資、反逃稅監管體制機制的意見》) and other regulations and rules.

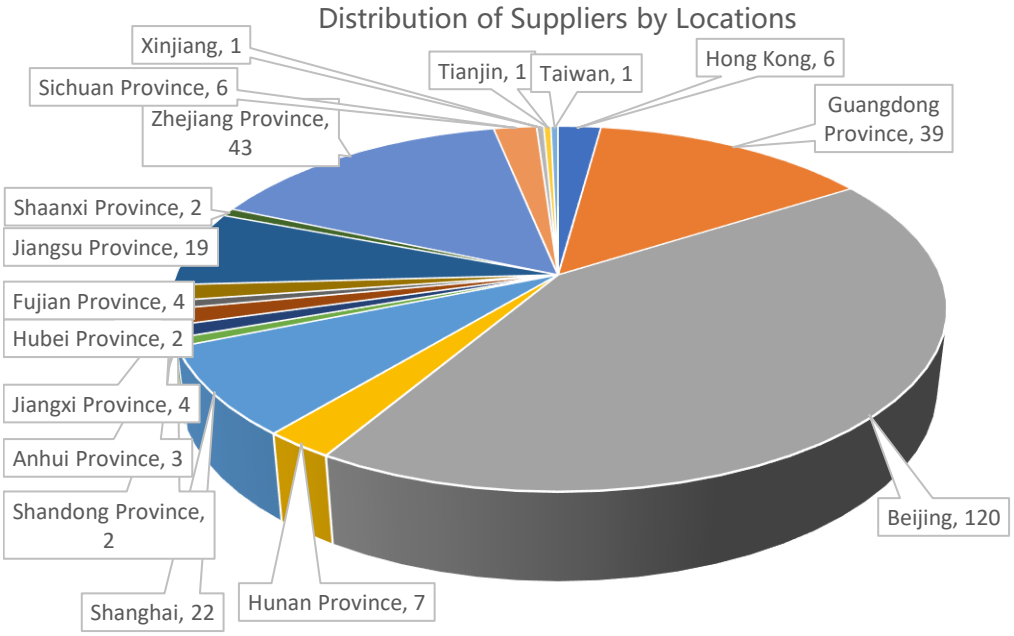
During the Reporting Period, the Group and its employees were not involved in any violation of laws and regulations related to corruption, bribery, extortion, money laundering and fraud.

Anti-money laundering training

During the Reporting Period, VBILL conducted anti-money laundering training for middle and senior management personnel, including management personnel of operation department, risk-control department, compliance department, finance department, brand department, product department and other departments, in order to strengthen their risk prevention and control awareness and thus meet regulatory requirements.

Supply Chain Management

As of 31 December 2019, the Group had a total of 282 suppliers, mainly located in Mainland China, striving to reduce greenhouse gas emissions during product shipments and reduce carbon footprint.

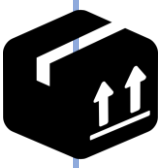


As an industry pioneer, Hi Sun is not only committed to fulfilling its corporate social responsibility, but also hopes to promote the sense of environmental and social responsibility of suppliers and partners through its influence, so as to bring positive impacts to the entire supply chain. As such, we have developed "Suppliers' Code of Conduct" as a guidance for our suppliers in applying sustainable development concepts in their daily operations, including energy conservation and emission reduction, employee rights, anti-corruption, occupational health and safety, and compliance with all applicable business-related laws and regulations to protect mutual interests. As measures to further manage the suppliers' impacts on the environment and society, Megahunt regularly conducts environmental audits on suppliers by evaluating their environmental management performance, including reviewing their relevant management systems, restricting the use of hazardous substances, ensuring the use of raw materials are in compliance with relevant green products environmental regulations or standards, examining test results for environmentally hazardous substances and adopting pollution prevention measures, etc.

We also value the quality of our suppliers' products and services. Each business segment will regularly evaluate and manage suppliers through the following major measures:

Qualification review and on-site inspection of candidate suppliers to ensure that they have acquired appropriate qualifications in order to make proper selection of the most suitable suppliers.

Regular review on suppliers by evaluating their product quality, service quality, technical skills, prices, delivery time and other factors. Suppliers are disqualified unless they make rectifications in time for any major quality accidents or violations are found.



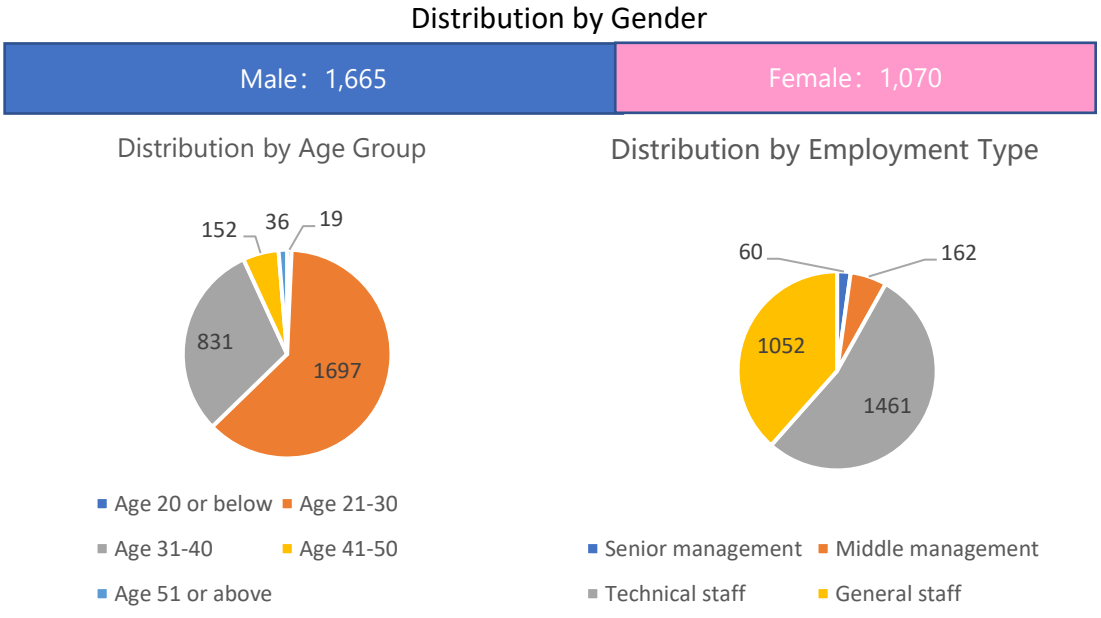
For businesses involving in product manufacturing, sample checks on the finished products of outsourcing contractors, evaluation of product quality, qualification rate and other areas, and maintaining close communication with the contractors to ensure that the product quality meets our standards.

Value Created for Employees

Hi Sun recognises the importance of employees for its sustainable development, and it has been their efforts and dedication which contributes to our achievements. Therefore, we are committed to rewarding employees for their contributions by offering competitive compensation and benefits, building a healthy and safe working environment and establishing comprehensive promotion channels and training systems so as to cultivate outstanding industry professionals. Besides, all employment-related procedures such as recruitment, promotion, dismissal and compensation are performed in compliance with relevant laws and regulations, including but not limited to the Labor Law of the PRC (《中華人民共和國勞動法》), the Law of the PRC on Occupational Disease Prevention and Control (《中華人民共和國職業病防治法》), the Regulations on Prohibition of Child Labor (《禁止童工規定》) and the Labor Contract Law of the PRC (《中華人民共和國勞動合同法》). During the Reporting Period, the Group were not involved in any material breach of employment-related laws and regulations.

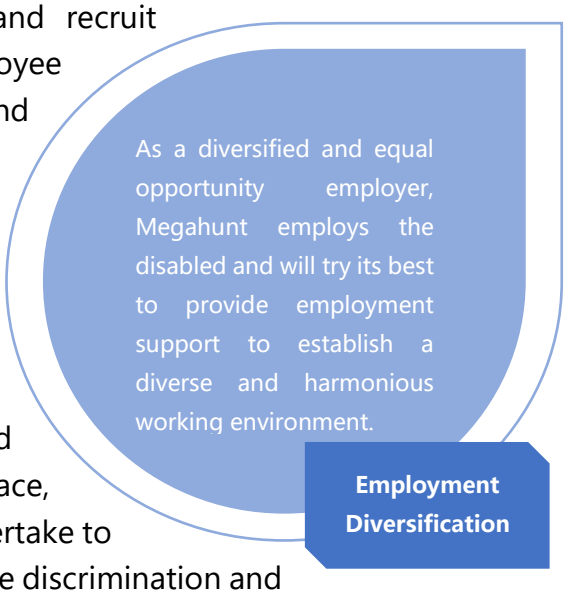
Employees Overview

As of 31 December 2019, the Group had a total of 2,735 employees. The following is the distribution of employees by gender, age and employment type:



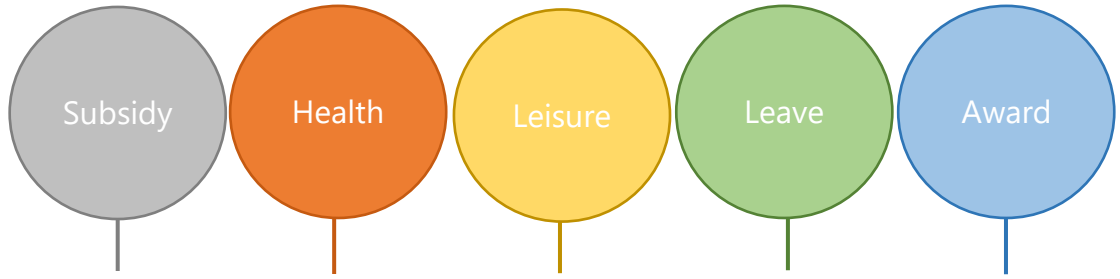
Equal-opportunity Employer

Hi Sun is committed to becoming an ideal employer. We always adhere to the principle of equality and diversity, and recruit through internal transfers, employee referrals, job fairs, online recruitment and other channels. We also participate in campus recruitment from time to time to recruit suitable talents to join us. We focus on applicants' abilities, personal qualities, skills, experience, teamwork and communication skills, rather than their gender, marital and pregnancy status, disability status, race, nationality, religion and belief. We undertake to make every effort to eliminate workplace discrimination and ensure that every employee is treated fairly.



Compensation and Benefits

We are committed to offering our employees with competitive compensations and benefits, and we regularly review the compensation system to ensure that the level of compensation is in line with the market rates. Each business segment will also provide different benefits, including:



Communications allowance, transportation allowance, lunch allowance, offsite allowance, shift allowance, additional meal allowance, social insurance, housing provident fund

Supplementary medical insurance, child insurance, health check

Birthday party, basketball, football, team building, festive celebrations, CNY annual dinner, company trip

Statutory holiday, annual leave, marriage leave, maternity leave, compassionate leave, paternity leave, breastfeeding leave

Excellent supervisor, excellent team, excellent staff

Harmonious Work Culture

In addition to an equal and diverse corporate culture, we also attach great importance to communication between employees and the Company. We will collect and consider employees' opinions in order to keep improving the working environment and enhancing employees' sense of belonging. To this end, we have established two-way communication channels such as emails, CEO's mailbox, employee publications, bulletin boards and online message boards for employees to submit opinions or complaints about the Company. The human resources department also meets with employees every year to learn more about and collect suggestions from employees.

In addition, we also attach great importance to the work-life balance of employees. Each company regularly organises a variety of entertainment and leisure activities including annual dinner, festive celebrations, team building workshops, gathering activities and leisure trips for employees to unite and their enjoyment.

Safe Working Environment

Employees are the most important assets of the Group. Therefore, we will make every effort to provide employees with a healthy and safe working environment, formulate occupational health and safety measures, and abide by the Occupational Disease Prevention Law of the PRC (《中華人民共和國職業病防治法》), the Work Safety Law of the PRC (《中華人民共和國安全生產法》) and other occupational health and safety related laws and regulations. During the reporting period, the Group were not involved any cases or complaints about violating relevant occupational health and safety related laws and regulations.

We have implemented a series of occupational health and safety measures in offices and factories to after comprehensive protection to the employees' the well-being:

- conduct regular fire inspections to ensure fire facilities and equipment are in place and order
- issue safety notices to remind employees of electricity safety, fire safety information
- arrange occupational health and safety trainings on fire safety and health knowledge
- set up anti-static floor and anti-static mats in server rooms and product-testing areas in certain offices. Anti-static measures are in place to prevent employees from being shocked during testing sessions
- conduct power hazard inspections, check for abnormalities or aging conditions in distribution boxes and electrical wiring, and replace aging electrical equipment to prevent the risk of short circuits, power outages or even fire
- develop disaster prevention and emergency plans to prevent and respond to emergencies and protect the lives of employees and property

In addition, Hangzhou PAX and Hunan Hisun have obtained the OHSAS18001: 2007 Occupational Health and Safety Management System Certification, which standardises the safety management of the Group's workplace.

Training and Development

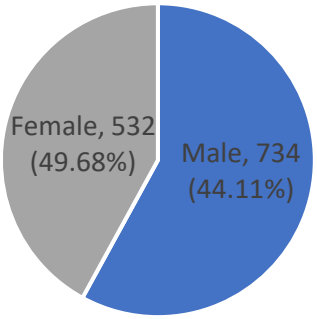
As a technology-based company in the financial and information technology industries, we and our employees need to continuously improve professional skills and knowledge, understand industry trends and keep abreast of market developments for the purpose of our sustainable development.

The Group's training put emphasis on the professional development of employees, while providing training opportunities for employees to improve themselves continuously, and expect them to strive for excellence. Every business segment will formulate training plans every year, arrange various internal and external training courses, seminars, exchange sessions and sharing sessions. These plans encompass training for new recruits and on business knowledge, safety, team-building, laws and regulation and comprehensive quality training, to enable employees to enhance their knowledge continuously and personal quality in order to contribute to the Company's development.

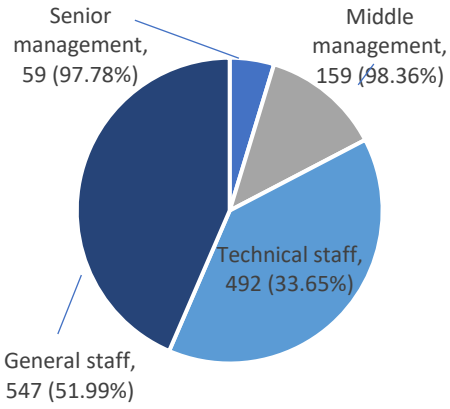
In terms of promotion, we have established good promotion channels, and conduct regular performance assessments in order to access the employees' achievements and evaluate their accomplishments, performance and skills. The assessment results will serve as important basis for employees' promotion and salary adjustment.

During the Reporting Period, our employees' total training hours exceeded 27,000 hours. The followings are the number and percentage of trained employee having received training by gender and employment type, and average training hours by gender, employment type and age group:[1]

Number and % of employees having received training by gender

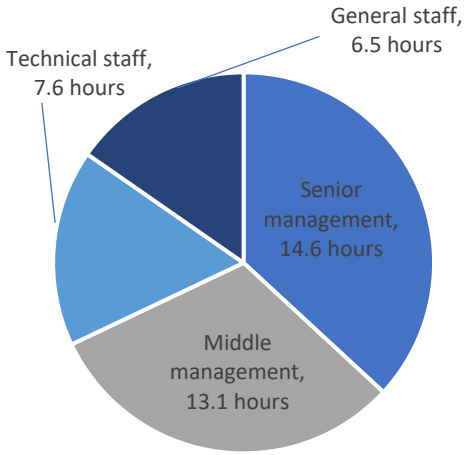


Number and % of employees having received training by employment type

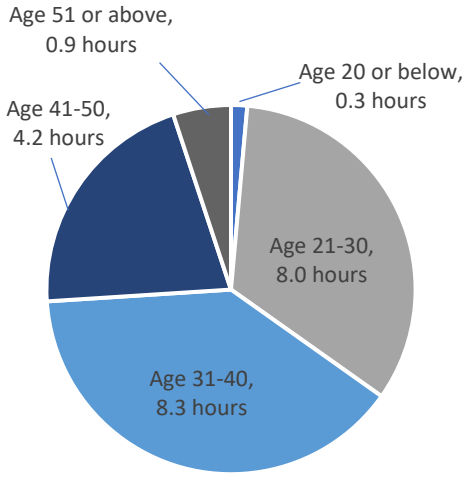


Average training hours by gender

Average training hours by employment type



Average training hours by age group



[1] The training ratios and average training hours during the Reporting Period do not include Hunan Hisun. We will optimise the data collection system to make more compensative disclosure in the coming year.

Promote Communications

In August 2019, ABS held the third "On the Top of Olympic" communication event. As one of the Company's traditional internal exchange activities, 3 day event has a theme of "sharing, exchange and growth". Experts from all branches gathered to share excellent research and development achievements in the past year. This event covered the introduction of overseas business, technical sharing, new products introduction and sharing of excellent business solutions to promote communications between various departments and branches.

Labour Standards

Child labour and forced labour are also major issues for companies. We will endeavor to abide by laws and regulations such as the Labor Law of the PRC (《中華人民共和國勞動法》) and the Prohibition on the Use of Child Labor (《禁止使用童工規定》), and promise to implement the most effective measures to prevent the occurrence of related situations. During the recruitment process, we require new employees to submit identification documents when they report duty to ensure that they have reached the legal working age. Once any child labour who is below the legal employment age is identified, we will remove the staff from the workplace in a timely manner to ensure their safety, and identify loopholes in the recruitment process and take improvement measures. In addition, the Group's policies and measures on working hours, leaves and overtime work are sent out in the Employee Handbook and made available on related human resources systems to avoid forced labour.

Value Created for Customers

We have always been committed to focus on the quality of products and services provided with the most professional knowledge, the latest technology and the sincerest attitude, in order to bring advanced and convenient integrated payment, financial and communication systems to customers and the general public.

During the Reporting Period, the Group did not violate any laws and regulations that had material imports to the Group, including the Advertising Law of the PRC (《中華人民共和國廣告法》), the Patent Law of the PRC (《中華人民共和國專利法》) and the Copyright Law of the PRC (《中華人民共和國著作權法》).

Payment Processing Solutions

The Group's payment processing solution business is a national high-tech enterprise company, providing services such as offline acquiring, mobile payment, internet payment, cross-border payment, QR code payment and even financial wealth management loans to merchants. With our stable and reliable transaction system and diversified merchant-oriented payment application solutions and products apart from being offered membership of the Payments and Clearing Association of China, we have also become a national leading third-party payment company, in cooperation with more than 3.5 million merchants with an annual transaction value exceeding RMB 1 trillion.

Due to our business nature, we have obtained the requisite licenses and qualifications for various payment businesses to ensure legal and compliant operations, including:

- National Bank Card Acquiring License
- Mobile Phone Payment License
- Internet Payment License
- RMB cross-border payment qualification
- Qualification for online and offline microloans

Operation Management

During daily operations, payment transaction systems may be subject to various risks, including internal control irregularities (such as abrupt increases in transaction amount, malicious refund, non-business hour transactions and excessive number of failed transactions) and early warnings from external institutions (such as various bank errors, warnings from banks, UnionPay, Payments and Clearing Association of China and other external institutions or requests for investigation assistance).To manage and prevent these risks effectively, we have formulated the Comprehensive Risk Management Measures, which guides employees to identify and analyze risks, assess risk levels and implement corresponding countermeasures.

When sourcing new merchants, we will first conduct due diligence on and assess the target merchants through telephone communication, carrying out on-site inspections, enquiry with relevant agencies or government departments to understand their business and license status. Then we will evaluate merchants to ensure that their business conditions are absent of abnormalities. After signing a contract with a merchant, in order to prevent risks at the merchant level, merchants with bad records newly engaged merchants and high-risk merchants, such as merchants selling readily realisable goods, having previous suspicious transaction records, involved in suspicious transactions, suspected fraudulent transactions or offering assistance to cardholders in cashing will be inspected to check their equipment usage, inspect suspicious transaction documents, understand their daily operations, examine the conditions of mobile payment terminal equipment, and monitor suspicious transactions. If relevant risks are found, we will implement corresponding measures according to the risk level including closing specific functions, freezing merchants, suspending POS transactions, withholding payments, deferring settlement, adjusting limits and risk coordination, in order to avoid unnecessary losses and protect the interests of the Company, merchants and the public.

On the other hand, the payment transaction business processes a large number of merchant transaction data every day. To ensure data security, we have set up the Emergency Response Plan and the Emergency Response Exercise Plan to establish preventive and response measures for business system interruptions and equipment room's failure to enhance employees' ability to handle emergencies and ensure systems, operations and data safety. According to the Emergency Response Plan, if an event is assessed as a catastrophic event and results in the operation failure of the business system, we will transmit the core data of the main server room with the core database synchronise in the disaster recovery centre in real time for data backup and ensuring preservation of all business and transaction data. In addition, we use multiple security devices, including external network firewall, external network Distributed Denial of Service (DDoS) device, Intrusion Prevention System (IPS) device, Web Application Firewall (WAF) device, database firewall and bank access zone firewall, to prevent the systems from being invaded and ensure data security. In order to further enhance the data security awareness of relevant personnel, we will arrange related training and drills every year, and will also regularly maintain and update our systems.

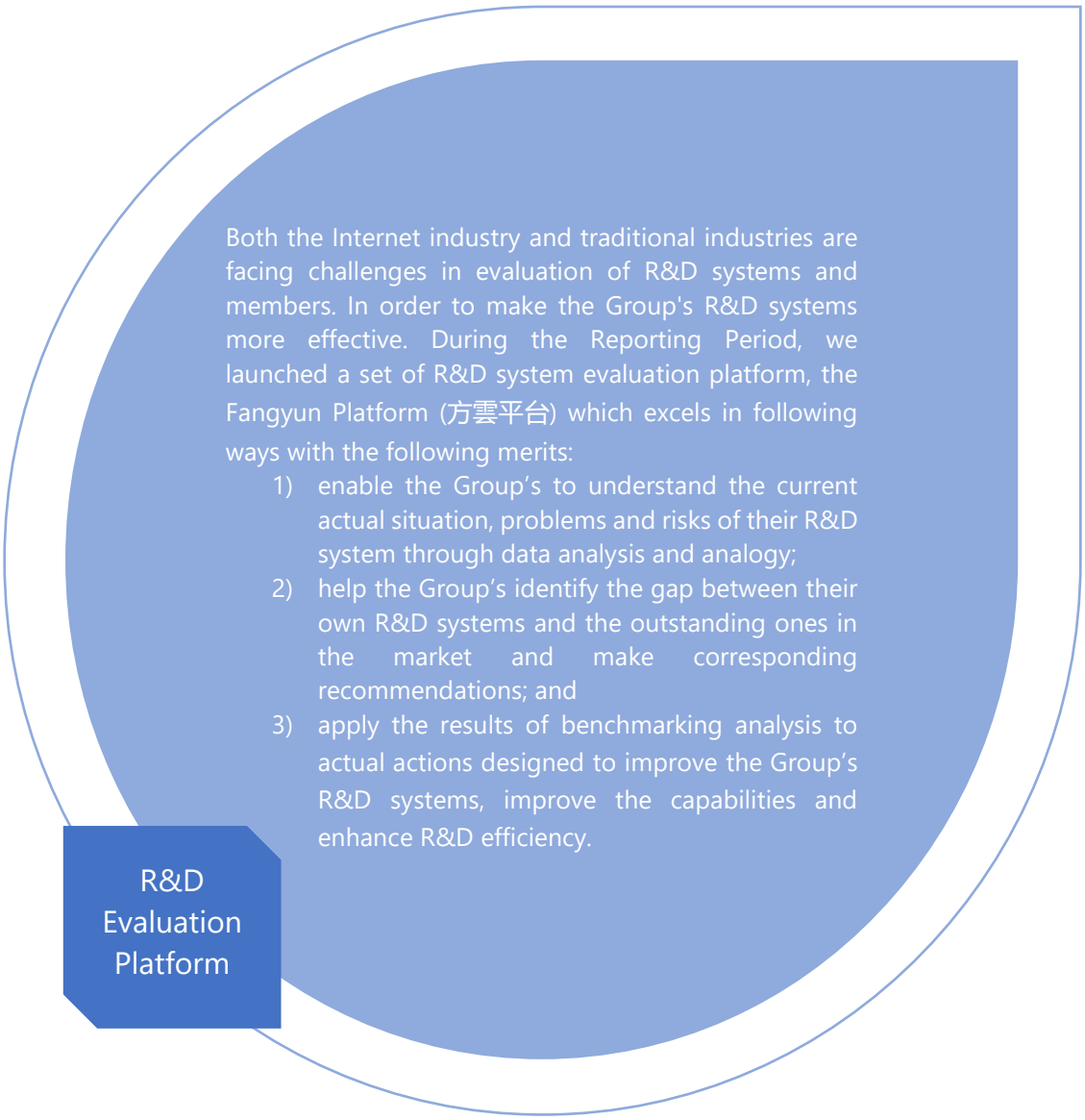
Quality Service

In addition to the management of daily operations, we also attach great importance to the quality of services. We require operating personnel to adhere to the concept of "pragmatic, timely, effective, enthusiastic and patient", always listen to customers and respond to customers' needs. We strengthen the after-sales service management through the Customer Complaint Management Mechanism. If customers have any inquiry or complaint, they can contact customer service personnel through telephone hotline, WeChat online customer services, official website and VBILL's payment application. The mechanism have set time limits for handling different complaints, and the processing time for general complaints, serious complaints and major complaints shall not exceed 3 working days, 2 working days and 4 hours respectively.

Moreover, our customer service personnel will arrange trainings according to the needs to appraise merchants of basic knowledge, business acceptance, terminal operations, account processing, risk prevention and other information. Every year, we conduct telephone or on-site inspections based on the merchant transaction conditions, business scale, operating conditions and risks. The inspections cover trainings for cashier, credit card operation process, conditions of appliances, business conditions of merchants, transaction authenticity and transactions abnormalities, in order to ensure both the appliances and merchants are operating normally. In general, we require customer service personnel to conduct on-site or telephone inspections of all special merchants at least once every six months.

R&D and Innovation

To sustain our position in the industry and maintain diversified payment transaction products and services, we believe continuous research and development ("R&D") and innovation are essential. We invest sufficient and stable resources every year to support R&D personnel in researching new technologies and products, in order to meet the changing market needs and to promote the industry's ongoing development. As of 31 December 2019, our R&D team has obtained 88 software copyright certifications and 4 patents.


Both the Internet industry and traditional industries are facing challenges in evaluation of R&D systems and members. In order to make the Group's R&D systems more effective. During the Reporting Period, we launched a set of R&D system evaluation platform, the Fangyun Platform (方雲平台) which excels in following ways with the following merits:
1) enable the Group's to understand the current actual situation, problems and risks of their R&D system through data analysis and analogy;
2) help the Group's identify the gap between their own R&D systems and the outstanding ones in the market and make corresponding recommendations; and
3) apply the results of benchmarking analysis to actual actions designed to improve the Group's R&D systems, improve the capabilities and enhance R&D efficiency.
R&D Evaluation Platform

Information Security Chips and Solutions

The information security chips and solutions business of the Group specialises in the R&D and sales of system grade chips and main clients are payment industry enterprises. We have now obtained the certification of national high-tech enterprise, Zhongguancun（中關村）high-tech enterprise and the Integrated Circuit Design Enterprise（集成電路設計企業認定證書), the Certificate of a Designated Manufacturer of Commercial Cryptographic Products (商用密碼產品生產定點單位證書), Software Enterprise certification and other certifications. We are currently one of the leading POS chip suppliers in the PRC, and committed to promoting the development of PRC chip industry.

One of the business's principal products is the MH1901 chip. Equipped with a secure core processor with built-in hardware security encryption module which supports a variety of encryption security algorithms, and complies with financial security equipment standards, it provides customers security and energy-saving for their financial security equipment, mobile security equipment, and provides other security equipment product. During the Reporting Period, we obtained 4 new patents and software copyright certifications.

Product Quality

The R&D process of project of the information security chips and solutions business mainly includes:

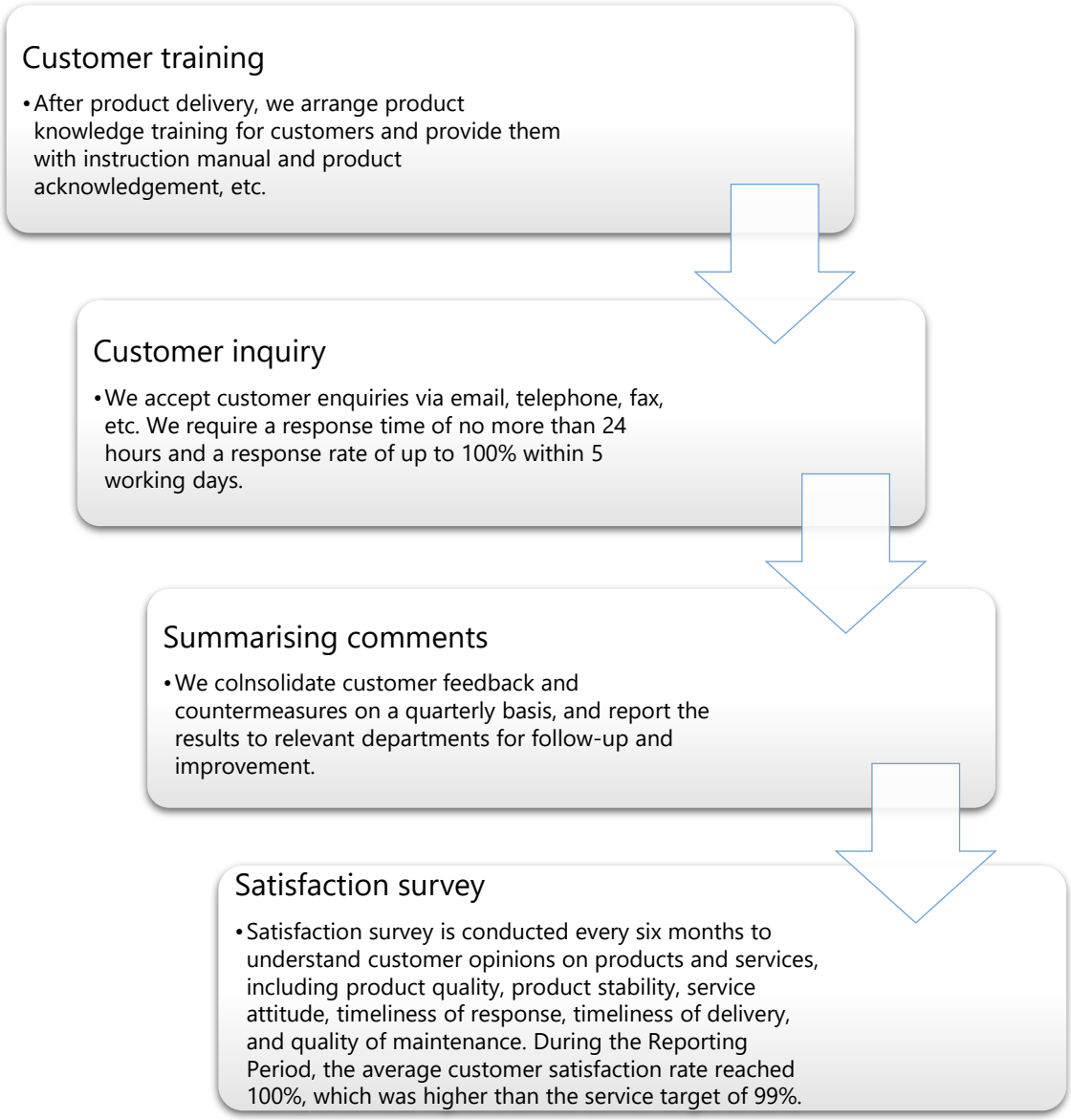
In order to provide customers with the best and safest chip products, we have adopted strict and comprehensive checks on product quality during the development, testing and purchase processes, including:

	Conduct tests on the function, performance and reliability of the chip. Testing items include power consumption, voltage, leakage test, compatibility, card speed, etc. The chip's heat and cold resistance level will also be tested.
	As our business does not involve manufacturing, we mainly rely on outsourcing contractors for production. We will require them to test finished products, provide test reports and record the ratio of defective products for follow-up.
	After the product has been purchased, our production and testing team will perform tests according to the standards of the Test Specification, including short circuit, current, driving capacity, frequency, voltage, etc., to ensure that the product meets quality standards for sales.
	Formulate Non-Conforming Product Control Procedures. If any non-conforming product is found during the quality control process, we will immediately notify the personnel of the technical department and the production department to investigate and identify the affected areas, including customers and inventory, and formulate corresponding countermeasures such as isolating affected products and customer returns.
	If there is a problem with the product at the client's end, we will conduct inspection according to customers' needs, and formulate rectification measures record the timely problem, causes and measures in the quality investigation report.

To ensure the security of the chip, our products have obtained multiple security certifications, including the security level two of the GM/T0008-2012 "Security Chip Password Detection Standards"（《安全芯片密碼檢測準則》）and passed the security audit of Brightsight, a leading international security assessment agency.

Service Quality

In addition to product quality, we are also committed to providing our customers with excellent services to strengthen our market leadership. We communicate with our customers and collect their opinions in the following ways:



Protect Information

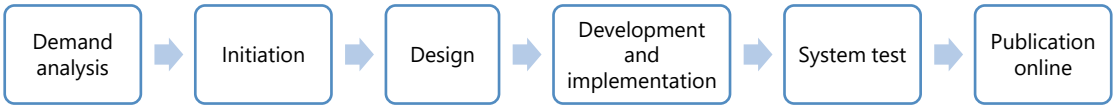
In order to protect the information and R&D data and to ensure the security of such information, employees shall follow the procedures outlined in the Installation Operation Manual when performing computer operations, including the installation of security software. Such software ensures the R&D data \turns into garbled data and becomes illeligible to a third party when leaked, hence protecting the R&D data and information during research and development. In addition, new employees are required to sign Confidentiality Agreement upon entry, to ensure that they will not disclose important information to third parties without authorisation. Information security training are also arranged for them to enhance their awareness of confidentiality.

Platform Operation Solutions

The platform operation solutions business of the Group is an e-commerce and mobile Internet company, which is a state-recognised high-tech enterprise, having obtained ISO9001: 2015 Quality Management System certification, Information System Integration and Service Level 2 (二級信息系統集成及服務資質), Computer Information System Integration Level 2 Enterprise (計算機信息系統集成二級企業) and other certifications, providing product technology operation services for payment, communication and financial industries. Our business and China Mobile E-commerce Co., Ltd ("China Mobile") jointly built and operated CM Pay Platform (和包), have a comprehensive mobile platform that integrates multiple services such as finance, telecommunications, smart cards and payment products. Currently, we mainly provide a full range of operational support services for "CM Pay", including daily development and maintenance service and customer service.

R&D and Project Quality

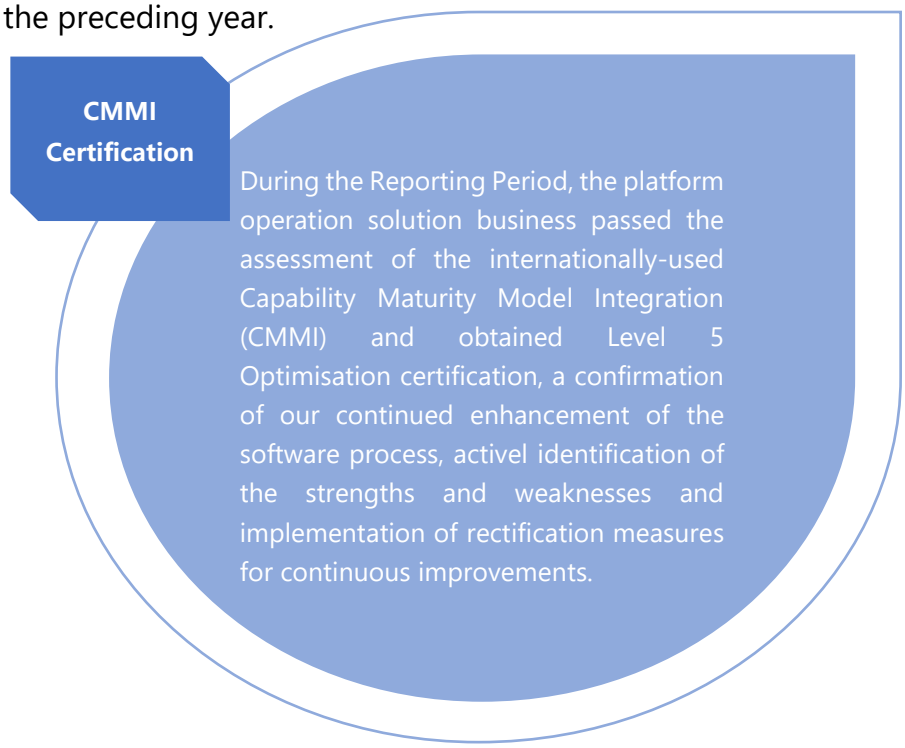
We carry out research and development projects according to customer needs. In general, stages of the procedures can be divided into:



In order to properly monitor and control the quality of the R&D process, we have formulated a number of quality control procedures to manage the main process, quality assurance, review, configuration management, project management and other areas. It is required that R&D and quality assurance personnel should strictly follow the prescribed procedural standards during R&D, testing and review to ensure the quality and smoothness throughout the entire process.

We standardise the project quality through Quality Assurance Procedures, which stipulates that quality assurance checklist must be developed once a project is launched and there should be not less than one quality assurance inspection to examine the project plan, products, weekly reports, review reports, and record the issues identified and report back to the department head regularly to make appropriate improvement plans in every stage in the R&D process. In addition, the R&D team will perform a number of tests, including unit tests, system integration (SIT) tests, and user acceptance (UAT) tests, to identify problems and defects, and perform repair and retests, to ensure project quality and make sure that the project would be but into production.

Regarding its main business CM Pay platform, we have maintained two-way communication closely with China Mobile, for example regular meetings, daily meetings, monthly meetings, and daily phone communications, to understand customer needs in a timely manner, give feedback and improve. To further ensure project quality, China Mobile will conduct monthly quality assessments on the CM Pay platform project, where assessments indicators include quality of customer service operations, business process management, product operation management, marketing activities, and application cooperation, with 100 being the full score. During the Reporting Period, the evaluation result of the "CM Pay" platform application software optimisation and improvement project of the platform reached an average score of 99.74, while its system maintenance service reached an average score of 99.63, which was higher that 99.50 in the preceding year.



R&D Results

As a national high-tech enterprise, we have continued to invest a lot of resources to develop new R&D projects for the platform operation solutions business to meet the increasing customers needs. As at 31 December 2019, we have obtained a total of 50 software copyrights covering mobile payment, invoicing, top-up, electronic coupons, data analysis and other software.

In order to continuously improve the functions of the CM Pay platform, we launched two new systems, Parents and Children Platform and Diagnosis and Treatment Payment during the Reporting Period, as a way to widen the customer source, make users' life more convenient, and cater their living needs.

- Parents and Children Platform system:
  - Presenting interesting short videos
  - Baby Class: a learning zone for children
  - Mom Class: professional parenting knowledge for mothers
  - Holding online and offline activities such as lotteries and quizzes

- Diagnosis and Treatment Payment system providing users a more convenient medical treatment payment experience:
  - Hospital management
  - Medical card management
  - Real-time inquiries of prescription information
  - Prescription payment
  - Multi-channel transactions
  - Transaction record query

Data and Information Security

Protecting data and information security has always been our focus. Our platform operation solutions business has obtained the Information Security Management System certification (GB/T 22080-2016/ISO/IEC 27001:2013), for information security management activities related to application software development, operation and maintenance and operation services. We also obtained the First-Level Capability Requirement certification of Communication Network Security Service Capability Assessment Certificate (通信網絡安全服務能力評定證書) issued by China Communications Enterprise Association and the Information Technology Service Operation and Maintenance Standard Compliance certificate (信息技術服務運行維護標準符合性證書), confirming our effort in ensuring information security. We have established a sound internal risk control mechanism and strengthened the network information protection by encrypting sensitive information, including user data, ID numbers, passwords, bank securities fund account information, location information, and making a complete backup. Other measures include:

- Daily inspections of network equipment, such as routers, firewalls, switches, etc. to ensure their smooth operation;
- Conduct data backup on a monthly basis;
- Prior authorisation for access to server room;
- Regular scan on the network security vulnerabilities and system vulnerabilities for major devices on the network;
- Identification of faults and remedy in time;
- Two-way authentication to ensure transmission security; and
- Utilising a three-level key management system and encryption mechanism, with a password management platform being set up between the hardware cryptographic devices of the application system and the cryptographic device. Password equipment and mechanism are integrated to ensure the end-to-end transaction security of the system.

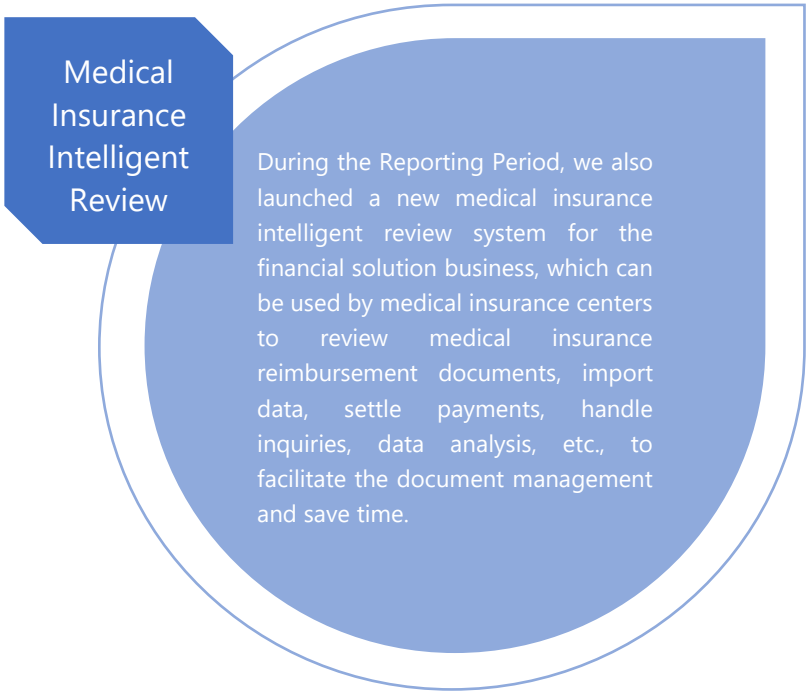
Financial Solutions

Our financial solutions business is a leading information technology service enterprise in the industry, focusing on providing management, products, information technology consulting and services for the financial industry, covering all-round services from consulting services to solution design and implementation. Our long-term partners include the five largest state-owned commercial banks, other commercial banks, asset management companies, insurance companies, securities companies, fund companies and many other fields. With the corporate ideal, "Creating Quality-first Excellence", we are committed to providing our customers with the best information system consulting, integration and operation services and information technology products. We have obtained ISO9001:2015 Quality Management System, CMMI (Capability Maturity Model Integration) Level 3 certification of the Software Engineering Institute and Level 2 certification of the Computer System Integration Qualification of the China Information Technology Industry Federation etc.

Service Innovation

As an influential company in the industry, we continue to invest resources in developing the most advanced and high-quality technologies and products to meet the changing market needs. As of 31 December 2019, we have obtained a total of 78 software copyrights, out of which one was newly obtained during the Reporting Period.

During the Reporting Period, we launched a new credit management system, HiSun @ CMS, to manage, evaluate, and conduct credit business with financial enterprises such as finance companies. This system can quickly build a comprehensive technical framework for financial services capabilities, including a multi-layered system of channels, services and procedures, products, and transactions, providing application services for liquidity loans, fixed asset loans, discounts and entrusted loans, as well as the recovery and management of credit business. It can also provide parameter configuration and extended development, adding product features and attributes to basic financial products, such as price, service and channels, therefore achieving new financial product innovation.
Credit Management System


Medical Insurance Intelligent Review
During the Reporting Period, we also launched a new medical insurance intelligent review system for the financial solution business, which can be used by medical insurance centers to review medical insurance reimbursement documents, import data, settle payments, handle inquiries, data analysis, etc., to facilitate the document management and save time.

Customer Service

We always maintain close communication with our customers and respond in a timely manner. If customers have any enquiries or complaints, they can raise by phone, email, on-site or website. Customer service personnel will direct the same to the relevant responsible department on the same day, follow-up with the customers within two working days, and notify the complainant of the preliminary handling results and the rectification plans within three working days. In addition, we will also collect the customer satisfaction rates on the project through Project Stage Acceptance Report or Customer Service Record Form.

In order to fully understand the needs of customers and enhance the quality of products and services, we will, on an annual basis, invite customers from maintenance and development projects to complete questionnaires for obtaining their satisfaction rating in terms of our project progress, service goal realisation, project staff efficiency, work attitude, technical level, problem handling effectiveness, etc. The overall customer satisfaction for the Reporting Period reached 90%.

Quality Management

In order to effectively control product quality, we have formulated the Quality Manual in accordance with the requirements of ISO9001:2015 Quality Management System, familiarizing the employees with the quality policy and goals for employees to strict adherene to, in order to continuously improve product development and customer service processes, and enhance the customer satisfaction.

The research and development staff will control the product quality during the development process according to the Project Quality Management Standards, which sets out technical index standards, test requirements, product submission requirements, internal and external project review content as a frame work for staff. For project testing, the Project Quality Management Standards covers unit testing, integration testing, and user acceptance testing, to ensure the product quality in all aspects.

In order to improve the quality of projects and the overall operation of the Company, every year, we formulate various quality targets, covering customer satisfaction, complaint handling rate, operation success rate of software development and system integration project, customer complaint or suggestion handling rate. All departments would strictly work towards these targets to improve daily operations. We conduct annual assessments through customer satisfaction surveys, project acceptance reports and handling system failure rates to assess the achievement of quality goals. During the Reporting Period, the Company's overall quality objectives were achieved, including a 90% customer satisfaction rate, 100% customer complaint handling rate and 100% success rate of software development and system integration projects.

Information Security

We mainly provide core banking systems and financial solutions for major banks and financial institutions. The systems are involved with the transmission of a large amount of customer data, banking and financial information. To prevent the systems from being attacked or invaded, resulting in information leakage and theft, we have established an information security system, identifying the person in charge of information security and corresponding duties, and implemented multiple security measures to ensure data and network security, including but not limited to:

- Set up firewalls and install anti-virus software to ensure the normal operation of servers and websites;
- Keep server logs well, save system operation logs and user logging functions for more than 60 days, including IP addresses and usage;
- Establish a dual-machine hot backup mechanism in the service system. Once the main system encounters a failure or is under attack and fails to operate normally, the backup system can be used to replace it in time;
- Set access rights for server and website;
- All information on the website must be reviewed and approved by the senior management before publication; and
- Develop security education and training systems, strengthen users' awareness of network security, and avoid contacting and disseminating harmful information or web pages to meet the requirements of relevant laws and regulations.

Electronic Power Meters and Solutions

The electronic power meters and solutions business of the Group is a national high-tech enterprise, focusing on the research and development, production and sales of electronic power meters, which mainly include single-phase/third-phase electronic power meters, acquisition equipment products and system software products. Maintaining high-quality products and services is the core of our business. We have obtained ISO9001:2015 Quality Management System certification, and have carried out research and development, manufacturing, testing and sales in strict accordance with the general requirements of such management system, ISO10012 Measurement Management System and the testing and calibration laboratory capabilities of IEC17025-2005 to ensure our products fulfil national standards and industry requirements, and meet the customer needs.

R&D Quality

As an industry-leading technology company, we have invested a lot of resources to support research and development of the electronic power meters and solutions business, and will keep launching new research and development projects based on market demand and the current conditions of the Company's products. During the Reporting Period, an additional 6 software copyrights, and a total of 50 software copyright certifications and 16 valid patents have been obtained. In order to protect the efforts of the R&D team, we strictly follow the Intellectual Property Law of the PRC (《中華人民共和國知識產權法》), and other relevant laws and regulations, to prepare Patent Application Working Guide for our employees to follow in terms of the procedures, required documents and standards of applying for patents such as invention patents, utility model patents, and appearance patents.

In addition to supporting R&D and innovations, we also attach great importance to the management of the R&D process. Through The Management System of Research and Development, we strive to ensure the product quality throughout the entire process, by providing guidelines and standards applicable to every stage of an R&D project, from concept stage, planning and design stage, development and testing stage, verification and release stage to even closing stage. During research and development, our R&D team will regularly hold project meetings, decision review meetings, technical review meetings and temporary meetings. They will also prepare weekly project reports to follow up on project progress, identify product problem, and make rectifications in a timely manner.

Product Quality

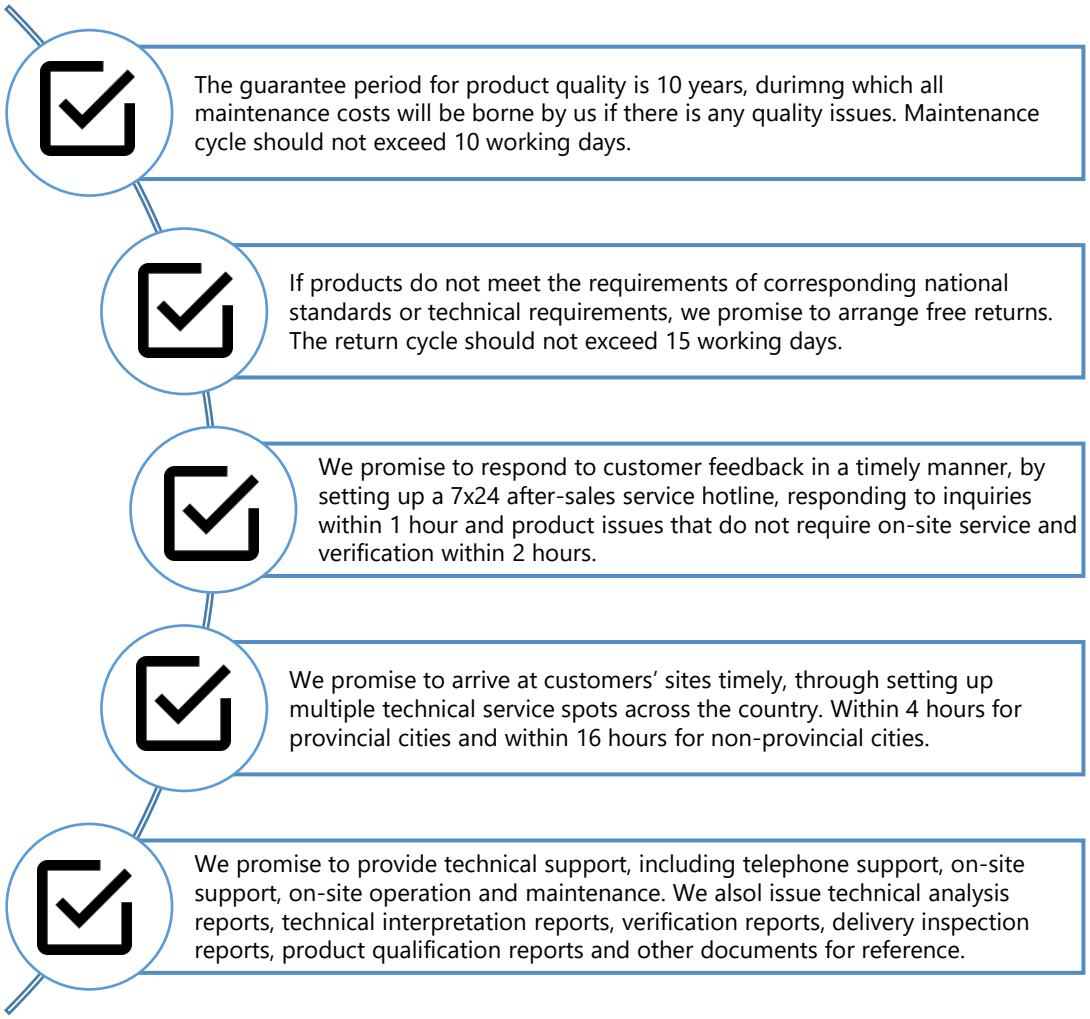
Maintaining product quality is a priority for our business. We have adopted a number of quality control measures to comprehensively monitor product quality during the R&D stage, purchase stage, production process, delivery stage, or even after-sale stage. Our products meet the requirements of the Metrology Law of the PRC (《中華人民共和國計量法》), Electricity Metering Equipment (AC) Particular Requirements (GB /T17215.352-2009/IEC62053-52:2005) (《交流電測量設備特殊要求》), Specifications of Third phase Intelligent Electronic Power Meter (Q/GDW 356-2009) (《三相智能電能表型式規範》), Specifications of Single phase Intelligent Electronic Power Meter (Q/GDW 355-2009) (《單相智能電能表型式規範》) and other standards relevant to the quality and safety of electronic power meters products.

The workflow for product quality control, from R&D, purchase, progress, routine review, delivery to after sales is set out as below:

R&D
We will conduct unit, integration, model and performance tests of the products under research and development to ensure that the products comply with national and industry standards and customer requirements.
Purchase
For raw materials or products provided by suppliers, we will carry out a full inspection or sample inspection based on their categorisation. Sample inspection procedures are performed in accordance with the Counting and Sampling Inspection Procedures (《計數抽樣檢驗程序》) (GB / T2828) on the appearance, performance and functions. We also carry out regular spot checks on products from the outsourcing contractors.
Progress
The new product or the first product of the batch will be inspected, and regular inspections will be conducted during production on the practice of the operating personnel and the operating procedures at each process.
Routine review
For products certified by the China Quality Certification Center (CQC), we will conduct routine and confirmation inspections at the final production stage. For routine inspection, we will check the appearance, relays and parameters. Only products passing inspection will be packaged and affixed with a certificate of conformity. If there is any non-conforming product, it will be dealt with and re-inspected according to the Defective Product Output Control Procedures. For confirmation inspection, a laboratory authorised by the CQC is selected for conducting sample inspection. If any non-conforming product is found, such product will be temporarily suspended from production and sales, and corrective measures will be taken. In addition, we carry out annual confirmation inspections for key components such as transformers, relays and chips.
Delivery
In order to ensure that the product meets customers' requirements for specifications, performance, functions, etc., and also complies with meets relevant laws, regulations as well as industries, national and international standards, we will check its appearance, parameters, functions, accuracy, and restoration status. Conforming and non-conforming batches are classified, and corrective measures are taken in time for the non-conforming products.
After sales
We will record the quality problems of all products for three years, including data concerning product operation, user repairs, batch failures etc., and establish a product quality database to find out causes and formulate rectification measures to improve product quality.

Service Quality

We also attach great importance to the quality of after-sales service. To this end, we have specifically formulated a number of service commitments to maintain service quality and ensure that customers are satisfied with the quality of our products and services, including:



In addition, we will invite major customers every year to fill out the Customer Satisfaction Survey Form to obtain their satisfaction rating and opinions on product functions, quality, technical capabilities of customer service personnel, and service attitude.

Privacy and Intellectual Property

The Group strictly promise its confidential information, trade secrets and R&D efforts, employees and customers' personal and confidential information, and strictly prohibits all forms of unauthorised disclosure of the same. We also sign Non-Disclosure Agreement with some business partners and customers to prevent leakage of R&D information, data, programs, trade secrets, customer personal information and other confidential information to the largest extent to protect the interests of the Group and customers.

The Group allocates great deal of resources in our businesses. In order to protect the efforts of our R&D teams, we apply for patent and copyright certification for our R&D achievements in accordance with the Patent Law of the PRC (《中華人民共和國專利法》) and Copyright Law of the PRC (《中華人民共和國著作權法》) and other applicable laws and regulations.

Advertising and Labelling

When promoting products and services, the Group strictly complies with the Advertising Law of the PRC (《中華人民共和國廣告法》) and other applicable laws and regulations to check the authenticity of promotion content to ensure that it does not contain messages that mislead consumers.

In terms of product labels, we will review the label content before product delivery to ensure that label designs comply with national standards and content authenticity.

Value Created for Environment

Hi Sun understands that our daily business operation may impose impacts on the environment, hence we strive to integrate the concept of sustainable development into business operations and decision-making processes. We identify and monitor emissions and resource utilisation of various businesses, while abiding by environmental protection-related laws and regulations, including but not limited to the Environmental Protection Law of the PRC (《中華人民共和國環境保護法》), the Law of the PRC on the Prevention and Control of Environmental Pollution by Solid Waste (《固體廢物污染環境防治法》), the Water Pollution Prevention and Control Law of the PRC (《中華人民共和國水污染防治法》), the Law of the PRC on Prevention and Control of Air Pollution (《中華人民共和國大氣污染防治法》, the Law of the PRC on Prevention and Control of Pollution from Environmental Noise (《中華人民共和國環境噪聲污染防治法》), etc., in order to formulate relevant relevant environmental protection policies, implement energy conservation and emission reduction measures, and minimise the carbon footprint of the Group, striving to achieve a balance between our business development and environmental protection. During the Reporting Period, we did not violate any environmental laws and regulations.

Energy, Air and Greenhouse Gas Emissions

Based on our business needs, the energy consumption, exhaust gas and greenhouse gas emissions of the Group during the Reporting Period are mainly derived from purchased electricity for daily operations of offices and factories and the fuel consumed by vehicles.

The followings are the exhaust gas and greenhouse gas ("GHG") emissions of the Group during the Reporting Period and 2018:

	Unit	2019	2018
Emissions			
Air emissions			
Nitrogen Oxides (NO_X)	kg	32.41	24.15
Sulphur Oxides (SO_X)	kg	0.57	0.58
Particulate Matter (PM)	kg	2.65	1.92
Total GHG emissions[2]	tonnes of CO2e	1,450.46	1,325.16
Direct emissions (Scope 1)	tonnes of CO2e	102.97	105.27
Indirect emissions ((Scope 2)	tonnes of CO2e	1,343.49	1,219.89
Total GHG emissions per floor area (Scope 1&2)	tonnes of CO2e/sq. meter	0.05	0.06
Energy			
Total energy consumption	MWh	2,190.94	2,049.83
Purchased electricity	MWh	1,838.10	1,688.93
Diesel oil	MWh	3.31	11.02
Unleaded petrol	MWh	349.53	349.88
Total energy consumption per floor area	MWh/sq. meter	82.91	86.36

[2] According to the GHG Protocol Corporate Accounting and Reporting Standard (revised edition) issued by World Business Council For Sustainable Development and World Resources Institute , scope 1 direct emissions cover GHG emissions directly produced by businesses owned or controlled by the Group, while scope 2 indirect emissions cover GHG emissions of "indirect energy" resulted from electricity (purchased or acquired), thermal energy, refrigeration and steam internally consumed by the Group.

We are committed to instilling the concept of energy conservation and carbon reduction in employees at various businesses and operating locations. Meanwhile, we are also committed to implementing the following environmental protection measures to enhance employee's environmental awareness to optimise energy efficiency and reduce the overall exhaust and greenhouse gas emissions . These measures include:

Saving

- Post energy saving signs throughout the office
- Power off when leaving office area
- Replace business trips with video conference whenever possible
- Encourage employees to use public transport whenever possible
- Minimise unnecessary public area lighting at night

Optimising

- Select first-level energy labeled appliances
- Keep Prepare adjust air-conditionings system to maintain optimal room temperature in work place during summer
- Plant in the office to purify the indoor air

Reduce air emissions concentration

During the Reporting Period, we have installed a fresh air system at the Beijing office of Megahunt, which can purify the air and reduce the concentration of particulate matter (PM2.5 and PM10) and carbon dioxide in the air to protect the health of our employees.

In addition to managing energy use and carbon emissions during daily office operations, we are also highly concerned about the emissions from production activities, including waste water from production, domestic sewage from employees, exhaust gas caused by solder and alcohol volatilisation and noise generated during production. During the Reporting Period, Hangzhou PAX has commissioned a third-party testing agency to test the sewage, exhaust gas and noise in the factory to ensure the pH value, chemical oxygen demand, ammonia nitrogen, phosphorus in sewage, carbon monoxide, nitrogen oxides and metal content in exhaust gas, as well as noise level meet relevant discharge requirements of the Integrated Wastewater Discharge Standard (《污水綜合排放標準》), the Indirect Discharge Limitation of Industrial Wastewater Containing Nitrogen and Phosphorus (《工業企業廢水氮、磷污染物間接排放限值》), the Integrated Emission Standard of Air Pollutants (《大氣污染物綜合排放標準》) and the Emission Standard for Industrial Enterprises Noise at Boundary (《工業企業廠界環境噪聲排放標準》), in order to prevent the emissions from causing significant negative impacts on the environment and affecting the surrounding ecological environment.

Water Resources

The Group's resource consumption includes not only purchased electricity and packaging materials, but also domestic water provided by regional water supply companies and property management companies. During the Reporting Period, we did not encounter any problems in sourcing water. The followings are the water consumption data of the Group during the Reporting Period and 2018:

	Unit	**2019**	**2018**
Total waste consumption	m^3	14,634.80	13,845.92
Total water consumption per floor area[3]	m^3/sq. meter	0.94	0.96

[3] As certain property management companies were not able to provide water consumption records of individual users, the total water consumption in 2018 does not cover headquarters of VBILL, VBILL Yinqi（銀企）office, VBILL (Beijing) Financial Information Services Ltd. (隨行付（北京）金融信息服務有限公司), ABS and Hunan Hisun Changsha office.

In the face of increasingly tight water sources, although water resources are not a major consumption of the Group, we also implemented the following water saving measures in our offices:

- Deploy dual-flush toilets to reduce water usage;
- Strengthen the daily maintenance and management of water equipment such as faucets and pipes, and timely repair or replace damaged pipes, valves, flush valves and other appliances to avoid water leakage and avoid water wastage; and
- Set up water conservation signs at appropriate locations to strengthen employee's awareness of water conservation.

Waste and Packaging Materials

Different businesses of the Group produce different wastes, comprising domestic waste, waste paper, waste office supplies, electronic waste, batteries, circuit boards, etc, in addition to packaging materials for finished products. For non-hazardous waste such as domestic waste and waste office supplies, proper sorting and storage are performed. The waste will be handed over to an authorised organisation for collection, disposal or recycling. As for the hazardous waste generated by the production activities of the Group, including batteries, tin ash, circuit boards, etc., we strictly abide by the requirements of the Law of the PRC on Prevention and Control of Environmental Pollution by Solid Wastes (《中華人民共和國固體廢物污染環境防治法》) and other laws and regulations. We collect and classify these hazardous wastes safely and store them in sealed containers labeled with hazardous wastes in accordance with the Standard for Pollution Control on Hazardous Waste Storage (《危險廢物貯存污染控制標準》) of the PRC. We also engage a qualified hazardous waste recycler to collect and safely dispose of such wastes to prevent them from being mixed into other non-hazardous wastes and causing impact on the environment.

In order to effectively reduce the amount of waste generated and the burden on the environment, we strongly promote the concept of recycling and reuse. We advocate not using disposable lunch boxes and reducing the use of plastic bags. Meanwhile, we encourage employees to use electronic channels to communicate as much as possible, to reduce the amount of paper used and to realise the concept of "paperless office".

The followings are data of the non-hazardous and hazardous waste generated and packaging materials consumed by of the Group during the Reporting Period and 2018:

	Unit	2019	2018
Emissions			
Total hazardous waste produced	tonnes	0.17	0.18
Total hazardous waste produced per floor area	g/sq. meter	6.32	7.58
Total non-hazardous waste produced	tonnes	28.58	26.34
Total waste disposed	tonnes	23.22	25.40
Other general refuse	tonnes	15.38	25.25
Paper	tonnes	7.84	0.10
Electronic waste	tonnes	N/A	0.05
Total waste recycled	tonnes	5.29	0.94
Paper	tonnes	0.45	0.94
Other general refuse	tonnes	4.84	N/A
Total non-hazardous waste produced per floor area	kg/sq. meter	1.08	1.11
Use of Resources			
Total packaging material	tonnes	5.00	3.37
Paper	tonnes	5.00	3.37

Green Products

The production process of the Group's energy metering products imposes certain impacts on the environment. To identify, control, manage or even reduce these impacts, Hangzhou PAX's electronic energy meters, the design, production and service of the centralised meter reading system, the load management system, the development and service of the distribution transformer integrated management system and related management activities are accredited with ISO14001: 2015 Environmental Management System certification. We have formulated System Management Manual in accordance with its standards to regulate production activities and continuously monitor their environmental performance, so as to implement effective environmental management measures to reduce impacts. At present, we have formulated a series of policies and measures from product planning and design stage, procurement stage, production stage to scrapping stage.

Product planning and design stage

We require our team to pay attention to the control of chemicals in the R&D process. Hazardous capacitors containing hazardous polychlorinated biphenyl (PCB) and electronic switches containing mercury are strictly forbidden, whereas during product design stage, consideration must be given to product reproducibility and disassembly for recycling and re-use upon discard at later stage, such as:

- Easy to disassemble - reduce the number of firmware, and the types of plastics and alloys used
- If no disassembly is required – select only the most compatible materials of they are not easily disassembled to allow recycling
- Convenient for heat treatment - plastics should not contain halogen flame retardants to create hear-convenient conditions
- Environmentally friendly design - encouraging the use of recycled materials and lead-free solder

When purchasing raw materials, parts, semi-finished products and other materials, we evaluate suppliers' environmental protection elements in accordance with the environmental protection system audit of the Instructions on the Restriction of Hazardous Substances in the Electronic and Electrical Equipment ("RoHS") to ensure that the products provided do not contain chemicals forbidden by the Group. If the product contains such substances, it should be replaced in time, and renewable and recycled materials should be used as much as possible to reduce the negative impacts on the environment.

Procurement stage

Production stage

During the production process, waste water, exhaust gas, noise and other emissions will be generated. We engage a qualified third party to check the emissions concentration to ensure compliance with the Integrated Wastewater Discharge Standard (《污水綜合排放標準》), the Indirect Discharge Limitation of Industrial Wastewater Containing Nitrogen and Phosphorus (《工業企業廢水氮、磷污染物間接排放限值》), the Integrated Emission Standard of Air Pollutants (《大氣污染物綜合排放標準》) and the Emission Standard for Industrial Enterprises Noise at Boundary (《工業企業廠界環境噪聲排放標準》) and other requirements.

Production activities generate certain waste, including discarded products and equipment. We split them into recyclable and non-recyclable parts according to Waste Management Measures. We collect and store the recyclable parts for recycling and re-use afterwards. Non-recyclable parts are stored collectively and regularly sent to qualified unit for centralised processing in order to properly manage the hazardous waste.

Discard stage

Value Created for Community

Hi Sun understands the importance of giving back to the society for the sustainable development of the Company. We always spare no effort to advocate our employees to act by organising and participating in various community investment projects, investing resources in public welfare, environmental protection, sports, and public education, etc., actively implementing corporate social responsibility, and contribute to the broader community.

The Hong Kong Council of Social Service, a federation of non-government social service agencies of Hong Kong and an essential partner of the Hong Kong Government in social welfare and development, is delighted to award Hisun as a Caring Company , in recognition of our commitment in Caring for the Community. Also, along with Hisun obtaining this Corporate Social Responsibility recognition, our employees under the Caring Company Scheme have also been nominated as Caring Ambassadors, in recognising their contributions in our corporate community involvement.

Sports

As in previous years, we sent employee representatives to participate in the Rotary Hong Kong Super Marathon this year to join together, challenge ourselves and participate in charity.

Rotary Hong Kong Super Marathon

Community

Help the poor in Myanmar

In October 2019, Hi Sun and VBILL's "Good Deed" charity team cooperated with the Sowers Action donated and visited to schools in Ayeyarwady Province, Myanmar to install teaching supporting facilities, including solar battery boxes, solar panels, projectors, LED bulbs and solar low-voltage ceiling fans to improve the learning environment for students.

Care for the elderly

VBill carried out a charity activity of "A charity walk with VBILL and went to Xiji County, Guyuan, Ningxia to care for the elderly left behind", to substitute their young generations who left for work and were unable to take care of the elderly.

Environmental Protection and Public Education

Tree Planting

During the Reporting Period, VBILL employees participated in tree planting activity. 50 cypress saplings were planted in the suburbs of Beijing to enhance the environmental awareness of employees.

Prevent financial risks

VBILL has actively carried out various publicity activities throughout years to promote financial and anti-corruption knowledge to the general public. During the Reporting Period, VBILL arranged a number of online and offline promotions, including setting up booths in communities, distributing brochures and posting promotional posters to the public. Also, VBILL makes good use of online platforms, including the official website and WeChat, to deepen the public understanding of financial crimes such as fraud, corruption, money laundering, and raising awareness of avoiding such risks.

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