

# Economic Sustainability Management (Smart & Lean)

## Economic Policy and Practice

HARN aims to be maintain the leader in distributor and services with the “Sustainable Solutions” of the engineering system by utilizing the knowledge in products selection and develop innovations which responds to the customers’ demands in order to enhance the quality and the safety of the consumers life with high quality products, modern technologies, sales and services that are fast, accurate and worth the value, including the provision of expertise consulting. These are the tools which create customer’s satisfactions, enhance flexibility and increase the ability to compete, including securing the brand loyalty, gaining value in the long term to HARN. In addition, also seek more cost-effective and appropriate investment opportunities through the following strategies:

### **Selling products with acceptable quality and standards**

Focus on selling quality products with globally recognized standards where HARN shall select quality products specially building engineering system products such as firefighting system, air-conditioning system, sanitary system and cooling system, including digital printing system products which greatly importance to safety, product storage process and the continuity of production process. Therefore, it is crucial to select good quality products which are certified by international standards and suitable to the customers’ needs, well known products which are popular and widely accepted in the market, to build trust, confidence and customer satisfaction continuously.

### **Increase of commodity dealers**

HARN plans to expand the range of dealership in building engineering products which include firefighting system, air-conditioning system, sanitary system and cooling system as well as digital printing system where the products will be ordered gradually in order to increase customers’ choices whereby the customers’ needs will be supported in all groups of product standards. Furthermore, HARN shall increase the number of personnel to be sufficient with the business expansion, especially in the work in firefighting system installation projects and other building engineering system work. HARN pushes to have adequate number engineers to support works in projects which are increasing in amount and value.

### **Offers a variety of products in complete range with sufficient stock to meet the customers’ demands without leaving the customers to spend much time waiting for the products**

HARN is one of the distributors of complete range of building engineering products by being the leader in business of importing and selling products in firefighting system, cooling system, air-conditioning system and sanitary system including digital printing system, with a large selection of products. Most of the products sold are imported from other countries which takes time in ordering and waiting for the products to be transported



into the country. HARN therefore must do a sales projection, make plans for product orders and keep an appropriate amount of stock in order to have sufficient current products to meet the customers’ demands and able to deliver the products to the customer in a timely manner without delay which may damage the sales and the opportunity of a return customer. At the same time, HARN will not overstock that it would contribute to a high cost of stock keeping, until causing damage from depreciation according to period or the over useful life.

### **Organize promotional activities to stimulate sales**

HARN organizes promotional activities on a regular basis such as participation in trade shows to create awareness and reach the target customers directly. There are product seminars/training for project designers and clients to create product familiarity for them to choose the products that HARN sells. There are advertisements in the various magazines which relate to the business of HARN as well as sending invitations to project designers to join activities in visiting the factories of producers in foreign countries, who are famous in global market, in order to study the technology and gain new perspectives on the concepts of building industry to elevate the standards of construction in Thailand, which is one of HARN CSR policies, and building confidence in the products imported by HARN to be sold leading to their choosing of HARN products to be used in the various projects with confidence.

HARN is still committed to sharing the engineering knowledge of HARN with its customers and the general public by posting contents on Facebook and HARN’s website to establish a with wider knowledge and deeper insights, did a project called “Knowledge Sharing” enhance product awareness among existing and target customers, establish relationships with customers nationwide, foster credibility and brand loyalty, instill confidence in product quality and after-sales service, enhance knowledge and skills in the field of work and correctly maintaining products in accordance with engineering principles. Adhering to the principle that “providers

always learn and grow.”. Including still to strengthen relationships through continuous customer visits, sales staff are consistently trained to understand product to enhancing their expertise to effectively convey accurate information to customers, and there is a focus on product development and seeking new products to increase sales opportunities.

Additionally, HARN has been driving operations to achieve its sustainability goals by participating in research/innovation

development projects with both public and private sectors. This collaboration allows for the exchange of knowledge on research and technologies related to HARN’s products, maximizing benefits in the industry, promoting learning for graduates in academic institutions to meet international standards, improving consumer quality of life, and creating business opportunities.

### Academic Partner, government, and Standard regulatory agencies



## Economic Performance

### Innovation Development

HARN’s core business involves the whole engineering system, fire protection system, air conditioning system, sanitation system, refrigeration system, digital printing system, biological 3d printing system and Internet of Things system, Enhance Innovation Strategy through the planning and allocation of resources to support research and innovation to strengthen competitive advantage and promote the achievement of the Carbon neutrality and Net Zero Target. Operational Framework e.g., market-focused innovation, enhances employee capacity,

determined a future investment direction that focuses on the high value & low carbon business group to increase the competitiveness, and can be further developed into high value businesses through direct and indirect investment in innovation. Also supports the development of innovation, encourages the establishment of long-term cooperation with third-party agencies or experts. HARN implemented various innovation projects, as follow:

#### 1) Vanapa Project

In 2024, HARN signed a Memorandum of Understanding (MOU) with the Ananda Mahidol Foundation Scholarship Alumni Association, Kasetsart University, Silpakorn University, the Geo-Informatics and Space Technology Development Agency (GISTDA), Siam Cement Group Public Company Limited, Mew Space & Advanced Technology Co., Ltd., and the Department of National Parks, Wildlife, and Plant Conservation on a research project to assess carbon sequestration and the net carbon dioxide fixation balance of the dry dipterocarp forest ecosystem through remote sensing surveys, under the name “Vanapa Project.”

tower, known as a Flux-Tower, operating continuously for 24 hours. The data will then be analyzed using mathematical models to calculate greenhouse gas emissions. This method is standardized, fast, and accurate.

The signing of this agreement marks a collaboration between the public sector, private sector, and the Department of National Parks, with the aim of developing carbon measurement, carbon accounting, and carbon credit assessment from natural forests, both above and below ground, using remote sensing technology and evaluation under Tier 3 standards. This will track greenhouse gas emission reductions resulting from forest degradation and deforestation caused by recurring wildfires in the Mae Ping National Park, Lamphun Province, and help the forest naturally regenerate by reducing the frequency and recurrence of wildfires.

At the same time, research will be conducted to assess carbon credits from reducing wildfire recurrence by working with the Department of National Parks and local communities to manage the forest, prevent wildfires from entering the area, and manage water resources in forested headwaters. This will enable the forest to regenerate naturally. A process and standard will be created by experts from all eight agencies, and the proposed system will be presented to the Thailand Greenhouse Gas Management Organization (Public Organization) to open up opportunities for businesses to support wildfire reduction by investing in community enterprises. These enterprises will create new jobs for forest management in collaboration with communities in exchange for carbon credits generated through the process, which will be evaluated using scientific equipment and satellite data that can be verified.

The Tier 3 standard assesses carbon dioxide exchange using the Eddy Covariance Technique, employing geo-informatics and satellite data processed together with ground-based measurements collected by permanent monitoring equipment installed on a

If this process is applied comprehensively to conservation forests nationwide, it is expected that a significant amount of funding from the private sector will flow into wildfire reduction efforts through job creation in communities, which will help reduce PM2.5 dust and air pollution sustainably.

## 2) Safety & Comfortable Business (SC)

Since 2023, HARN introduced “Quick Installation Products”, which provided a solution for current needs, particularly in fire protection systems and air conditioning systems. These products are crucial and require efficient, safe, fast, and environmentally friendly installation. They replace traditional pipe welding, resulting in cleaner systems without requiring experienced labor. In 2024, sales of Quick Installation Products increased compared to 2023, demonstrating the success of product development and marketing that meets the demand for products that reduce installation time. This solution also addresses the shortage of skilled labor and rising labor costs, responding well to current market trends.

Additionally, plans have been made to provide product training for contractors and interested parties to increase knowledge,

understanding, and confidence in using HARN’s products. This will help improve installation efficiency and ensure that the products are used to their full potential. Moving in this direction will allow HARN to build a larger customer base and increase product acceptance in the future, as well as strengthening relationships with customers and providing opportunities for sustainable market expansion.

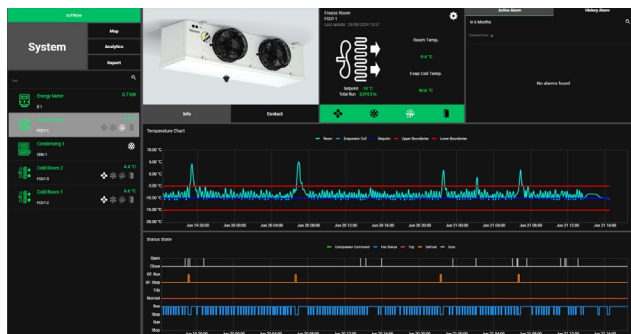
Furthermore, HARN aims to develop technology and seek environmentally friendly products, such as inert gas fire extinguishing agents for fire protection systems, which are non-toxic to consumers and the environment, and PEX pipes for plumbing systems, which are odorless, clean, safe, hygienic, free from toxins, and environmentally friendly.



## 3) Refrigeration Business (RF)

Refrigeration Business Unit has collaborated with AIYARAHARN CO., LTD. (“subsidiary”) to develop energy-saving innovations for refrigeration system. We have designed and installed an innovation of energy-saving system is named Telechill Smart Solution (S2), which is an Internet of Things monitoring system. This is a new product introduced to the cooling system market, which features temperature monitoring, alerting, and statistical recording capabilities for tracking the energy efficiency of cooling systems via a control room display immediately. This helps maintain the quality of products in cold storage and ensures they are safely delivered to customers, reducing risks and preventing product quality loss more effectively.

Most importantly, it can help reduce energy consumption of refrigeration systems, lower costs for cold storage businesses, and minimize environmental impact, aligning with the trend of achieving zero greenhouse gas (CO2 Emission) emissions. This will create a competitive advantage and contribute to increased sales growth.



Telechill S<sup>2</sup>  
Smart Solutions

In 2024, the seminars in several regions where it has been done throughout the past several years. In order to reach customer groups in several regions and to provide information and know-how of the products. Including new technology innovations for products that save energy and maintain the refrigeration system that HARN distributes for maximum efficiency. Organizing seminars on topics to meets the demands from customer groups in every region to expand the customer base and increase efficiency.

From July 10 to 12, 2024, the executives from the Refrigeration Systems Business and the Digital Printing Systems Business participated in the Cold Chain Exhibition at BITEC Exhibition and Convention Center. The event focused on discussions about industrial technology innovations, the latest trends, and strategies for dealing with future impacts. Dr. Sukit Litikom, Director of the Engineering Support Division, gave a lecture on “The Use of Cooling for Product Storage and Preservation.” Mr. Vachiravit Akaraseranee, Director of Project Sales, lectured on “Principle of Cold Room Air Distribution.” Mr. Kittiphong Kittimethaveenan, Director of Sales, discussed “Making Cold Rooms Environmentally Friendly with IoT Technology.” Mr. Phanuwat Intraphat and Mr. Pramoth Kanjanasrisukkul, Sales Managers, presented on “Energy-Saving Innovations in Refrigeration Systems,” and Mr. Withoon Thamee, Director of Sales, gave a lecture on “Revolutionizing Product Labeling: Advanced Printing Technologies for Cold Storage.”



Additionally, HARN participated in a seminar with the National Farmers’ Council of 14 Southern Provinces, titled “Innovation in Cooling Technology for Agricultural Product Quality Preservation and Making Cold Rooms Environmentally Friendly with IoT Technology,” held on July 30–31, 2024, at the Diamond Plaza Hotel in Surat Thani. The seminar had 100 attendees.



HARN also attended a seminar with the Chumphon Provincial Agricultural Office on the topic “Cold Rooms for Freezing Fruit Storage,” held on August 15, 2024, at the Emerald Twin Hotel in Chumphon. The seminar had 200 attendees.



Furthermore, HARN organized a seminar on “Energy-Saving Innovations and Environmentally Friendly Refrigeration Systems,” in collaboration with the R290 training thailand team from the Refrigeration and Air Conditioning Engineering Technology Department at King Mongkut’s University of Technology North Bangkok. The lecture, “Using Environmentally Friendly Natural Refrigerants (R-290) and Safely Managing Flammable Refrigerants,” took place on August 16, 2024, at HARN’s office. The seminar was attended by 88 participants from 34 organizations.



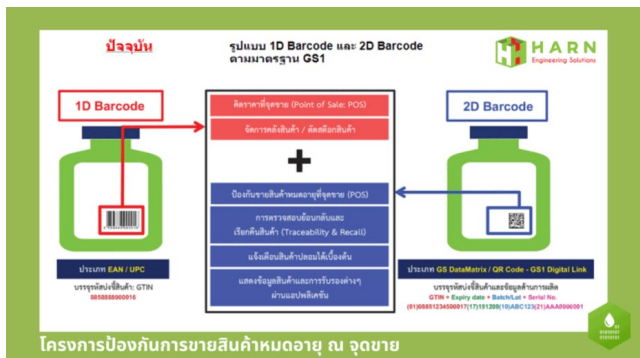
In addition, HARN hosted a seminar on “Export Fruits and Energy-Saving Innovations in Refrigeration Systems” on November 21, 2024, at the Deluxe Building, Thammasat University Rangsit Center, with 40 attendees.



#### 4) Digital Printing System Business (DP)

Digital Printing Business have the opportunity to join as a partner to driving new innovations with GS1 Thailand, Federation of Thai Industries to improve safety for consumers. GS1 Thailand is an agency under the Federation of Thai Industries. Who acts as the only official registrar for issuing product barcode numbers according to the GS1 international standard in Thailand. Which has taken care of the issuance of barcode numbers to Thai and Lao PDR entrepreneurs for over 40 years with mission to promote and support the use of the GS1 international standard to meet standards and cover all industries to reduce costs and increase ease of doing business as well.

GS1 Thailand Institute has moved forward to drive the innovation for consumers. By joining with CP All Public Company Limited along with CPRAM Company Limited in implementing 2D barcodes instead of 1D barcodes for checking and alerting expiration dates of consumer products at selling point. It has started piloting with ready-to-eat food products produced by CPRAM in 7-Eleven stores to build confidence in food safety for consumers. This technology also facilitates employees to check the expiration date of products. This will reduce working time and increase accuracy for inspection. In 2022, The project to implement 2D barcodes according to the international standard GS1 has been launched on the topic “2D Barcodes: Solution for Consumer Safety”, which meets the demands of reliable products, raising the safety for consumers, at Chiang Mai.



In 2024, HARN participated in several events to promote the use of barcode technology with GS1 Thailand at various locations, such as the Road Show events in Suphanburi, Ubon Ratchathani, Trang, and Chiang Rai, among others. Additionally, Mr. Sattayamon Mahanam, Sales Manager, was honored by GS1 Thailand to serve as a speaker at the 2024 GS1 Thailand Annual General Meeting. The event, held at The Berkeley Hotel Pratunam, focused on the theme “GS1 Global Standards for Developing a Sustainable Thai Industry with Accurate, Transparent Data and Increased Consumer Safety.” The goal was to promote and drive the Thai industry forward by utilizing accurate and verifiable product data to enhance consumer safety and contribute to a balanced and sustainable Thai economy.

HARN remains committed to disseminate and promoting the use of the GS1 barcode standards across various industries, supporting the adoption of new technologies and innovations in business processes, and preparing for future changes and challenges. HARN is also building a partnership with GS1 Thailand to strengthen networks and continue sharing knowledge.



For 3D for Medical Application products (“3DMed”), creates an organ model with advanced 3D printing technology to help diagnose and plan effective treatment in the 3D for Medical Application, Siriraj Hospital made a memorandum of agreement 3D model files continuously in 2024 totaling 25 cases, and there have been increased a total of 1 case. Rajavithi Hospital has a total of 36 cases, and last year there were a total of 13 cases, the more than 300 cases cumulative of cases in 2024 which HARN is also a coordinator between the Faculty of Dentistry, Chulalongkorn University, King Mongkut’s University of Technology Thonburi, and Materialise to organize a workshop on the application of Mimics program in creating 3D files and 3D models used diagnostic purposes and surgical planning for about 15 medical doctors, while being in the process of coordinating to arrange a workshop for Khon Kaen University. This can be another success as a leader and professional in bringing the 3D technology to the medical field.

In 2024, HARN 3DMed participated in knowledge exchange and experience in terms of image file making and 3D model making for surgical planning, as well as utilizing 3D images and models with students from the Department of Biomedical Engineering, Faculty of Engineering, Srinakharinwirot University.



As a result of this knowledge exchange and the specification presentation in 2024, achieved a total accumulated revenue of Baht 30.14 million from sales. It is expected that in 2025, there will be additional opportunities to close sales for the 3D Bio-printer and 3D Bio-printer Axolotl.

Furthermore, HARN has recognized the growing interest in reducing carbon footprints through the use of various technologies that HARN sells and services. The company has opted to use environmentally friendly printing technologies to differentiate itself in the market and add value to both its business and customers. As a result of this commitment, HARN was awarded a certificate for environmentally friendly products in the “Printing Machine” category by SCG Chemicals Public Company Limited.



The main printing technology used in the production line includes:



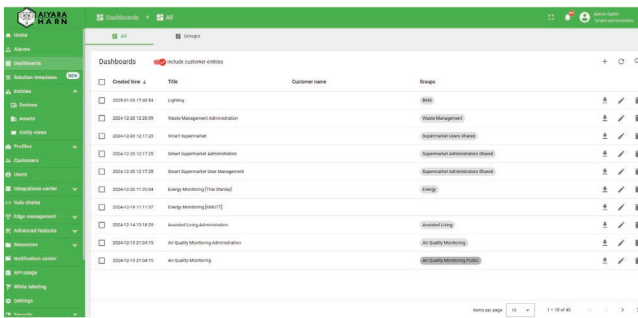
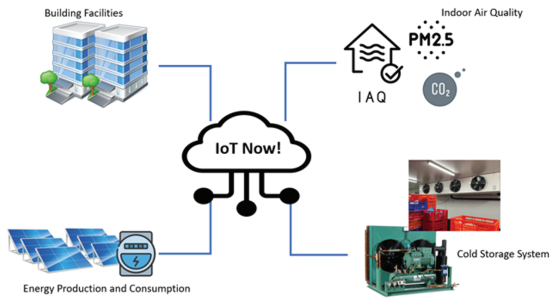
- The CIT technology is a printing machine that uses less energy and can use ink and solvents derived from alcohol, which have a lower evaporation rate than solvents derived from MEK. It features the Green Pack technology, which helps distill volatile solvents for reuse, thus reducing waste from packaging containers and improving production efficiency.
- The TTO technology is a printer designed for installation with packaging machines. It has up to 4 ink-saving modes, helping to reduce ink consumption by up to 60%.
- The TIJ technology, commonly known as cartridge ink printing, is notable for requiring less maintenance, providing high print resolution, offering adjustable resolution settings, using less energy, and featuring an Auto-Swap function that helps reduce time and the number of ink changes.
- The LASER technology is a printing machine that does not use chemicals in printing, resulting in longer machine life, high print quality, low maintenance, and no consumables required.
- The print code and data verification technology helps prevent and reduce waste caused by printing errors in real time, thereby increasing work efficiency, enhancing product reliability, and preserving the environment.

In addition, HARN also participated in research funding support with the National Research Council of Thailand. Under the project of “The biomaterial print head with embedded measurement device for 3/4D printing. It can be said that the result from research and development meets the goals to the project. HARN has also supported research funding for soft materials printed with a Bio-compatible 3D printer in collaboration with Dr. Raviphath Maneechote and the MTEC research team. They produced realistic prosthetic fingers using soft materials with digital technology to expand and create business opportunities.

## 5) Internet of Things System Business (Aiyaraharn)

In 2024, Aiyaraharn has conducted research and development of 3 projects of Internet of Things products, were further developed from the research that was pushed into products in early 2024, There was of 1 Platform Software development project and 2 Hardware projects. These products are designed with the intention of working under the same ecosystem. Details of the products are as follows.

### Product 1 : IoT Platform Software (IoTNow)



IoTNow is a Platform Software on Cloud that Aiyaraharn developed to be the control center and operational data monitoring for IoT products that are implemented, sold, and provided by Aiyaraharn. The platform consists of the Dashboard and Control Panel for IoT work in the aspects of building systems, tracking systems for energy usage, electricity generation with solar cells. Refrigerator system, and indoor air quality systems. Customers can observe information and control the operation of these systems at the website via the internet, where IoTNow provides annually subscription. Currently, we have started providing services to customers in the refrigeration system, Solar power generation system and indoor mechanical tracking system.

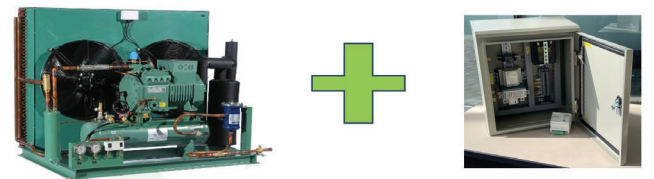
### Product 2 : IoT Gateway for Cold Storage System version 1.5



This product is an extension of the IoT Gateway for Cold Storage, which was developed in 2023 and launched for sale in early 2024. During the first quarter of 2024, its firmware was upgraded to support a wider range of temperature controllers from multiple brands, increasing compatibility from a single model to five models—all of which are among the most popular controllers in Thailand’s cold storage market.

Additionally, the product’s capability was enhanced to support up to six controllers per gateway, regardless of whether they are from the same brand or model. This improvement provides greater flexibility and better meets the needs of small cold storage owners who manage approximately 3–5 rooms per branch and require monitoring for no more than ten refrigeration units. As a result, total sales in 2024 reached 53 units.

### Product 3 : iCDU with IoT Ready



This is another product that builds upon the IoT Gateway for Cold Storage and is being developed in collaboration with HARN’s Refrigeration Business. The goal is to enhance its capabilities beyond merely a monitoring system for refrigeration systems, transforming it into a comprehensive solution that both controls and tracks system performance via IoTNow! With this development, refrigeration control systems distributed by HARN’s Refrigeration Business, which were previously standalone systems, will now feature built-in IoT capabilities. This advancement will enable customers to manage their refrigeration systems more efficiently, with full remote management capabilities, while also enhancing customer service and support. The product is currently in development and is expected to be available for sale in the second half of 2025.

## Promote fair competition

In order to ensure that the treatment of business competitors complies with international standards and remains within the legal and regulatory framework concerning fair competition, HARN has established a code of business ethics for dealing with competitors, aligning with these principles, with the guidelines as follow;

- Undertake the business activities in compliance with the law and competition regulations, and cooperate with the government authorities.
- Establish the procedure and measure preventing the involvement in or conspiracy with the behavior against fair competition.
- Ensure the employees be aware of fair competition and compliance with applicable competition law.

## Promote social responsibility in value chain

HARN supports and promotes business operations to be strong, grow, and progress under the balance of the economy, society, environment, and corporate governance, while creating sustainability throughout the value chain, with the ultimate goal of enhancing the quality of life for people in society in accordance with policies that promote social responsibility in the value chain, with the guidelines as follow:

- HARN places importance on sourcing products responsibly by selecting products from partners and manufacturers who are transparent, traceable, and socially and environmentally responsible.
- Focuses on sourcing environmentally friendly products and promoting good health by selecting items that are beneficial to health and do not harm the environment.
- Aims to improve transportation efficiency by reducing management costs, shortening delivery times, and promoting the reduction of carbon emissions into the atmosphere.

## Promote respect for assets rights

HARN aims to conduct business in accordance with policies that promote respect for assets rights, with the guidelines as follow:

- Appropriately check to ensure that is legally allowed to use and grant the right to use a certain property.
- Not participate in any activity violating other person's properties, for example, inappropriately using advantageous marketing position, producing fake products, and intellectual property infringement.
- Fairly pay for the use or acquisition of a certain property.
- Establishes guidelines to protect the rights of stakeholders who suffer damages from violations resulting from operations, ensuring compensation is provided at no less than the rate specified by law.

- Promote fair competition and activities, and support anti-monopoly and anti-dumping.
- Pay attention to social context and not take advantage of natural or social conditions, such as poverty, to unfairly create competitive advantages.

In 2024, HARN is committed to conducting business under policies that promote fair, transparent, and non-discriminatory competition, **not** any advantage by seeking competitors' confidential information through dishonest or improper means, and do not defaming competitors using slander that led to reduction or limitation of trade competition, including **no** legal case between competitors.

- Focused on developing sales channels and communication in the online format to meet customer expectations and adapt to the changing behaviors of customers/consumers in the digital age.
- Dedicated customer service unit that acts as a communication channel to offer exclusive benefits to customers, gather feedback, and provide after-sales services.
- Complies with the laws and regulations of relevant regulatory authorities, fostering understanding and communication throughout the organization and building trust through the disclosure of corporate governance operations across various channels.

In 2024, HARN **not** any violation of good corporate governance, code of conduct and compliance with relevant laws, rules and regulations, has safety and legal management standards.

In 2024, HARN not any violation of intellectual property infringement by complying with the law related regulations. HARN allows for reporting of any possible offence or filing any complaint of any breach of law or ethics through chairman of Audit Committee. HARN has an established procedure for actions to be taken after getting the whistleblowing. The matter shall be investigated and then reported submitted to the Board's for acknowledgement.

In addition, HARN also sets a practice guideline for the directors, top executives and employees, including code of ethics and accountability for the stakeholders to creating behavioral standard for the operation of such personnel on an integrity basis. It is also set code of conduct a guideline for the Board members, executives, to employee's organization-wide to be aware and follow. In this regard, and monitor such performance on a regular basis.



# Customer/Consumers Responsibility Management and Development

## 1) Confidentiality of Customer’s Personal Data

HARN to the importance of respecting the rights and committing to protect the personal data of customers which have been collected, stored, used, and revealed in presenting products and services to meet the needs as appropriate, accordance with personal data protection notice to show transparency in its operations, which has policies and guidelines are in accordance with the Personal Data Protection Act (PDPA) through its website [www.harn.co.th](http://www.harn.co.th), covering the following:

- Personal data collected by HARN
- Objectives of personal data processing
- Disclosure of personal data
- Duration of personal data collection
- Rights of the owners of personal data
- Contact channels to HARN and personal data protection officers
- Review of policies on privacy

The personal data protection officers (DPO) are responsible for protecting customers’ personal data. To protect confidential information from leaking to external parties, the confidentiality of the data is categorized by level of importance and is limited to the scope of duties and responsibilities assigned. HARN provides a complaint channel regarding customers’ personal data through the website [www.harn.co.th](http://www.harn.co.th). If any customer has a complaint, HARN will investigate the facts, consider corrective actions, provide advice or suggestions, and identify measures to resolve the issue. A suitable time frame for investigation will be set, taking into account the nature of the issue and the corrective action to be taken in collaboration with the relevant parties. In case of financial damage, compensation will be provided based on the severity of the issue, or legal penalties may be applied depending on the case.

In 2024, HARN complied with the framework of the Personal Information Protection Act (PDPA). There were no complaints from customers regarding the protection of their personal data.

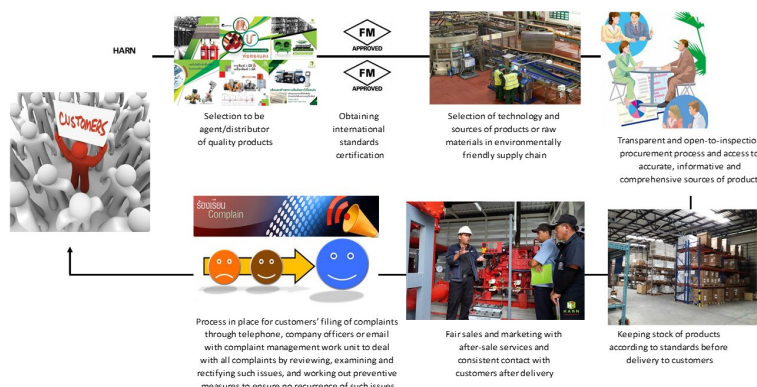
## 2) Responsibility to Consumers/ Consumers

HARN is committed to selling products that meet international standards, developing services in line with customer expectations and satisfaction, and adhering to business ethics when interacting with customers with responsibility and integrity with the highest benefit of customers in mind, under the policies that focus on customer responsibility and development. Emphasis is placed on the development of products, services, and solutions, utilizing information technology and technology as tools to manage sales processes to improve the efficiency of delivering products and services to customers as targeted. Also uses technology to monitor potential issues and obstacles to ensure that planning for expansion and product delivery aligns with customer needs. Additionally, HARN is transitioning to an environmentally friendly business and fosters customer engagement through Facebook, its website, Line Official Account, and seminars, allowing customers to securely access and exchange information via digital systems. Furthermore, HARN continuously focuses on improving its management system in accordance with ISO 9001:2015 standards and developing the correct knowledge and understanding among employees and stakeholders regarding workplace safety to ensure

the safety and reliability of products and services delivered to customers. A department is designated to regularly inspect product quality standards every month, and a separate unit inspects the operational systems, service processes, and methods for addressing feedback and complaints. These activities are aligned with company policies, announcements, and operating regulations, and suggestions and complaints will be promptly considered for improvement and corrective action within an appropriate time frame.

In 2024, there were no complaints from customers regarding the safety and environmental aspects of product use, according to an audit by the ISO Certification Institute from SGS (Thailand) Co., Ltd. on November 27-28, 2024. HARN has no major legal deficiencies that violated relevant regulations and laws.

HARN with realization of the importance of products that enhance quality of life and safety of customers/consumers, HARN has paid great care and attention to all processes on an end-to-end basis until the goods reach the customers/consumers according to policies and guidelines, as follows;



### 3) Quality and standard of the products

HARN emphasizes on the quality and the standard of the distributed products so that the customers can be confident in the quality and the safety of the products that follows the terms and conditions agreed upon with HARN. The products sold by HARN are mostly certified by the UL (Underwriters

Laboratories) and/or FM (Factory Mutual) and/or BS (British Standard) and/or TIS (Thai Industrial Standards) and/or EN (European Standard) and/or Vds Standard. As for HARN's OEM, these are produced under BS or ASTM International, including all aspects of HARN's operation is certified by the ISO 9001:2015.

- Note:**
- Underwriters Laboratories (UL), safety standards by the Underwriters' Laboratories Inc. (UL), non-profit independent organization from the USA. Responsible in testing and prepares the safety standards and safety insurance of the products.
  - Factory Mutual (FM), responsible in testing protective and fire extinguisher equipment of the insurance group in the USA.
  - British Standard (BS), safety standards by the British Standard Institution (BSI)
  - Thai Industrial Standards (TIS), industrial standards, products guaranteed by the Thai Industrial Standard Institute.
  - VdS is an independent institution that tests fire prevention and extinguishing equipment That guarantees safety and reliability in the field of fire protection and safety Germany


### 4) Products Insurance


HARN ensures the damages or defectives of products following the insurance conditions of the products that HARN distributes or installs for the customers for 6 months to 1 year, for the machines and the spare parts, respectively. The products of HARN had been insured already by the suppliers for similar time.


For project sales, after completion of installation work, HARN ensures the installed products under the conditions for 1 year where the suppliers also ensure the products to HARN for 1 year as well and may consider purchasing additional warranty from the seller in case the customer wants a longer warranty.

### 5) Processes of storing products in warehouses and transportation products

HARN has 3 warehouses: as follow;

 **The main warehouse**, is located at 888/14-16 Moo.21, Bang Phli Yai, Bang Phli, Samut Prakan 10540. The rental area covers 6,374.23 square meters which HARN owns the ownership to store valve products and other products in Fire protection system, Air-Conditioning system, Sanitary system, Refrigeration system and Digital printing system. This place is also used to assembly equipment's on a made to order basic.

 **The 2nd warehouse**, is located at 509, Soi Soonvijai 4, Bang Kapi, Huay Kwang, Bangkok 10310. Is rented from a related companies with HARN to store products, assembly and maintenance of printers and equipment in digital printing system. This place is also used to assembly equipment's on a made to order basic.

 **The 3rd warehouse**, is located at 38/43, Moo 4, Lam Luk Ka Road, Lam Luk Ka, Lam Luk Ka, Pathum Thani 12150. This place covers 80 square meters and is rented from an external company provides the warehouse service which is not involved with HARN. It is used to keep hazardous chemicals that purchased from manufacturer and wait to distribute to customer or use to install the fire protection system for customer.

#### Processes of storing products in warehouses

Warehouse staff prepare space to store and a bar code product as details receives from a purchasing staff to check correctness and make an acknowledgement receipt. Which warehouse

staff will inspect product type, quality, quantity, bar code, and acknowledgement receipt to correctness. Then, will store products in warehouse, placing products came first outside and products came later inside for convenience in next distribution and control quality of product before reaches customer. In case of incorrect purchasing and product defect/damage, the warehouse staff will report to the purchasing division in order to examine as well as inform manufactures, and/or the insurance.

#### Processes of transportation products

Delivery staff record a picking list and makes a delivery control note to the warehouse staff for check name of customers, product quantity, delivery place, and to plan a logistic route, in order the sales division will have data to inform customer an appointment about the estimated delivery time. Also, packing staff to collect documents related for all delivery to transportation providers who contracted by HARN for check type, detail, and total of products delivery, then, sign on the delivery control note as evidence. After that, deliver to accord to route specified, In case of emergency delivery or appointment for advanced shipping, the packing staff will receive a delivery note from salesperson and coordinate with to transportation providers who contracted by HARN.

HARN distributes products from warehouses to customers (shipping cost included in product price) by HARN trucks and other delivery trucks hired from the transportation operators outside who are not involved with HARN. Now, operators are selected and registered as the approved vendor list (AVL) by our HARN. We also have insurance for products kept at warehouses to prevent damage or accident during storing and operating in case of fire, lightning strikes, earthquake, storm, flood, and other accidents in warehouses. Now, the insurance covers assets at the Head Office and products at warehouses. As of December 31, 2024 our HARN have insurance on product

shipping domestically for high value purchasing to prevent loss or damage from accident, during lifting product to the delivery truck and transporting on truck. HARN is an only beneficiary and from 2012 until present, HARN **never** claim damage from a serious accident except for some minor accidents from moving products at warehouses, costing less than Baht 10,000 in each time.

Note : HARN’s will determine a sum assured in each year according to asset values from the latest financial budget before having insurance and review the increase/decrease of insurance amount as appropriate.

## 6) Customer Relationship Management Plan

HARN recognizes the importance of customer satisfaction, which is why it has implemented the ISO 9001:2015 quality management system within the organization. The quality policy is stated as: “We will create a lasting impression on customers with fast service, high-quality products, and continuous development of personnel through ongoing improvements in work processes.” This is to maintain customer satisfaction with products and services, and the principles are communicated to all business units.

Also focuses on managing good relationships with customers through various marketing activities, such as regular customer visits, promotional activities, customer satisfaction surveys at least once a year, and training sessions about products and services. These efforts lead to trust and the development of long-term partnerships with customers, HARN aiming for customer loyalty and repeat business.

Additionally, HARN systematically manages customer complaints through its website at [www.harn.co.th](http://www.harn.co.th), ensuring complaints are handled, tracked, and reported across all business units. Customer satisfaction surveys for HARN products and services are conducted annually to continuously improve product quality, services, and internal processes. These surveys provide important data that enhances understanding of customer needs.

In 2024, the Quality Management Department is responsible for evaluating service quality, complaint handling, regulatory compliance, and conducting customer satisfaction surveys in October 2024. The proportion of complaints resolved within an appropriate time frame is 100%, and the results from the 2024 customer satisfaction survey show an average score of 94.14%, a 0.64% increase from 2023, and exceeding the target by 4.14%, which was set at 90%.

According to the satisfaction survey, HARN has maintained a high level of customer satisfaction by improving product quality, increasing communication channels, and offering post-sale services. It also regularly shares beneficial business information with customers, as well as communicates survey results to relevant departments, on improving products, services, and internal processes to meet customer expectations.

HARN remains committed to managing good customer relationships, focusing on marketing activities, and providing ongoing product knowledge training for staff involved in sales. Continuous product development is also prioritized to ensure that products and services meet customer expectations and remain trustworthy.

Customers' Satisfaction	2024	2023	2022
<b>Products and Services</b> (Quality, variety products and services quality)	93.50	92.91	93.38
<b>Sales, Service and Project engineers</b> (Product, service, troubleshooting, and installation knowledge)	94.27	93.65	94.29
<b>Other services</b> (Management, provision of information, communication with HARN)	94.64	93.94	94.78
<b>Overall average</b>	<b>94.14</b>	<b>93.50</b>	<b>94.15</b>

