About GS1 Hong Kong

Founded by the Hong Kong General Chamber of Commerce in 1989, GS1 Hong Kong is the local chapter of GS1, a not-for-profit, global supply chain standards organization headquartered in Brussels, Belgium, with over 110 national chapters in 150 countries. GS1 Hong Kong's mission is to enable Hong Kong enterprises to have more efficient, visible and safer supply chains through the provision of global standards and a full spectrum of standards-based solutions and services, thus making possible business optimization and value creation. It engages with communities of trading partners, industry organizations, governments, and technology providers to understand and respond to their business needs through the adoption and implementation of global standards.

關於 GS1 Hong Kong

GS1 Hong Kong 是1989年由香港總商會成立，是GS1社區的成員組織之一。它是一個積極開發和實施全球供應鏈標準的非營利機構。GS1香港致力於幫助香港企業騰飛，擁有超過110個成員組織，遍及全球150個國家。根據全球供應鏈標準和以標誌為本的解決方案及服務，GS1 Hong Kong 助香港企業享有更高效、更優質及更安全的供應鏈。

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www.gs1hk.org
“Innovation is the ability to convert ideas into invoices.”

L. Duncan

序

Foreword

GSI believes that technology innovation enables businesses and communities to create an ongoing and insightful dialogue that leads to a deeper understanding about how people think, as well as how and why they change.

With this belief, we have been dedicated to promoting GSI standards that allow trading partners worldwide to easily communicate useful information such as products, locations, manufactured details and more so that they can maximize the benefits from innovation.

Through GSI Hong Kong’s efforts in the past 25 years since its establishment, GSI standards have reached out to a variety of industries including retail consumer goods, food and wine, apparel, healthcare, logistics as well as information and communication technology. We create values for more than 6,800 members, helping business community thrive and compete in the global marketplace by fostering the adoption of the international supply chain standards, technologies and practices that form the backbone of supply chain efficiency, visibility and collaboration.

In order to share the experience and intelligence of outstanding practitioners, we have produced our new business casebook. This case book, just like the prism on the cover, contains an impressive list of nine carefully vetted stories that demonstrate how businesses from different industries optimized their operations, sharpened their competitive edge and achieved maximum benefits by capitalizing on our standard-based solutions and services.

The book also answers the needs of those seeking to learn from good examples and follow best practice in implementing standard-based solutions. It also broadens our horizon and enables a deeper understanding of the remarkable values that GSI standards bring to various players in the supply chain.

By reading the stories, you will know how business innovations are catalyzed by standards and technologies, and how innovation plays an integral part in overcoming supply chain challenges and fueling business growth. I’m sure you will find these cases inspiring and the insights directly applicable in your own business. Life is a never ending learning process and chance favors only the prepared mind.

In the years to come, we look forward to leaping ahead with our members and partners. We will work together to raise the bar of business excellence and go the extra mile in the ever-changing business environment, maximizing mutual benefits through the creative use of global standards.

Last but not least, I would like to extend my heartiest gratitude to all story contributors and every member of the editorial and production team who has been so dedicated in making this project a success. Enjoy reading!

Anna Lin, JP  
林慧怡太平紳士
Chief Executive

GSI相信，技術創新有助企業及社區達成遠大目標，啟發理想及互動交流，更深入了顧客的需求，革新服務及貿易的方法及自由。

基於這種信念，我們不斷努力推動GSI標準，讓跨越全球的貿易夥伴可以輕易共享實用資訊，例如產品資料、貿易背景、生產商等詳細資料，並且透過科技創新帶來最大效益。

GSI香港成立至今已有25年，時至今日，我們致力不斷推動GSI標準向不同行業推展，包括零售消費品、食品和飲品、服裝、醫療護理、物流以及資訊和通訊技術。我們致力為超過6800名會員帶來效益，並積極推動商界基於國際標準，應用科技和實踐，全力協助業界提升供應鏈的整體效率、資訊透明度，以及加強與供應商之間的協作，從而提高企業在全球市場的優勢和競爭力。

為了與衆同行，我們亦悉心製作本書籍 pièce jointe，藉此分享傑出業者的成功案例，適合作為實踐標準的指標你們的實用參考；同時闡述發展與拓展思維，提升競爭力及應對競爭的原則。

對於渴望追求卓越、揮灑無盡的朋友，本書提供了值得參照的成功案例，適合作為實踐標準的指標你們的實用參考；同時闡述發展與拓展思維，提升競爭力及應對競爭的原則。

亞洲貿易的發展，是瞬息萬變、充滿挑戰，我們需要不斷創新及改進，以確保能在競爭激烈的市場中保持優勢。

展望未來，我們期待每一個人都能開拓眼界，努力追求卓越，提升競爭力及在瞬息萬變的商業環境中不斷進步，更上層樓。我們將繼續在應用全球標準及推動創新，為各經濟帶來最大效益。

最後，謹向所有協力成功舉辦的機構，以及專為我們的編輯和製作團隊衷心致謝。感謝他們的努力，我們才能看到這本精彩的成果。

希望大家享受閱讀本書！
Fat Lee Company Limited

Uplifting local business through applying global standards

Established in 1997, Fat Lee Co. Ltd. is a manufacturer and distributor of disposable utensils from Hong Kong. Supported by production and warehousing facilities located in the city, the company’s product range includes all cups, bottles, lunch boxes, trays and dishes made from paper, plastic and foam. These items are primarily distributed to Hong Kong, Macau and other nearby regions, through various distribution channels and retail outlets.

Fat Lee Company Limited於1997年成立，是香港一家製造及批發紙製餐具的公司。公司設有生產及倉儲設施，產品包括紙製、塑膠和發泡膠的杯子、水瓶、午餐盒、碟子和碟子，通過不同批發渠道和零售商，主要分銷到香港、澳門和其它鄰近地區。
**Business challenge**

Following its transition to a second-generation management, the family-owned company saw the pressing need to improve its supply chain efficiency to support its continual business expansion and product diversification, overcome the related challenges brought on by these changes and capture the burgeoning market potential and opportunities.

Prior to supply chain revamp, the company relied on manually intensive processes to handle ordering and receipt of different raw materials from multiple overseas sources, including the United States, Japan, India, and Europe; warehousing and stocktaking; transfer of raw materials to production plants; subsequent transfer of finished products back to the warehouse and delivery to several distribution and retail channels.

Plenty of non-working hours were wasted on locating misplaced stock, determining the actual inventory turnover and monitoring stock movements. Because of the inventory errors, the supply chain remained low in efficiency and visibility and was ill-equipped to help the business owner track stock inventory changes and hence, make constantly informed business decisions.

**Solutions**

In order to understand the client's warehouse operational and logistics workflow requirements, the GSI Hong Kong team conducted onsite inspections and interviews with responsible personnel from the warehouse and management.

Redesign of warehouse layout

Based on a detailed analysis of all key warehouse metrics, GSI Hong Kong was able to establish the optimal physical layout, to support efficient material flow in and out of the facility as well as improve operating procedures and incorporation of any secondary functions into the overall warehouse design. In fact, the warehouse layout was restructured for space optimization as well as facilitating easy location and retrieval of materials and finished products.

Revamp of warehouse management system

GSI Hong Kong also offered professional advice on how the client could reconfigure its warehouse management and workflow systems to improve its monitoring on the movement and storage of materials and processing the associated transactions, including receiving, putaway, picking and inventory taking. The redesigned systems also help direct and optimize inventory movements and handling, with the information captured in real time. With the warehouse management solution proposed by GSI Hong Kong, Fat Lee can carry out the transaction processes in a convenient and error-free way, while keeping their inventory updated and enabling warehouse managers to handle ad hoc situations smoothly and efficiently.

**Benefits**

Overall, Fat Lee's revamp of its operational model with the guidance and consultancy offered by GSI Hong Kong has resulted in an appreciable increase of its supply chain efficiency, with the following benefits:

- Electronic receipt of inbound goods is now possible, thereby eliminating the labor-intensive, time-consuming process of stocktaking
- Scan goods into warehouse locations for greater accuracy and visibility of inventory on hand
- Automated counting and sorting on the production line
- Ability to track products through manufacturing, warehouse storage and delivery
- Electronically track and trace every item from different product categories and recover them with ease and convenience if they are misplaced
- Re-focus staff time on value-added tasks

**Quantified result**

The warehouse automation project has led to efficiency enhancement and savings, including a 5% increase in inventory accuracy and a 30% decrease in excessive inventory.

Given the ease of accessibility of real-time supply chain information, the company's management is now better equipped to make sound, timely decisions to cope with the changing trade environment and formulate strategies for business expansions. The company can now spend more time on expanding their business instead of monitoring the day-to-day operation.
Hong Kong Maxim’s Group
香港美心集團

Connecting suppliers with innovative solutions
創新方案連繫供應商

Hong Kong Maxim’s Group is one of Hong Kong’s largest catering companies since its founding in 1956, with over 860 outlets operating today across the city, Mainland China and Vietnam. Under its portfolio is a diversity of Chinese, Asian and European restaurants, quick-service eateries, cakes & bakery shops and institutional catering. The Group is also engaged in the manufacturing, distribution and retail for a range of festive products, including the award-winning Maxim’s Mooncakes. The Group is also the licensee of renowned brands, including Starbucks Coffee, Genki Sushi and Ippudo ramen and The Cheesecake Factory, as well as delivering air-catering services to 11 Chinese cities through the first sino-foreign joint venture it established in 1980.

美心集團創立於1956年，是香港最大型的飲食集團之一，目前於香港、內地及越南擁有超過860間分店。集團的餐飲業務範圍廣泛，包括中菜、亞洲和歐洲菜、快餐、西餅、烘焙店及機構食堂等。集團亦生產、批發和零售壹年節日佳品，包括獲獎的美心月餅。集團亦獲授權經營多個知名品牌，包括星巴克咖啡、元氣壽司、一風堂拉麺以及芝士蛋糕工廠，並於1980年成立的中外合資企業，為來往11個中國城市的航班提供飛機餐飲服務。
**Business Challenge**

Hong Kong Maxim's Group has been operating a complex end-to-end supply chain, given the diversity and large numbers of restaurants, eateries, retail outlets, products, brands, culinary types it manages on a daily basis. While the different restaurants, eateries and retail outlets under Maxim's management are responsible for their own procurement, a centralized system is used to simplify the synthesizing and processing of the procurement data. Yet, there are still other challenges to both Maxim’s and the trading partners in the ordering, goods receipt and invoicing processes. In particular, manual data entry of purchase orders and invoices into the IT system is prone to errors and time consuming that greatly affects their operation efficiency.

In view of this, Maxim’s seeks to uplift its performance in the above three areas, so as to reduce the delays, administrative and operational costs caused by the tedious tasks of information re-entry, correction of errors, and slow modes of communication. Besides, to enhance the partnership with their trading partners, Maxim’s aims to improve the ordering and invoicing transparencies in a procurement cycle so that order will be fulfilled correctly and payment will be settled without delay.

**Solutions**

Commissioned to streamline its supply chain process for higher efficiency, the Group has initiated to adopt ezTRADE - GST Hong Kong’s B2B Electronic Data Interchange (EDI) platform to leverage real-time and structured data to process orders and invoices in a cost-efficient way. This comes as a vital step for Maxim’s to establish electronic connections with its trading partners, superseding the emails, phones calls and manual entry work with ease while maintaining the highest efficiency.

Under this initiative, Maxim’s can send purchase orders to its suppliers and the latter can send their EDI Invoice files to a messaging platform, where the invoicing data is automatically integrated into their back office systems, which helps eliminate manual entry efforts and saves plenty of man-hours and minimizes human errors. Receiving goods at restaurants/warehouse will be simplified and more efficient with the use of Advance Shipping Notice (ASN) in which suppliers, prior to goods arrival, will inform Maxim’s the details of goods dispatched including delivery date, quantity and other information.

The ezTRADE platform enables the Group to automate a number of key supply chain functions, including the preparation of purchase order (PO) requisitions, the input of PO data into the backend system, the transmission of PO via Internet; issue invoice; processing of supplier invoices.

As Maxim’s prepares for the rollout of its EDI platform, its trading partners in Hong Kong and Mainland China will also be invited to join the EDI program.

**Benefits**

With all product categories, prices and quantities itemized in detail on each PO, trading partners can extract accurate and timely trade information using a common business language in a standardized electronic format, and data transmission can be conducted over the ezTRADE network in a simple and efficient manner.

Implementing such a platform will offer the Group’s several benefits, including:

- **Streamlined business processes** - saves time and resources from ordering to invoicing via the Internet, with shortened business cycle.
- **Greater reliability** - prevents loss of information during transit, as the trade documents will be rendered in soft copies for quick and safe electronic transmission.
- **Reduced need for manual entry work**.
- **Optimal productivity** - reduces costs of data re-entry and human error.
- **Accuracy in data exchange**, which will help reduce the incidence of unfulfilled and mismatched orders.
- **Greater visibility** - facilitates smoother physical flow of goods along the global supply chain.
- **Increased competitiveness** - through the adoption of international logistical standards.
- **Enhanced customer relationships** - by being more responsive to customer demands.

**業務挑戰**

香港美心集團每天需要處理數以千計的採購資料，從食材、零售到產品，產地、品牌和供應商等等，其處理自動化操作相對較難。美心旗下不同的餐飲、食品批發零售業務及管理層各自採用，然而其採購資料仍需與用位於同一中台系統，以確保數據同步及處理的工作。此外，美心與其供應商亦需面對訂貨、收貨、發貨流程所帶來的挑戰。尤其是人手輸入採購訂單和發送貨運資料系統時，時常會出現錯誤，有機會會延誤發貨。

有見及此，美心力求改善上述三個挑戰的表現，以減少錯誤，喺降低因重複輸入資料，及複雜資訊模式和其複雜處理程序所造成的行政和營運成本。此外，為加速與供應商的關係，美心希望改善採購週期的訂單和貨運流通，確保一旦訂單已正確處理，亦能立即付運，不致延誤。

**解決方案**

為解決採購流程，簡化效率，美心集團採用了GST Hong Kong的電子數據交換平台「市場達」，透明無需縮寫及複雜的資料，簡化採購訂單和發貨處理程序的成本及效，提升美心與其供應商建立電子商務的重要一步，不但提高數位化採購、轉運，電話及人手輸入工作，更能提高處理效率。

採用這個平台，可簡化供應商發送採購訂單，後者可將電子數據交換平台發送一個無紙處理平台，由平台自動及後續數據輸入到供應商的電子系統，避免重複手動人手輸入，省時及大量工時，並減少人手出錯。電子數據交換流程簡明化及監控貨運資料的收集程序，提高效率，供應商在貨運流通，亦會可早期通知美心所需貨品的資訊，包括送貨，數量，及其他資訊。

「市場達」平台令集團供應商的多個採購點步驟簡化，包括訂購採購訂單，接收採購訂單資料系統等，線上辦理採購，發貨，以及處理供應商資料。

隨著美心集團推出電子數據交換平台，其獨步香港的供應商平台亦會協助供應商參與這個平台。

**業務挑戰**

由於每張採購單均已登載列明商品種類、價格及數量，貿易夥伴及庫存資料都可及時取得準確的資料資訊，進而確保貨品的供應貨源及標準化的電子格式，此可簡易供應商換貨、【數據達】數據傳輸。

**這個平台為美心帶來以下效益**

- **簡化商業流程** - 由訂單到發貨环节通通互聯網，可節省時間和資源，供應商業務流程。
- **提升可觸達度** - 由於文件文件均為電子版本，簡化快速，減少傳統時代耗時浪費。
- **減少人手輸入的工作**，簡化生產流程，減少訂單錯誤或延誤的情況。
- **降低風險** - 鍵盤操作提供多層保障，減低錯誤，
- **發展電子化數據流程**，加快效率，
- **促進與供應商的有效互動，促進與供應商關係。**

**市場達**

"Maxim's" and any name, logo or trademark of any restaurants and any intellectual property right therein used or referenced in this publication belong to Maxim's Caterers Limited, a company operating in Hong Kong and/or its affiliates.
Zuellig Group

Boosting order-to-cash processes by joining the largest EDI alliance

Zuellig Pharma specializes in the marketing and distribution of pharmaceutical and healthcare products. The company provides targeted solutions including distribution of pharmaceuticals, medical devices and clinical trial materials, sales and marketing outsourcing, patient-centered programs, and a full range of retail pharmacy services. Zuellig Pharma Group was established in 1922 to provide healthcare services across Asia, where it employs 10,000 staff members, operates in 13 countries and serves over 290,000 doctors, hospitals, pharmacies and clinics.

裕利醫藥有限公司

加入最大的電子數據聯通聯盟，改善訂單到現金流程

裕利醫藥有限公司專門推廣和分销醫藥及醫療護理產品，它提供針對性的方案，包括藥物、醫療設備和臨床試驗物資分銷、銷售和推廣外貿，病人為本計劃以及一連串零售藥房服務。裕利醫藥於1922年成立，在亞洲13個國家提供醫療護理服務，共聘用10,000名員工，服務超過290,000名醫生、醫院、藥房和診所。

INDUSTRY 行業

- Healthcare

GS1 STANDARDS USED 應用的 GS1 標準

- GS1 BarCode
- Global Trade Item Number (GTIN)
- Serial Shipping Container Code (SSCC)
- Electronic Data Interchange (EDI)

SOLUTION 解決方案

- ezTRADE
Business challenge
Catching up the 7S improvement initiatives

With the mission to enhance the traceability of pharmaceutical products from external vendors into its pharmacy stores in a more accurate and efficient way, the Hospital Authority (HA) pharmacies, starting from June 2012, have launched its pharmaceutical supply chain modernization project. In the project, an electronic data exchange platform eTRADE developed by GSI Hong Kong, was chosen to facilitate accurate and efficient data exchange between the HA and its suppliers, including purchase orders, purchase order responses, dispatch advice and invoices, etc.

Zuelig Pharma’s was invited to join this project to renovate its supply chain process. Although the company has had streamlined its supply chain with its business partners for years, including an Electronic Data Interchanges (EDI) platform arrangements with HA which was established for over a decade, the company still took this opportunity to further enhance its supply chain processes to perfection and tied in with the government’s 7S improvement initiatives under a preventive approach to public healthcare in Hong Kong.

Application of GSI Standards to the client’s communication protocols and processes has significantly enhanced the accuracy of its data exchange with HA and other healthcare customers, ensuring the elimination of processing and other blunders.

Benefits

Ultimately, patient safety has been improved with the implementation of product identification through barcode technology. This has enabled hospital, pharmacy or clinic staff to avoid medication errors by automatically matching product data with patient data.

This exercise has also enabled efficient traceability of pharmaceutical products, all the way from warehouse to patients. This helps the company facilitate prompt identification and removal of infected items in the event of a product recall. Patient safety is also better assured with the reduction of handling and delivery errors arising from manual input.

Zuelig Pharma has improved the accuracy of information captured in its trading documents during the procurement, pre-delivery and actual delivery cycles. The validation of the goods delivered also makes its operations faster and more accurate. The availability of real-time supply chain data, including the product needs of its customers, has enabled more real-time demand planning decision.

With the simple standards and appropriate technology and systems in place, Zuelig Pharma is able to improve the better efficiency and higher safety of the pharmaceutical distribution services it provides and cope with fast-changing customer demands, while maintaining a high level of operational service excellence.

Solutions

As a supply chain consultant to Zuelig Pharma, GSI Hong Kong assisted the pharmaceutical supplier to adapt to the supply chain process requirements specified by the HA. One of the key recommendations is the adoption of barcode applications for product identification at carton level. The barcodes affixed to each carton can automatically identify their physical content, including pharmaceutical items, assets, logistics units, shipments and physical locations, etc. at any point in the supply chain. This has eliminated the need of physical stock counting, while providing for real-time visibility into its inventory status and ensuring that the shipments do not end up at the wrong delivery address.

In addition, Zuelig Pharma embraced a number of other GSI standards, including Electronic Data Interchanges (EDI) documents such as Purchase Order Response (POR), Advance Shipping Notices (ASN) and Invoices.

Upon receipt of purchase orders from the HA, Zuelig Pharma will pack the products with a GSI Serial Shipping Container Code (SSCC) label attached. At the same time, an electronic dispatch advice will be sent to the HA for advance validation by the purchasing unit. Upon delivery to the HA’s warehouses, the SSCC will be scanned by the pharmacy staff to cross check all product data and physical goods delivered with the purchase information source. Once correctly verified, electronic invoices will be sent to the HA through the eTRADE platform.

Quantified result

With GSI Global Standards and EDI platform, Zuelig Pharma has streamlined the pharmaceutical procurement processes and facilitated the exchange of data and documents such as purchase order, purchase order response, advanced shipping notices as well as invoices. Over 80% orders were automated effectively which results in operation efficiency, accuracy and patient saving.
Marketing outreach
Original Taste Workshop

Delivering customers original taste with business innovations

Original Taste Workshop (OTW) Limited is a health food and beverages chain, renowned for a variety of homemade-style Chinese soups. It sells primarily through its 10 wholly-owned flagship stores and around 1,500 third-party retail outlets at supermarkets, convenience stores and department stores across Hong Kong, Kowloon and the New Territories.

Manufactured at the Group’s 15,000-sq feet production facilities in Hong Kong, OTW products are touted for their 100% natural ingredients, without the use of MSG (monosodium glutamate), additives, chicken powder, preservatives and artificial colours.

One of the OTW business goals is to expand into the retail markets of China and overseas, while extending its market shares in Hong Kong as it continues to broaden the array of its products.

OTW’s core business is to develop, produce and retail a range of Chinese-style soups. OTW’s range of soups includes 10 different varieties, including chicken, beef, pork, seafood, tofu, and mixed soups.

In order to achieve its business objectives, OTW has been focused on developing a range of healthy soups that are low in fat, high in protein and have a balanced nutritional profile. OTW’s soups are also free from MSG, artificial colours and preservatives.

OTW’s soups are sold in a variety of retail outlets, including supermarkets, convenience stores, and retail outlets in Hong Kong, Kowloon, and the New Territories.

OTW’s soups are also available for delivery, and the company is actively looking at opportunities to expand its retail outlets in China and overseas.

OTW’s soups are also available for delivery, and the company is actively looking at opportunities to expand its retail outlets in China and overseas.

INDUSTRY 行業

- Food

GS1 STANDARDS USED 應用的 GS1 標準

- Global Trade Item Number (GTIN)

SOLUTIONS 解決方案

- ezTRADE
- Consumer Caring Scheme

- 通商易
- 「貼心企業」嘉許計劃
Business challenge

To stand out from the highly competitive retail market, Original Taste Workshop has to work smarter utilizing technologies and reputation building tools, and to help it achieve its business objectives and maintain its competitive edge.

Among the challenges encountered was the need to raise its product visibility and efficiency as well as to facilitate business-to-business exchange with retailers and other stakeholders. Since the company's product portfolio includes a variety of over 60 items, there is a need for the management to streamline the procurement process for the different ingredients from Mainland China and other countries, ensuring that no key orders end up missing in transit, that inventory shortages are replenished in time and that customer fulfillment is met. Tackling such a challenge calls for supply chain transparency, along with materials/products tracking and traceability with ease and minimal errors.

At the shopfront level, it is also a challenge for the company to inculcate its sales personnel with a customer-first mentality and improve their service quality. Addressing all these challenges is critical for the success of company's market outreach strategy and efforts.

Solutions

By leveraging ezTRADE, an electronic document exchange platform that facilitates paperless trading, Original Taste Workshop has been provided with a robust support for the exchange of business messages and transmission of commercial documents with trading partners along the supply chain using Electronic Data Interchange (EDI) messaging formats. This means that it is able to streamline and better organize its complex operational processes, such as procurement, to handle transactions with its suppliers, with minimum fuss and reduced errors, while eliminating any communication, order processing and delivery errors every step of the way.

Benefits

Sharing accurate and timely trade information with its multiple trading partners through ezTRADE, the company enjoys increased data accuracy, preventing information loss during transit and avoids human errors. Costs of data re-entry are also minimized. Savings in time and resources, from ordering to invoicing via EDI, has also shortened its business cycle.

Combining with its membership involvement in the Consumer Caring Scheme and the solutions provided by GS1 Hong Kong, all of these helped raise awareness of the company's management about business practices on several fronts, including marketing, promotion, branding strategies and customer relationship management.

Original Taste Workshop has also joined the Consumer Caring Scheme, organized by GS1 Hong Kong, to evaluate the quality of its products and services as well as to increase its brand image and equity for greater public awareness. To create a stronger corporate identity, the company has printed the Consumer Caring logo on its product packaging and the badges of the frontline staff. This conveys the message that the company places much importance on the interest and well-being of its consumers and that the customers are at the heart of its business.

To further extend this core value, the company also launched an internal drive in 2013, educating its employees and encouraging them on handling customer complaints with responsiveness, tact and sincere assistance. In the coming future, the company's training will be focusing on providing customers with professional explanations about the products sold at its outlets.
Quality
DCH Logistics provides one-stop professional logistics services to its international branding clients in Hong Kong, Macau and Mainland China, including supply chain management, material sourcing, modern warehousing system, cold chain management (air-conditioned, chilled and frozen), repackaging, value-added services (VAS) freight forwarding, goods consolidation and distribution. In particular, DCH Logistics is committed to provide professional and diversified solutions for one-stop logistics supply chain, so as to reduce the client’s operation cost and enhance their market competitiveness.

DCH 行物流有限公司為香港、澳門及內地的國際品牌提供一站式專業物流服務，包括供應鏈管理、原料採購、現代倉儲系統、冷凍鏈管理（包括空调、冰鮮、冷藏）、重新包裝、增值服務、貨運代理、貨品加急及批發等。DCH 行物流特別致力於為一站式物流供應鏈提供專業而多元化的解決方案，藉此為客戶節省營運成本，並提升其市場競爭力。
Business challenge

Globally, there has been an increasing trend of food safety incidents or crises over the years and it increases the risk associated to Hong Kong since over 80% of the food is imported from overseas. These kinds of incidents alert the importance of product recall efficiency and global food traceability at origin to ensure food safety and quality to final consumers in Hong Kong.

Further, customers are more demanding in food safety and quality management. Apart from lifting up the food traceability standards, DCH Logistics has pioneered in cold chain logistics for temperature-sensitive food products to export from overseas to local market. They are now using market traditional facilities for temperature recording and data will be retrieved once cargo arrives at DCH Logistics Centre. Remedial action(s) may not be easily taken in the event of temperature violation during transit. To strengthen and further advance the cold chain services to clients, the company plans to adopt EPC/RFID tag in real-time temperature monitoring in the food supply chain.

Solutions

In order to enhance customer confidence on food purchase, DCH Logistics decided to adopt GS1 Global Traceability Standard (GTS) and RFID-based cold chain management solution in their food supply chain services to enhance global food traceability and supply chain visibility.

With the mission to ensure food safety throughout the entire end-to-end logistics from source to client, DCH Logistics extends the traceability application to its upstream suppliers. GS1 GTS is firstly deployed in the frozen fish category to identify the critical product control points. On supplier side, unique GS1 codes are assigned to each packaged product and logistics units. All this outbound logistics unit information and shipment data will be shared to the relevant parties through a track and trace platform, e2TRACK, built on the Electronic Product Code Information System (EPCIS) visibility standard.

To add more values to clients, the company also adopts a RFID-based cold chain management solution tailored made to the temperature sensitive food products, such as confectionery. With the RFID sensors installed, temperature and humidity can be continuously monitored during each critical logistics point, including storage, packaging, dispatching and delivered alongside the entire supply chain till client’s receipt confirmation. The monitored information can be constantly accessed through e2TRACK.

Benefits

Through the real-time data visibility platform e2TRACK, DCH Logistics, as a logistics provider, can enjoy accurate traceability information and speed up the order processing upon product arrival. By implementing global standards and its enabling technologies, the company is also empowered to provide end-to-end supply chain confidence to its upstream and downstream trading partners. It further boosts the positioning of DCH Logistics as a pioneer value-adding logistics service provider by providing safe and traceable products to its clients within Hong Kong and beyond.

業務挑戰

過去一年，全球食品安全暫時處於危機事件出現上升趨勢；由於香港超過90%的食品是由外國進口，面對的風險也日益增多。食品安全事故突出其產品回購成本及全球食品源頭可追溯性的重要性，只有做好這兩方面，方能確保香港的首選消費者可以享用安全而優質的食品。

再者，現今的消費者對於食品安全和品質管理的要求已有所提升。除了食品安全標準之外，大衆更關注於其食品的冷鏈物流技術，處理從海外入口到本地市場無論是溫度變動的食品。大衆對市場的冷鏈設備記錄要求嚴格，產品相隔大衆物流中心，便可馬上讀取數據。不過，一旦發現產品溫度在運送過程出現異常，要補救並不容易。為了進一步改善冷鏈物流服務，大衆尤針對其食品供應商引入EPC/RFID標籤，以實現監察食品安全溫度的變化。

效益

透過客戶端的數據追蹤平台「tranQ」，大衆物流決定可以簡化全球追溯標準（GTS）及以RFID為基礎的冷庫物流管理方案，以提升全球食品安全的可監測性及透明度。

解決方案

為加強消費者對所購買食品的信心，大衆尤定決定引入其食品供應商採用全球追溯標準（GTS）及以RFID為基礎的冷庫物流管理方案，以提升全球食品安全的可監測性及透明度。

同時，大衆尤將食品追溯的應用延伸至所有倉儲，以確保食品在整個物流流線的安全性。大衆尤之為香港魚類的供應商引入GS1 GTS，追溯每一個產品的產品處理。於供應商方面，每個產品及物流單位均會附上獨特的GS1編碼，所有進出倉儲和貨物運輸的數據，均會上載到易品電子化服務中心（EPCIS）為基礎的追溯及協調平台「tranQ」，以作分享用途。
Safety
Nex Medical Limited is a major manufacturer and distributor of disposable laparoscopic devices used for minimally invasive surgeries conducted at hospitals, clinics and other healthcare institutions. Leveraging on US and European medical technology, the medical supplies company’s manufacturing operations are based in mainland China, managed by a Hong Kong team.

Specializing in disposable laparoscopic devices, Nex Medical aims to meet the demands of healthcare practitioners looking for medical instruments of high quality, ergonomics and performance.

Nex Medical 有限公司是即棄腹腔鏡設備生產商和分銷商，這些設備用於醫院、診所和其他醫療機構的微創手術。Nex採用優秀的醫療科技，由香港團隊管理，生產基地設於中國大陸。

Nex 專精於即棄腹腔鏡設備，為醫護人員提供高質素、符合人體工學和效能出色的醫療器材。

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Business challenge

Patients today face significant risks that a recalled medical device could be used in their treatment if there is no way for quick and reliable identification of a recalled device. Without an appropriate identification and tracking system, a defective device could remain undiscovered for a longer time, which is a significant patient safety concern. Having a wider connection in the global distribution chain and increasing alerts in patient safety, Nex Medical faces the challenges of effective identification of individual medical devices produced, inefficient and ineffective product recalls, incomplete adverse event reporting, counterfeit products and inefficient healthcare supply chain processes.

A strong need for Nex Medical was developed to implement an effective product identification mechanism to automatically document and track the disposable laparoscopic devices it distributes, in order to enhance the traceability of these products.

Benefits

By embracing GS1 solutions, Nex Medical has been able to meet globally recognized identification standard for medical services, by which it can track and trace its device distribution efficiency, while being able to develop a database for system integration of Information if necessary.

Nex Medical’s successful implementation of the UDI on its products means that the healthcare devices it manufactures and distributes will be authorized for use anywhere in the world, especially countries that mandate UDI requirements to be attained. Apart from maintaining its global market presence and fulfilling the regulations, the company also leverages UDI to optimize its manufacturing and supply chain business processes.

This model will allow the company and other data providers to load their master data once for all geographies. Data recipients, such as its customers from Hong Kong’s healthcare industry and beyond, will also have access to the data through one source.

Quantified result

The UDI is required on the label in a human readable format, as well as in a manner that can be read by automatic identification and data capture (AIDC) technology, such as a linear or 2D DataMatrix barcode. A unique UDI must be applied to the “base package” and all packaging levels.

Given the need for Nex Medical to assign UDI numbers to its products, a database with identifier numbers, corresponding products, respective manufacturers and other distributions has to be maintained.

The GS1 solution for creating the device identifier of a UDI is the Global Trade Item Number (GTIN). The “dynamic” portion of a UDI is a production identifier generated in manufacturing and includes expiry data, lot number or serial number (depending on how the device is controlled) and is printed on the product label. See illustration below:

**SERIAL NUMBER**

**LOT NUMBER**

**EXPIRY DATA**

In the course of its consultancy work, GS1 Hong Kong provided training to key operational staff from Nex Medical in order to educate the FDA standards and UDI guidelines and the various operational practices, including database setup and maintenance, to ensure their smooth implementation.

Solutions

Under GS1 Hong Kong’s consultancy and assistance, the device manufacturer decided to implement the new Unique Device Identification (UDI) codes recommended by the U.S. Food and Drug Administration (FDA). As such, the company is required to assign a UDI number to each version and model of its devices. With the unique device identification system, the company can adequately identify each medical device.

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A-Fontane

Supporting business expansion with supply chain modernization

The A-Fontane Group is a vertically-integrated business specializing in a range of bedding products, which include mattresses, pillows, blankets, duvets, duvet covers, made from different fabrics and materials. Established in 1973, the Group owns the A-Fontane flagship brand. All A-Fontane bedding items are in-house manufactured and processed, along with raw materials procurement, warehousing, delivery, distribution, retail and logistics among its key operations. Supported by 1,500 employees, the Group operates a manufacturing base of one million square feet. Its international sales network covers Mainland China, Hong Kong, Taiwan, Japan, South-East Asia, USA, Canada and Australia.

雅芳婷集團屬於垂直整合企業，專門生產床褥、枕頭、毛毯、羽絨被及羽絨被套等床上用品，所使用布料及物料十分多元化。集團成立於1973年，以「雅芳婷」為其旗艦品牌，所售床品全屬自家製品，由雅芳婷一手包辦原料採購、製造加工、存倉、發貨、批發、零售到物流等各項重要工序。雅芳婷集團僱用約1,500名員工，工廠佔地約100萬平方呎，其國際銷售網絡橫跨中國內地、香港、台灣、日本、東南亞、美國、加拿大及澳洲等多個地區。
**Business challenge**

A-Fontane started out as a traditional family business and has been growing and expanding its famous brand of bedding products worldwide. Faced with the rapid changes of technology and the consumer market, the company must constantly rejuvenate its brand and continue its quest for new business opportunities, in order to retain its competitive edge in the market.

The company is challenged to modernize its supply chain to cope with its expanding item variety and business volume. In the past, A-Fontane operated by a document-control process flow. In order to achieve its operational efficiency and effectiveness and customer satisfaction, they have decided to embark on end-to-end supply chain modernization for its mattress items, from raw material procurement to delivery to end customer.

In addition, they are planning to start an e-commerce business worldwide. Supply chain efficiency such as inventory accuracy and effective logistics support are the primary keys to its e-commerce success.

**Solutions**

GSI Hong Kong provided A-Fontane supply chain consultancy service based on a Supply Chain Operations Reference Model (SCOR) to standardize their supply chain management processes for its mattress products, from procurement stage to final customer delivery. The SCOR model provides a unique framework that links its business process, metrics, best practice and technology features into a unified structure to support real-time communication among its supply chain partners and improves the effectiveness of its supply chain management.

In addition, A-Fontane has adopted the EPC/RFID application on their mattress items with the purpose of achieving efficiency, data accuracy and items traceability. With the application, RFID chips were embedded into the mattress and all its items’ movements, both inbound and outbound, are automatically captured by the system as the products pass through the EPC/RFID reader without human intervention, achieving efficiency, visibility, data accuracy as part of real-time process monitoring.

**Benefit**

Process visibility and items traceability are the two main benefits achieved under this project. With the redesigned mattress supply chain process flow, all cargo movement can be automatically captured by EPC/RFID, thus, to enhance process efficiency, visibility and traceability. This enables A-Fontane to track and trace its products in real-time supply chain process.

From the warehouse point of view, EPC/RFID application empowers staff members to receive, pick and dispatch goods in an efficient and effective manner, with greater pick/pack and stock accuracy.

With the upgrading of supply chain process and RFID application on efficiency, A-Fontane is well-equipped with a global standard for business expansion worldwide especially in e-commerce development, which is one of the strategic directions that the company seeks to pursue.

**Quantified result**

A-Fontane sees the need to transform its traditional operations into a modernized supply chain in compliance with global standards, supported by more efficient warehouse and inventory management to develop its multi-channel business. Supply chain savings of at least 10% corresponding to inventory accuracy enhancement, are expected to arise from this project.

**Visibility**

A-Fontane supply chain flow for its mattress products has been redesigned, from raw materials ordering through storage, production and final shipment as well as delivery.

**業務挑戰**

面對市場發展趨勢，今日已成為掌握國際化的線上商品品牌。面對日益壯大的中國和東南亞的消費市場，A-Fontane必須保持市場的競爭力，繼續發展其商標，以維持其競爭力。

開發產品市場，售後服務亦需要跟上，供應鏈現代化成為A-Fontane的當務之急。RFID技術的供應鏈流程化自動化，是為了提升邊緣效率和客戶滿意度，結合精益生產A-Fontane供應鏈全霧化現代化，結合貿易與運輸流程，所推進的RFID系統可追溯最終消費者的每一個供應鏈過程。

同時，A-Fontane亦計劃開發全球電子商務系統，因此必須維持供應鍊有效運作及提升有效的物資管理。

**解決方案**

GSI Hong Kong為A-Fontane提供供應鍊顧問服務，建議採用供應鍊標準參考（SCOR）模式，以設計供應鍊流程及標準化，實現從原料到最終消費者之間的每一個環節，SCOR模式結合企業的營運流程、管理標準，改善實作，精細化流程控制，提出綜合的供應鍊觀念作參考方案。不但為供應鍊各部門提供實用管理支援，亦可提高供應鍊管理水平。

此外，RFID系統亦開始應用電子標籤技術（EPC）及無線射頻識別（RFID）科技，以達到提升供應鍊透明度及可追溯性的目標，全面改善有關價值鏈的運作水平。應用EPC/RFID系統後，具體於生產和貨運流程可自動完成出入記錄，無須人力支援，使實時監察商品物資的流程更有效率、透明度和準確度。

A-Fontane的供應鍊系統已整合到RFID，從訂貨及儲存原料，生產批號到運輸，每一個程序的效率都能夠在此展現。
China Certification & Inspection Group
Food Safety Traceability Center

China Certification & Inspection Group (CCIC), which was officially set up in 1980, is an independent third party certification and inspection organization dedicated to providing inspection, verification, certification and testing services, with accreditation by General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China (AQSIQ), Certification and Accreditation Administration of the People's Republic of China (CNCA) and China National Accreditation Service for Conformity Assessment (CNAS).

Under the auspices of CCIC, CCIC Food Safety Traceability Centre was established in 2013 to certify and inspect products. It is the only trans-national and independent certification and inspection institution that aims to provide inspection, identification, certification and traceability information query services.

成立於1980年的中國檢驗認證集團（CCIC）是經國家品質監督檢驗檢疫總局（AQSIQ）許可、國家認證認可監督管理委員會（CNCA）資質認定、中國合格評定國家認可委員會（CNAS）認可，以「檢驗、鑑定、認證、測試」為主業的第三方檢驗認證機構，在全球擁有300家機構，在國內的重要港口和城市有分公司的約500家。

在CCIC的支持下，CCIC食品安全溯源中心於2013年成立，負責食品認證及檢驗工作，是目前國內唯一提供跨國產品檢驗、檢測、認證並可為消費者提供溯源資訊查詢系統的機構。

INDUSTRY 行業
- Logistics

GS1 STANDARDS USED 應用的GS1標準
- Electronic Product Code
- Information Services (EPCIS)

SOLUTION 解方案
- ezTRACK
Business challenge

China has seen the fastest growth in wine consumption, a leap of 142.1 percent from 2007 to 2011, reaching 192.25 million cases, or more than 1.9 billion bottles, according to a survey conducted by the international Wine and Spirit Research, whose findings were published last year. The study also forecasts that Chinese wine consumption will increase by an additional 39.62 percent - 71.65 million cases, or 858 million bottles - between 2012 and 2016.

Across its customs checkpoints in the south, Hong Kong has also grown in importance as a major wine trading hub of Asia, following its abolition of wine tax in 2008. The city’s burgeoning wine business can also be attributed to its proximity to the mainland, where market demand for liquor has greatly risen with the popularity of its wine culture.

After a year of operation and equipment test, the quarantine process of wine importing has been accelerated. At the same time, under the policy of the Shenzhen Enfer-Exit Inspection and Quarantine Bureau (SZCQ), the sample inspection of the wine with certification is issued by authorized overseas test lab can be reduced at the Shenzhen border.

Looking into ways to accelerate the wine import clearance process, the CCIC Food Safety Traceability Centre, SZCQ, Shenzhen Shenzhen Logistics and GS1 Hong Kong have combined forces to carry out a wine import clearance project. This project also aimed at finding solutions to regulate the legitimacy of the market, combat counterfeiting and protecting consumers’ interests.

Solutions

To ensure a smooth roll-out of the project, GS1 Hong Kong developed “ccic315.com” based on an EPICS-standard-based platform - eTRACK, in order to provide testing application and product track-and-trace services. This streamlined the whole process of cross-border product movement. The platform allows Chinese importers to request CCIC’s overseas offices to conduct on-site food and wine testing in an authorized test lab. Upon confirmation of test results for a product consignment, CCIC Food Safety Traceability Centre will issue a certificate to the overseas suppliers. The report and the wine information will also be uploaded to the eTRACK platform, ensuring that the products are compliant with food standards on the mainland.

By this, it ensures that the products are compliant with food standards on the mainland and duly endorsed. Based on this certificate, a secured label with a serialized number encoded in QR code will be tagged on each product under the monitoring of CCIC. With this security label, both logistics and product information can then be verified by the related stakeholders and all consumers.

Since product tracking capability is important for monitoring the movement of physical goods from source to port, it is necessary for the global supply chain to be deployed accordingly to ensure smooth information delivery by the various trading partners. The ccic315.com is built on the eTRACK platform which adapts GS1 Electronic Product Code Information Service (EPCS) Information delivering standards to enable stakeholders to view and examine business documents as well as physical goods movement down to item level.

“ccic315.com” makes it possible for Shenzhen’s inspection and quarantine personnel to acquire inspection details and undertake risk assessments prior to shipment arrival in China, thereby accelerating the inspection process significantly.

Benefits

Efficiency of SZCQ’s quarantine process has been boosted with the adoption of eTRACK platform, resulting in shorter clearance cycles for the benefit of wine importers into China and their mainland-based trading partners. Its quarantine process has been greatly shortened. Based on the outcome, the Shenzhen customs authorities now target to shorten the customs clearance duration from 15-20 working days to 2 days. Besides helping CGI save considerable manpower and sampling size, the project has also helped uplift their operational efficiency and facilitated smooth accomplishment of their increasingly heavy workload.

With a serialization security label issued by CCIC and affixed on every bottle of wine, it has now also become possible for consumers to autonomously check the authenticity of the product on hand, just by scanning the QR code with a mobile device.

In closing, the rapid growth of wine consumption in China, the need for efficient inspection and quarantine processes, coupled with the increasing demand for genuine products, has made the implementation of the ccic315.com platform a necessity. By providing a secure and transparent system for wine importers, the platform helps ensure that only genuine products reach the local market, thereby safeguarding the reputation of the wine industry and protecting consumers’ interests.

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Feasibility Study for Cross Border Supply Chain Visibility Across Guangdong, Hong Kong and Asia

A critical path for Hong Kong to remain as the Asian logistics hub

Since China’s entry into the World Trade Organization, it has entered into a Free Trade Agreement (FTA) with ASEAN countries to reduce trade barriers between them. The Mainland has also endorsed FTA with another eight trading partners and negotiating a similar agreement with India, Korea and Japan.

While the changing trading landscape pose a serious threat to its entrepôt role, Hong Kong still retains a significant competitive advantage with its free port conditions. Considering that the biggest barrier to cross-border trade flow of goods is delays at the border, the relevant authorities are challenged to facilitate an increase in visibility of the cross-border supply chain and facilitation of customs and border clearance using technology.

GS1 Hong Kong has been sponsored by the The Hong Kong Logistics Development Council (LOGSCOUNCIL) to conduct the “Feasibility Study for Cross Border Supply Chain Visibility Across Guangdong, Hong Kong and Asia” project, which is the key to retain Hong Kong’s position as an Asian logistics hub, in collaboration with the Asian Institute of Supply Chains & Logistics of the Chinese University.

China加入世界貿易組織後，與東盟（ASEAN）各國落實自由貿易協定（FTA），以減少彼此之間的貿易障礙。內地政府又與另外八個貿易夥伴簽訂自由貿易協定，與印度、南韓及日本的協定亦在商討之中。

雖然貿易世界的變局嚴重威脅香港的轉口港地位，但自由港仍然是香港的優勢。跨境貨品貿易的最大障礙是邊境延誤，為化解這一瓶頸，有關單位正利用科技，促進跨境供應鏈可視化，使貿易流程的過程更快捷。

為鞏固香港作為亞洲物流樞紐的地位，香港物流發展局贊助GS1 Hong Kong完成「廣東、香港及亞洲間跨境供應鏈可視化之可行性研究」，並與香港中文大學亞洲供應鏈及物流研究所共同進行。

INDUSTRY 行業
- Logistics 物流

GS1 STANDARDS USED 應用的 GS1 標準
- Electronic Product Code Information Services (EPCIS) 產品電子代碼訊息服務

SOLUTION 解決方案
- ezTRACK 藍橋網
Security and authenticity
Data access by entry of pre-assigned user ID and passwords was achieved, with a basic security mechanism put in place in Hong Kong and Taipai, whose information platforms were compatible. Data security is essential in cross-border SCV which involves sharing of confidential data.

Security equipment
E-locks and E-tokens were used along with other devices like RFID readers and tags that were affixed to the cargo at pallet and item levels.

Solutions

Two cross-border pilot cases were undertaken to address three major issues:
- Lack of interfacing standard for system communications
- Need for data security and authenticity
- Lack of mutually recognized cargo equipment

In the pilot cases, the focus was placed on a 20-feet container transporting a cargo load from Keelung Port, Taiwan to Hong Kong, by vessel, then from Hong Kong to Shenzhen or Dongguan by truck.

The pilot studies highlighted a need to facilitate sharing of cross-border cargo information via compatible platforms used on both sides of the border. In this regard, agreed communication protocols and data standards need to be established among the platforms.

Currently, the customs information platform deployed in Hong Kong and Taipai supports EPICS (Electronic Product Code Information Service) standard for machine-to-machine interfacing and which facilitates retrieval and sharing of data about individual objects within and across enterprises. Using the EPICS standard offers visibility benefits in terms of cargo tracking (where, tracing, (where), pedigree and authentication) (Are the products genuine? ) to fully realize the benefits of supply chain visibility, the information flow has to be synchronized with the physical container/cargo flow.

The EPoS standards are part of GSI Hong Kong’s ezTrack service adopted for pilot implementation. This online tracking platform enables real-time visibility of cargo and information flow from embarkation point to the destinations, enhancing cross-border supply chain visibility for global businesses.

System compatibility
A standardized interface for system communication among different customs authorities can enable sharing of cargo data, in advance or on a real-time basis.

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解決方案

本研究主要探討以下三大議題：

- 香港物流發展基礎支援小組主席及小組成員遠東及海外（國際），有利
  企業發展系統整合及營運
- 政策及研究

- 保障資料安全及有效性

- 香港與鄰近地區缺乏互相認可的貨物處理標準

兩個試點案例中，最廣泛關注的是一個長達約20天的貨運，此貨運先經
港區一處海關場送貨到香港，再在香港以貨運鐵路運輸送貨到車間。

試點案例的研發工作十分複雜；在推進過程中，兩地必須使用互相
兼容的通訊平台，以及數據間的互換。因此，必須根據企業及通訊
協議，制定戢在企業的數據標準。

香港及台灣公司所使用的信息資料平台支援電子公文執訊息系統
（EPISC）標準，標準在世界各地的系統接口的兼容性，兩地海關
數據標準在整個企業內部及多企業之間的互動，企業
電子資料信息系統標準對貨運視覺化重要，此功能包括於最差case
的即時追蹤，協助資料的供應，提供貨運統計訊息（包括持有者身份
、貨物出發地、目的地等）以及貨物貨運資訊。此外，貨運貨流的
訊息必須保留時間，方能充分供應數據可視化的需求。

產品電子化信息系統標準，本研究計劃在試點案例中採用的「觸發器」
服務的一部分，「觸發器」是一個立足於地基，可計時貨物執行時間
報告的中心地基，實用性貨物信息的基礎，有關國際企業建立
持貨運網絡可視化的基礎。

系統兼容性

由於香港貿易系統實踐在最終產品電子化信息系統標準，實際的數據
須以手動式延遲香港，以致可能延遲及出現。但在香港實際，兩地海關
必須建立各基礎的標準協調，以預防或減少星際貨運帶來的影響。
What is GS1 Standards?
GS1標準是甚麼？

The GS1 System of foundations provides the framework for enhancing open supply chains through the use of digital information. GS1 Standards for identifying, capturing and sharing information - about products, business locations, and more - makes it possible for companies to speak the same language, connect with each other, and move their business forward.

GS1 標準體系透過電子資料交換訊息，為供應鏈建立了具備標準的資料互享基礎。GS1 標準用於識別、捕捉和分享各種資訊，包括貨物和業務位置等，讓商貿夥伴得以用同一套商業語言溝通連繫，推動業務發展。

GS1 BARCODES
GS1條碼

GS1 EPC / RFID
GS1產品電子代碼 / 靜態識別符

Interoperability, made possible by identification standards, data capture standards, and interface standards for electronic communication, allows product information to flow through the supply chain.

通常識別、資料載體及電子資料交換訊息此三大標準，令供應鏈供應商能找到準確交換產品流向資訊，提高了業務的互連通性。

INTEROPERABILITY

GS1 Barcodes and EPC / RFID are data carriers for GS1 identifiers, but can also accommodate different needs such as batch / lot information and expiry dates.

GS1 條碼和電子產品代碼 / 無形識別符（EPC / RFID）是 GS1 識別用的資料載體。它們又能容納批次或有效期等不同資料，以符合不同業務所需。

COMPANY & LOCATION 公司及位置

• Global Location Number (GLN) 全球位置號
• Global Trade Item Number (GTIN) 全球貿易項目號
• Sensitized Global Trade Item Number (SGTIN) 全球貿易項目編號

LOGISTICS & SHIPPING 物流與運輸

• Serial Shipping Container Code (SSCC) 連番運輸箱號
• Global Trade Item Number (GTIN) 全球貿易項目號
• Product Descriptions 貨物描述
• Global Product Classification (GPC) 全球貨物分類

ASSETS 資產

• Global Individual Asset Identifier (GIAI) 全球個別裝置識別
• Global Repeatable Asset Identifier (GRAI) 全球可重複裝置識別
• Global Service Relation Number (GSRN) 全球服務關係編號
• Global Document Type Identifier (GDTI) 全球文件類別識別
• Global Freight Number (GFN) 全球運輸編號

SERVICES & MORE 服務與更多

• Global Service Relation Number (GSRN) 全球服務關係編號
• Global Location Number (GLN) 全球位置號
• Global Product Classification (GPC) 全球貨物分類
• Target Market 目標市場

WHAT GOES INTO IT 進口貨

• GTIN 全球貿易項目號
• GLN 全球位置號
• Brand Owner Identification 品牌擁有者識別
• Product Descriptions 產品描述
• Global Product Classification (GPC) 全球貨物分類
• Target Market 目標市場

WHAT GOES INTO IT 運輸物

• GTIN 全球貿易項目號
• GLN 全球位置號
• Brand Owner Identification 品牌擁有者識別
• Product Descriptions 產品描述
• Global Product Classification (GPC) 全球貨物分類
• Target Market 目標市場

WHAT GOES INTO IT 退貨

• GTIN 全球貿易項目號
• GLN 全球位置號
• Brand Owner Identification 品牌擁有者識別
• Product Descriptions 產品描述
• Global Product Classification (GPC) 全球貨物分類
• Target Market 目標市場

WHAT GOES INTO IT 運輸

• GTIN 全球貿易項目號
• GLN 全球位置號
• Brand Owner Identification 品牌擁有者識別
• Product Descriptions 產品描述
• Global Product Classification (GPC) 全球貨物分類
• Target Market 目標市場
Solutions & Services
解決方案及服務

Driving standards development and adoption
帶動標凖發展及採納

GS1 BarCodes
全球標準化與數據捕捉

Global Standards for Identification and Data Capture
應用於自動識別及數據捕捉的全球標準

GS1 eCom
全球標準化與電子商務

Global Standards for Electronic Business Messaging
應用於電子商務及數據捕捉的全球標準

GS1 GDSN
全球標準化與數據交換

Global Network for Data Synchronization
應用於全球數據交換的網絡

GS1 BarCode numbers registration and administration
GS1條碼數字之登記及管理

Supporting local businesses with the implementation of GS1 BarCode System and the GS1 BarCode quality assurance
為本地企業提供GS1條碼系統及品質保證

GS1 HK DataPool
GS1香港數據庫

An industry-wide B2B platform facilitating electronic transaction messaging via EDI and web to support electronic ordering, invoicing and shipment notices
一個跨界的B2B平台，透過電子交易訊息（透過電子訂購、發票及出貨通知

BarCodePlus

A product and location information portal allowing users to access and share quality data using GS1 NDIS as GTIN and GLNs via the Internet, mobile and smartphones
一個互聯網平臺，可讓用戶透過GS1 NDIS作為GTIN及GLNs，透過互聯網、移動及手機應用程式分享品質數據

Global Electronic Party Information Registry (GEPIN)
全球電子參與者資料庫

A global online directory of suppliers, with information of over 10,000 companies worldwide, creating boundless business opportunities
一個線上供應商資料庫，包含超過10,000家公司，為全球企業創造無限的商機

Enabling knowledge exchange between multiple stakeholders throughout the supply chain ecosystem
通過供應鏈生態系統促進參與者之間的知識交流

Hosting a wide range of training courses to facilitate knowledge transfer for SCM principles, e-business strategies, global standards and the implementation of enabling technologies
舉辦一系列培訓課程，以促進供應鏈管理、電子商務策略、全球標準及促進技術的知識轉換

Workshop and training course: Barcode Workshops, SSCC Workshop, Digital Marketing Workshop, ECR Workshop, Internet of Things Certification Programs, E-CRM Workshop, Industry seminar and conference: Annual Supply Chain Management Excellence Summit
舉辦一系列培訓課程：條碼工作坊、SSCC工作坊、數位行銷工作坊、郄世經理培訓、IoT認證及產業論壇

Facilitating local collaborations
促進本地及跨境的合作

To enhance Hong Kong’s industry competitiveness by the following solutions
為提升香港產業競爭力，我們提供以下方案

Retail ECR
零售業電子商務

Food & Wine Traceability
食品及酒類可追溯性

Healthcare Supply Chain Modernization
醫療供應鏈現代化

GS1 EPCon

Global Standards for RFID-based Identification and Traceability
應用於電子標籤及可追溯性的全球標準

GS1 Traceability

A Traceability Process for Product Recall and Quality Management
產品召籲程序及質素管理

GS1 B2C

Global Network for Data Synchronization
應用於數據交換的全球網絡

GTC/GTS

Global Traceability Conformance (GTC)
全球可追溯性診斷

Consumer Connect

Consumer Connect

A direct mobile communications platform for brand owners to provide trusted product information and interact with consumers anywhere, anytime
一個直接的移動通訊平台，讓品牌主可隨時與消費者互動，以提供信應

Cold Chain Management

Cold Chain Management

Cold Chain Management Solution
冷鏈管理方案

Temperature monitoring and control of goods (both fixed and pharmaceuticals), information flow, and thermal-humidity status from point of source to point of destination
溫度監控及控制貨物（包括固定及製藥物），資訊流動及溫度濕度情況從源頭到目的地

Warehouse Management System
倉儲管理系統

Inventory management network to capturing in stock, out stock, and stock take information
一個供應鏈管理系統，用於監控庫存、出貨及盤點

Item Level Tracking Solution
貨品級別追蹤方案

Providing manufacturer-to-retailer supply chain link by item-level EPC/RFID tagging
供應商到零售商的貨品級別追蹤，以EPC/RFID標籤

With new information technology, blockchain and others, global standards and protocols are used to ensure traceability, systematic approach to trace products, control and monitoring of product recall, and risk management.
通過新的資訊技術、區塊鏈等，全球標準及協議被用於確保可追溯性，系統追蹤產品，對召籲產品的控制及監控，風險管理。
Acknowledgement 特別鳴謝

A-Fontane 雅芳婷

China Certification & Inspection Group
Food Safety Traceability Center
中國檢驗認證集團食品安全追溯中心

DCH Logistics Company Limited
大昌行物流有限公司

Fat Lee Company Limited
發利行有限公司

Hong Kong Maxim’s Group
香港美心集團

Original Taste Workshop
原味製作

Nex Medical Limited
Nex醫藥有限公司

Zuellig Group
特利集團有限公司