GS1
Hong Kong

The Global Language of Business

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 於1989年由香港總商會成立,是GS1社群的成員組織之一,也是一間積極開發和實施全球供應鏈標準的非牟利機構。GS1總部位於比利時的首都布魯塞爾,擁有超過110個成員組織,遍及全球150個國家。憑藉全球供應鏈標準和以標準為本的解決方案及服務,GS1 Hong Kong 讓香港企業享用更有效率、更高透明度和更安全的供應鏈,以優化業務及創優增值。透過採用全球供應鏈標準,GS1 Hong Kong 與各貿易夥伴、行業機構、政府及資訊科技公司建立緊密的關係,助他們了解行業需要並作出回應。

GS1 Hong Kong

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Efficiency
Quality
Marketing outreach
Safety
Visibility

Transcending business with innovation

Business Casebook 2014

Content

目錄

"Innovation is the ability to convert ideas into invoices.
「創新」就是把概念轉化為商業效益的能力。"

L. Duncan

Anna Lin, JP
林潔貽 太平紳士
Chief Executive
總裁

GS1 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 GS1 standards that allow trading partners worldwide to easily communicate useful information such as products, locations, manufacture details and more so that they can maximize the benefits from innovation

Through GS1 Hong Kong's efforts in the past 25 years since its establishment, GS1 standards have reached out to a variety of industries including retail consumer goods, food and wine, apparel, healthcare, logistics as well as information and communications 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 derived 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 operations. It also broadens our horizon and enables a deeper understanding of the remarkable values that GS1 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 fuelling 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!

GS1相信，技術創新有助企業及社區建立繼往開來、啟發思維的互動交流，更深入了解人們的想法、掌握潮流轉變的方向及由。

基於這個信念，我們不遺餘力推動GS1標準，讓廣佈全球的貿易夥伴可以輕易共享實用資訊，例如產品資料、所在地及生產詳情等，並透過科技創新體現最大效益。

GS1 Hong Kong 成立至今已有25年。多年來，我們努力不懈把GS1標準引進不同行業，包括零售消費品、食物和酒品、成衣、醫療護理、物流以及資訊和通訊技術。我們致力為超過6,800家會員帶來效益，並積極推動商界採納國際性供應鏈標準、應用科技和實務，全力協助業界提升供應鏈的營運效率、資訊透明度，以及加強與同業之間的協作，從而提高企業在世界市場的優勢和競爭力。

為了交流經驗、共享智慧，我們悉心製作了這本特刊，藉此分享傑出業者的成功個案。本刊的功能有如封面的三稜鏡，匯聚九個精心挑選的成功故事，展示不同行業的企業如何善用以標準為基礎的解決方案和服務，達到優化運作、提升競爭力及盡展優勢的目的。

對於渴望追求卓越、擇善而善的朋友，本特刊提供了值得仿傚的成功案例，適合作為實踐標準主導運作的實務參考；同時開闊眼界、拓展思維，讓大家進一步了解GS1標準如何為供應鏈各方創優增值。

只要細閱每節內容，就會領略到標準和技術如何加快商業創新，以及技術創新在跨越供應鏈挑戰、驅動業務成長方面不可或缺的角色。大家更可從每個案例中獲得豐盛的啟示，在本身業務上大派用場。所謂學無止境，機會只會垂青有準備的人。

展望未來，我們期望與各會員及夥伴攜手躍進，努力追求卓越，提升商業效益，務求在瞬息萬變的商業環境中不斷進步，更上層樓。我們將繼續在運用全球標準方面力求創新，為各方面締造最大效益。

最後，謹向所有提供成功個案的機構，以及專心致志的編輯和製作團隊衷心致謝。全憑他們的努力，我們才能看到這些精彩的成果。希望大家享受閱讀這本書！

Efficiency 效率

Fat Lee
Company Limited
發利行有限公司

Uplifting local business through applying global standards

採用環球標準　提升本地業務

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.

發利行有限公司創立於1997年，是香港一家即棄餐具生產商和批發商。公司於香港設有生產和倉儲設施，產品包括各種紙製、塑膠和發泡膠的杯子、水瓶、午餐盒、盤子和碟子，通過不同批發渠道和零售商，主要分銷到香港、澳門和其他鄰近地區。

INDUSTRY 行業
▪ Retail　　　　　　　　　▪ 零售

GS1 STANDARDS USED 應用的 GS1 標準
▪ Global Trade Item Number（GTIN）　　▪ 全球貿易貨品編碼

SOLUTION 解決方案
▪ GS1 Professional Consultancy Services　　▪ GS1專業顧問服務

Business challenge

Following its transition to 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 and Europe; warehousing storage 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 man-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 logistic workflow requirements, the GS1 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, GS1 Hong Kong was able to establish the optimum 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 redesigned for space optimization as well as facilitating easy location and retrieval of materials and finished products.

Revamp of warehouse management system

GS1 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 GS1 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 GS1 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 10% decrease in excessive inventory holding.

Given the easy accessibility of real-time supply chain information, the company's management is now better equipped to making sound, timely decisions to cope with the changing trade environment and formulate strategies for business expansions. The management of the company can now spend more time on expanding their business instead of monitoring the day-to-day operation.

業務挑戰

自第二代接手這家家族企業後，公司深感有必要從速改善其供應鏈效率，以持續擴充業務和產品類別、克服擴充所帶來的相關挑戰，並捕捉接踵而至的市場機遇。

在供應鏈尚未革新時，公司須進行多項人手密集的程序，包括訂購和接收源自美國、日本和歐洲等海外地區的多種原材料；進行倉儲和盤點；把原材料送往廠房；再把完成品送返倉庫，並交付到幾個批發和零售渠道。

大量工時浪費於找出存放錯誤的貨品、確認實際的存貨周轉率以及監察貨物流動。由於存貨屢屢出錯，供應鏈的效率和透明度一直未如人意，管理層也難以追蹤存貨轉變及即時作出有依據的商業決定。

解決方案

為了解客戶的倉庫運作和物流工作流程的要求，GS1 Hong Kong 進行了實地考察，並訪問了倉儲和管理職員。

倉庫佈局重新設計

詳盡分析了所有主要的倉庫業務標準後，GS1 Hong Kong 確立了最理想的實際佈置圖，它能加強物料流入和流出設施的效率，改善營運程序。新的整體倉庫設計亦能輕易添上任何附加功能。事實上，本會重新設計倉庫佈置時，是以最能善用空間，及最易於找出和存取物料和完成品為依據。

革新倉庫管理系統

GS1 Hong Kong 亦提供專業意見，協助客戶重新配置倉庫管理和工作流程系統，有利於監察物料的流動和儲存，以及處理相關的交易流程，包括收取、收拾、選取和盤點存貨。重新設計的系統亦有助監督和改善存貨的流動和處理工作，並可即時擷取資訊。採用了建議的倉庫管理方案後，發利行的交易流程更為便捷又能減少出錯，倉庫經理並能獲取最新的存貨狀態，更順利和更有效率地處理臨時狀況。

效益

整體來說，發利行按指引和諮詢服務革新營運模式後，供應鏈效率明顯提升，並達到以下功效：

• 能以電子形式接收運抵的貨品，免除勞動密集而耗時的盤點流程
• 貨品經過掃描再決定其儲存於倉庫的位置，能加強手頭存貨的準確度和透明度
• 生產線的點算和分類流程自動化
• 能在生產、倉儲和送貨流程中追蹤產品
• 以電子形式追蹤及追溯不同產品類別的每一項單品，即使存放錯誤也可輕易找出來
• 員工可集中時間埋首高增值事項

回報

倉庫自動化項目加強了效率，同時節省了開支。存貨準確度提升5%，持有過量存貨的情況減少10%。

公司管理層能輕易獲取即時的供應鏈資訊，作出健全、及時的決策，以應付日新月異的經營環境及制定業務擴充策略。管理層自此可集中更多精力擴展業務，而非忙於監察日常運作。

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、咖啡店及機構食堂等。集團亦生產、批發和零售一連串節日佳品，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、一風堂拉麵以及芝士蛋糕工廠，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。

INDUSTRY 行業
- Food
- 食品

GS1 STANDARDS USED 應用的 GS1 標準
- EANCOM
- Global Location Number (GLN)
- EANCOM
- 全球位置編碼

SOLUTIONS 解決方案
- ezTRADE
- BarcodePlus (enhanced to Maxim's Supplier Portal)
- 通商易
- BarcodePlus（改良版，稱為美心供應商門戶）

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 the 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 their 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 transparency 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 – GS1 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, faxes, phone calls and manual entry work with ease while maintain 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 Maxim's Group 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 logistics standards.
- **Enhanced customer relationships** by being more responsive to customer demands.

業務挑戰

香港美心集團每天要管理為數眾多且種類廣泛的餐廳、食肆、零售店、產品、品牌和餐飲類別,其點對點對供應鏈比較複雜。美心旗下不同的餐廳、食肆和零售商的管理層雖會各自採購,然而其採購數據仍需要輸入到一套中央系統,以簡化數據同步和處理的工序。此外,美心和其貿易夥伴亦需要面對訂貨、收貨、發票流程所帶來的挑戰。尤其如以人手輸入採購訂單和發票進資訊科技系統,將相當費時也容易出錯,有損營運效率。

有見及此,美心力求改善上述三個範疇的表現,以減少延誤,並降低因重複輸入資訊、改錯和溝通模式太耗時等繁瑣工序所造成的行政和營運成本。此外,為加強與貿易夥伴的關係,美心希望改善採購周期裡的訂單和發票透明度,確保一旦訂單已正確履行,便能立即付帳,不致延誤。

解決方案

為精簡採購流程,並提高效率,美心集團採用了GS1 Hong Kong 的電子數據聯通平台「通商易」,通過掌握即時和結構完整的訊息,來提高訂單和發票處理程序的成本效益。這是美心與其貿易夥伴建立電子聯繫的重要一步,不但能輕鬆取代電郵、傳真、電話和人手輸入工序,還能維持最高效率。

採用這個平台,美心可向供應商發送採購訂單,後者則可把電子數據聯通發票檔案傳送到一個通訊平台,由平台自動把發票數據輸入到它們公司的後台系統。這有助消除人手輸入工序,節省大量工時,並減少人手出錯。電子預先付運通知則簡化了餐廳/貨倉的收貨程序,提升效率。供應商在貨品抵達前,便會預先通知美心所送貨品的資訊,包括送貨日、數量和其他資訊。

「通商易」平台令集團把供應鏈的多個關鍵步驟自動化,包括準備採購訂單、輸入採購訂單數據到後台系統、網上傳送採購單、開發票,以及處理供應商發票。

隨著美心準備推出電子數據聯通平台,其遍佈中港的貿易夥伴亦獲邀參與這個平台。

效益

由於每張採購單均已詳細列明產品類別、價錢和數量,貿易夥伴可及時取得準確的貿易資訊,這些資訊均使用普羅的商業語言及標準化的電子格式,並可簡易快捷地透過「通商易」網絡傳送。

這個平台為美心帶來以下效益:

- 簡化商業流程－由下訂單到開發票均通過互聯網,可節省時間和資源,縮短商業周期。
- 提升可靠度－由於貿易文件均為電子版本,傳送安全快捷,故能減少傳送時的資訊流失。
- 減少人手輸入的工序。
- 優化生產力－減少重新輸入數據的成本及人手錯誤。
- 提升數據交換的準確度,能減少訂單未履行或錯配的情況。
- 透明度更高,能促進環球供應鏈的實體貨物流動。
- 通過採用國際物流標準,加強競爭力。
- 更迅速地回應客戶需求,從而增進客戶關係。

EFFICIENCY 效率

Zuellig Group

裕利醫藥有限公司

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

加入最大的電子數據聯通聯盟，改善訂單到現金流程

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.

裕利醫藥有限公司專門推廣和分銷醫藥和醫療護理產品，它提供具針對性的方案，包括藥物、醫療設備和臨床測試物資分銷、銷售和推廣外判、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
- 醫療護理

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)

- GS1條碼
- 全球貿易貨品編碼
- 貨運容器序號
- 電子數據聯通

SOLUTION 解決方案

- ezTRADE
- 通商易

Business challenge
Catching up the 75 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 ezTRADE developed by GS1 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.

Zuellig 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 75 improvement initiatives under a preventive approach to public healthcare in Hong Kong.

Solutions

As a supply chain consultant to Zuellig Pharma, GS1 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, logistic 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 addresses.

In addition, Zuellig Pharma embraced a number of other GS1 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, Zuellig Pharma will pack the products with a GS1 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 ezTRADE platform.

Application of GS1 Standards to the client's communication protocols and process 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.

Zuellig 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 delivery 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, Zuellig 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.

Quantified result

With GS1 Global Standards and EDI platform, Zuellig 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.

業務挑戰 － 配合75項改進措施

為提升從外部供應商到旗下藥房的藥物可追溯性，令追溯過程更準確和有效，醫院管理局自2012年6月起實行醫療藥物供應鏈現代化計劃，當中採用了GS1 Hong Kong研發的電子數據交換平台「通商易」，以促進醫管局和供應商之間準確而有效地交換數據，包括採購單、採購單回應、出貨通知單和發票等。

裕利醫藥獲邀參與這項計劃，革新其供應鏈流程。雖然裕利已與其商業夥伴共同精簡供應鏈多年，包括十多年前已與醫管局共建電子數據聯通（EDI）平台，裕利仍把握這個機會，進一步完善供應鏈流程，並聯繫上政府就香港公共醫療的預防性策略所實行的75項改進措施。

解決方案

作為裕利的供應鏈顧問，GS1 Hong Kong協助這家藥物供應商配合醫管局指定的供應鏈流程要求。其中一項主要建議是應用條碼，在紙板貨箱層級識別產品——通過貼於每個紙板貨箱的條碼，能在供應鏈的任何一點自動識別其實物內容、資產、物流單位、付運資訊及具體位置等。那能免除實際盤點工序，並實時反映存貨狀態，以及確保貨物不會運送到錯誤的地址。

除此之外，裕利醫藥還採納了多項GS1標準，包括採購單回應、預先付運通知及發票等電子數據聯通文件。

一旦收到醫管局的採購單，裕利醫藥便會包裝產品，並貼上GS1的貨運容器序號標籤，與此同時會向醫管局發送電子出貨通知單，讓醫管局的採購單位預先查對。產品送到醫管局的貨倉後，藥房職員會掃描貨運容器序號的條碼，按採購資訊交叉核對所有產品數據和送達的實物。核實正確後，職員會通過通商易平台，把電子發票傳送到醫管局。

在與客戶溝通的協定和流程中採用GS1標準後，裕利與醫管局及其他醫療護理客戶的數據交換準確度得到大幅提升，並免除了一些流程和出錯風險。

效益

通過條碼科技來識別產品，最終能加強保障病人安全。通過自動配對產品數據和病人數據，能協助醫院、藥房或診所職員減少配錯藥物的風險。

是項措施亦能保證藥物從倉庫至病人間的整個配送過程維持高度的可追溯性，並讓公司在需要回收產品之時加快識別和移除有問題的產品。因人手輸入而造成的處理和付運錯誤亦告減少，病人安全獲進一步保障。

在採購、付運前和實際付運的周期裡，裕利醫藥均能從貿易文件中擷取更準確的資訊。送貨時加以核對亦能加快業務操作，並提升準確度。系統所提供的實時供應鏈數據，包括客戶的產品需要，有助管理層作出更迅速以及以需求主導的商業決策。裕利應用了簡單的標準和適當的科技，提升了其藥物分銷服務的效率和安全，得以維持優秀的服務水平，並能配合快速轉變的客戶需求。

回報

裕利醫藥採用了GS1的全球標準和電子數據聯通平台，精簡了藥物採購流程，並改善了數據和文件交換流程，當中包括採購單、採購單回應、預先付運通知和發票等。超過80%的訂單已落實自動化，改進了營運效率和準繩度，令更多病人受惠。

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BLOCK F, QUEEN ELIZABETH HOSPITAL
30 GASCOIGNE ROAD KOWLOON

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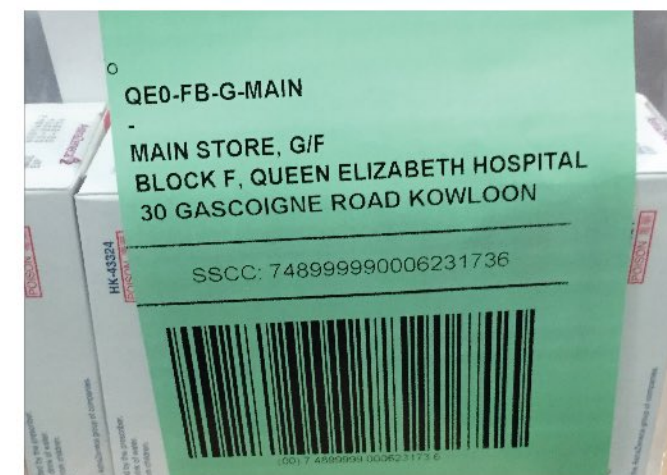
市場拓展

Marketing outreach

Original Taste Workshop

原味家作

Delivering customers original taste with business innovations

業務創新　為顧客送上原味道

Established in 2006, 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.

原味家作有限公司於2006年創立，是一家健康食品與飲品連鎖店，以多款自家泡製的中湯最為知名。它主要通過旗下10家全資擁有的旗艦店舖和約1,500家位於超市、便利店和百貨公司的第三方零售店銷售產品，網絡遍佈港九新界。

企業在香港設有15,000呎的廠房，標榜產品成分100%全天然，沒有使用任何味精、添加劑、雞粉、防腐劑和人造色素。

原味家作其中一個業務目標是擴展至中國與海外的零售市場，並持續擴大產品線，增加香港的市場佔有率。除了主導企業的擴展策略，原味家作的管理層亦監察企業的垂直整合供應鏈，從原材料採購、包裝、批發、零售以至市場推廣。

INDUSTRY 行業
- Food
- 食品

GS1 STANDARDS USED 應用的 GS1 標準
- Global Trade Item Number (GTIN)
- 全球貿易貨品編碼

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 reputable branding scheme, 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 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 shortfalls 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.

Oringinal 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 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 wellbeing 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.

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.

業務挑戰

與提供類近產品和服務的主要競爭對手相比，原味家作需要精明地運用科技，來達致業務目標和維持競爭優勢。

它面對的挑戰包括提高產品透明度和效率，以及促進與零售商及其他持份者的商業對商業交流。這些夥伴大都已在點對點物流系統和流程中採用新科技和全球標準。由於公司的產品組合包括超過60項商品，管理層確有必要精簡從中國大陸和其他國家採購材料的流程，以確保在運輸過程裡沒有遺漏任何主要訂單，並及時補充不足的存貨，滿足客戶的各項需求。這些挑戰都關乎供應鏈透明度，以及快速準確地追蹤材料/產品的能力。

在店舖層面，企業的挑戰在於須為銷售團隊培養以客為先的服務態度，以及改善服務質素。企業的市場拓展策略和工作能否成功，視乎其能否克服以上挑戰。

解決方案

企業善用了「通商易」這個以標準為基礎的電子商貿平台，它能促進無紙交易，並通過GS1識別碼協助企業提高效率。有了這個平台的強力支援，原味家作自此與供應鏈上的貿易夥伴交換業務訊息和傳送商業文件，均可採用電子數據聯通(EDI)的通訊格式。這意味企業能大幅精簡並妥善管理複雜的營運流程，在採購、處理與供應商之間的交易時減省工序並減少出錯，消除了流程中的各種溝通、訂單處理和送貨錯誤。

原味家作亦參加了「貼心企業」嘉許計劃，以提升原味家作的品牌形象和資產，有助向大眾宣傳。為加強企業形象，企業把嘉許計劃的商標印於產品包裝之上，前線人員亦須佩戴「貼心企業」徽章，以示原味家作非常注重消費者的利益和福祉，消費者就是企業的重心所在。

2013年，企業在內部啟動新計劃，教育員工並鼓勵他們快速、有禮和誠懇地處理顧客投訴。未來，企業將更進一步，把培訓聚焦為就店舖所售產品的特色和功能，向顧客提供專業解說。

效益

原味家作通過採用標準化的電子格式和共同的商業語言，與一眾貿易夥伴共享準確而及時的貿易資訊。透過「通商易」網絡簡便地傳遞數據，原味家作提升了數據準確度、防止了傳送期間的資訊流失，並避免了人為錯誤，重新輸入數據的成本也減到最少。通過電子數據聯通處理採購單和發票，能節省時間和資源，商業周期也得以縮短。

企業從參與「貼心企業」嘉許計劃及採用GS1 Hong Kong的解決方案，加深了管理層對各個業務層面的認識，包括市場推廣、宣傳、品牌策略和客戶關係管理。

Quality 質量

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

Delivering safe and fresh food with global traceability standards adoption

採納全球追溯標準　確保食品安全新鮮

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.

大昌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、現代倉存系統、冷凍鏈管理（包括空調、冰鮮、冷藏）、重新包裝、增值服務、貨運代理、貨品加固及批發等。大昌行特別專注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。

INDUSTRY 行業
- Logistics
- 物流

GS1 STANDARDS USED 應用的 GS1 標準
- Global Trade Item Number (GTIN)
- Serial Shipping Container Code (SSCC)
- Electronic Product Code Information Service (EPCIS)

- 全球貿易貨品編碼
- 貨運容器序號
- 產品電子代碼訊息服務

SOLUTIONS 解決方案
- GS1 GTS/GTC
- ezTRACK
- Cold Chain Management Solution

- GS1全球追溯標準／全球可追溯性準則
- 蹤橫網
- 冷凍鏈管理方案

Business challenge

Globally, there has been an increasing trend of food safety incidents or crises over the year and it increases the risk associated to Hong Kong since over 90% 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 been pioneer in cold chain logistics for temperature sensitive food products export from overseas to local market. They are now using market traditional facilities for temperature recording and data will be retrieved once cargo arrived at DCH Logistics Centre. Remedial action(s) may not be easily taken in the event of temperature violations 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 confident 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 processes 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, ezTRACK, 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 ezTRACK.

Benefits

Through the real-time data visibility platform ezTRACK, 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，全球食品安全事故或危機事件出現上升趨勢；由於香港超過90%食品是由外國進口，面對的風險也與日俱增。食品安全事故突顯了產品回收效率及全球食品源頭可追溯性的重要性，只有做好這兩方面，方能確保香港的最終消費者可以享用安全而優質的食物。

再者，現今的消費者對食品安全和品質管理的要求已有所提升。除了食品可追溯性標準外，大昌行還善於其首創的冷凍鏈物流技術，處理從海外入口到本地市場而容易因溫度變壞的食品。大昌行以市場的傳統設備記錄食品溫度，當貨品運抵大昌行物流中心時，便可馬上擷取數據。不過，一旦發現食品溫度在運送過程中出了差錯，要補救並不容易。為了進一步改善其冷凍鏈服務，大昌行計劃於其食品供應鏈引入EPC/RFID標籤，以實時監察食品溫度的變化。

解決方案

為加強消費者對所購入食品的信心，大昌行決定於其食品供應鏈推行全球追溯標準（GTS）及以RFID為基礎的冷凍鏈管理方案，以提升全球食品供應鏈的可追溯性及透明度。

同時，大昌行將食品追溯的應用延伸至所有供應商，以確保食品於整個物流過程的安全性。大昌行先為急凍魚類的供應商引入GS1 GTS，辨識每一個重要的產品處理點。於供應商方面，每件產品及物流單位都會被配上獨特的GS1編碼。所有這些出境資訊和貨物付運的數據，均會上載到以產品電子代碼訊息服務(EPCIS)為基礎的追蹤及追溯平台「蹤橫網」，以作分享用途。

為進一步提升客戶服務，大昌行物流對溫度敏感的產品採用了RFID冷凍鏈管理方案。糖果類是其中一種需要冷凍鏈的產品。在每一個重要的可追溯流程，包括儲存、包裝和產品配送，溫度和濕度均受到持續監察。每個物流單位均貼上了以RFID為基礎的冷凍鏈標籤，並隨供應鏈一同運送，直到客戶確認接收貨品。這些溫度和濕度資訊均可通過「蹤橫網」持續檢視和管理。

效益

透過實時的追蹤追溯平台「蹤橫網」，大昌行物流除了可以擷取準確的產品追溯資訊外，亦加快了整個產品訂購及運送過程。採用全球標準和相關應用技術後，上游和下游貿易夥伴對供應鏈的信心相對加強。那確保了運送往香港以至外地的食品均安全和可追溯，進一步鞏固了大昌行作為物流服務供應先驅的地位。

Safety 安全性

Nex Medical Limited

Nex醫藥有限公司

Taking patient safety to the next horizon via medical device tracking

追蹤醫療設備 保障病人安全

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醫藥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採用歐美的醫療科技,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。

INDUSTRY 行業
- Healthcare
- 醫療護理

GS1 STANDARDS USED 應用的 GS1 標準
- Global Trade Item Number (GTIN)
- GS1 BarCode
- 全球貿易貨品編碼
- GS1條碼

SOLUTION 解決方案
- GS1 Global Standards
- GS1全球標準

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.

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.

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 higher levels of packaging.

Given the need for Nex Medical to assign UDI numbers to its products, a database with identifier numbers, corresponding products, respective manufactures and other distributes 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

(01)10643149001763 (17)160702 (21)20411485

UDI with a GTIN, Expiry and Serial 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.

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 efficiently, 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

Through this project, patient safety is greatly improved, following enhanced effectiveness of product recalls, reduction of medical errors and availability of a new anti-counterfeiting tool. Another positive aspect pertains to the improvements of post-market surveillance, with the enhanced effectiveness for adverse event reporting. Correct information will be automatically and more effectively captured to ensure accuracy in electronic health records. Supply chain processes, inventory management and procurement will also be enhanced with the implementation of the UDI system.

業務挑戰

醫療機構若無法快速有效地識別須回收的醫療設備,醫護人員將有可能使用等設備,令病人蒙受重大的醫療風險。若沒有一套適當的識別和追蹤系統,有問題的設備可能長期未被發現,病人的安全將不受保障。面對病人安全受到日益關注,分銷鏈遍佈全球的Nex正面臨一系列挑戰,包括有效識別其生產的每一件醫療設備、未能有效和妥善回收產品、有欠完整的事故報告、假貨和效率不周的醫療供應鏈流程。

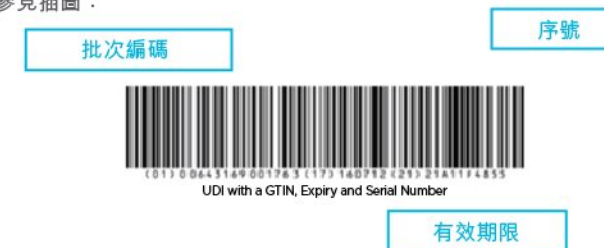Nex極需要實行一套有效的產品識別機制,以自動記錄和追蹤其分銷的即棄腹腔鏡設備,以加強這些產品的可追溯性。

解決方案

Nex在 GS1 Hong Kong 的協助下,決定採用美國食品及藥物管理局(FDA)建議的醫療器材獨有識別系統(UDI)。公司須為旗下設備的每一版本和型號編配一個UDI號碼,實施UDI系統後,公司能準確識別每一項醫療設備。

產品標籤上須以常人能讀取的格式列印UDI號碼,並同時須以自動識別及數據擷取(AIDC)科技所能讀取的格式列印號碼,例如使用線性或二維的DataMatrix條碼。「基本包裝」以及較高層次的包裝上均必須加上獨一無二的UDI。

Nex為產品編配UDI後,亦須維護記錄這個號碼、相關產品、生產商和分銷商的數據庫。

用以編配UDI的方案為全球貿易貨品編碼系統(GTIN)。UDI的「動態」部分為在生產過程中建立一個生產識別碼,當中包括有效期限、批次編碼或序號(視乎如何監控該項設備),並列印於產品標籤之上。

參見插圖:

批次編碼 · 序號

(01)10643149001763 (17)160702 (21)20411485

UDI with a GTIN, Expiry and Serial Number

有效期限

在提供顧問服務的過程中,GS1 Hong Kong 負責培訓Nex的主要操作人員,協助他們認識FDA標準、UDI指引以及各種操作實務,包括設立和維護數據庫及確保運作順利。

效益

採納GS1的方案後,Nex能與全球認可的醫療服務識別標準接軌,有效追蹤及追溯其分銷的設備,並在有需要時應用數據庫,有系統地整合資訊。

Nex於產品上成功實行UDI,意味其生產和分銷的醫療設備將獲准在世界任何地方使用,尤其那些強制要求採用UDI的國家。除了能維持全球銷售網絡及遵守法規,公司使用UDI亦能優化其生產和供應鏈的流程。

這項模式能讓Nex和其他數據提供者一次過載入所有地域的主體數據。查閱數據者(例如香港的醫療護理客戶等)亦可通過這項劃一的數據來源擷取數據。

回報

這項計劃能有效加強產品回收、減少醫療失誤並作為一項打擊假貨的新工具,從而大力促進病人安全。事故報告更為完善,亦有助產品運抵市場後進行監察。通過新系統亦能自動和有效地擷取資訊,能提升電子醫療記錄的準確度。採用UDI系統後,供應鏈流程、倉存管理和採購亦有所改善。

SAFETY 安全性

Visibility 可視性

A-Fontane
雅芳婷

Supporting business expansion with supply chain modernization
供應鏈現代化支援業務拓展

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-housed 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、毛氈、羽絨被及羽絨被套等床上用品，所使用的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，所售床品皆屬自家製品，由雅芳婷一手包辦原料採購、製作加工、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。

VISIBILITY 可視性

INDUSTRY 行業
- Retail
- 零售

GS1 STANDARDS USED 應用的 GS1 標準
- Global Trade Item Number (GTIN)
- EPC/RFID
- 全球貿易貨品編碼
- 產品電子代碼 / 無線射頻識別

SOLUTIONS 解決方案
- SCM Consultancy Services (SCOR Model)
- EPC/RFID Application
- 供應鏈管理顧問服務（供應鏈運作參考模型）
- 產品電子代碼 / 無線射頻識別系統

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 modernization 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 enhance 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

GS1 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 improve 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 items' movements, both inbound and outbound, are automatically captured by the system as the products pass through the EPC/RFID reader without human intervention, this achieving efficiency, visibility, data accuracy as part of real-time process monitoring.

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

Benefits

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.

業務挑戰

雅芳婷本為傳統家族企業,透過不斷發展擴張,今天已成為享譽國際的床上用品品牌。面對日新月異的科技和變幻莫測的消費市場,雅芳婷必須保持品牌的活力,繼續發掘新商機,以維持市場競爭力。

隨著新產品陸續推出,銷售額亦節節上升,供應鏈現代化成為雅芳婷的當務之急。雅芳婷的供應鏈流程一向由文件主導,但為了提升運作效率和客戶滿意度,雅芳婷決定把其床褥供應鏈全面現代化,透過點對點運作模型,革新從原料採購到發貨給最終消費者的每一個供應鏈程序。

與此同時,雅芳婷亦計劃開發全球電子商貿業務,因此必須維持供應鏈有效運作,包括保持倉存準確性及提供有效的物流支援。

解決方案

GS1 Hong Kong 為雅芳婷提供供應鏈顧問服務,建議採用供應鏈運作參考(SCOR)模型,以將其床褥供應鏈流程標準化,審視從原料採購到送貨給最終消費者之間的每一個環節。SCOR模型結合企業的營運流程、業務標準、最佳實務和專門科技,提出綜合的供應鏈運作參考方案,不但為供應鏈持份者提供實時溝通支援,還可提升供應鏈管理水平。

此外,雅芳婷的床褥產品亦開始應用產品電子代碼(EPC)及無線射頻識別(RFID)科技,以達到提升供應鏈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。啟用EPC/RFID系統後,每張雅芳婷床褥均會嵌入RFID晶片;當貨品通過EPC/RFID讀取器時,系統便可自動讀取其出入記錄,無須人力支援,使實時監察貨品動向的工作更具效率、透明度和準確性。

雅芳婷的床褥供應鏈經重新設計後,從訂購及儲存原料、生產至運送床褥,每個工序的效率都較以往更勝一籌。

效益

對雅芳婷來說,本項目主要帶來兩大得益。除了供應鏈透明度有所改善,貨品的可追溯性亦較以往提升。床褥供應鏈流程經重新設計後,EPC/RFID系統可以自動記錄貨品動向,使供應鏈運作更具效率、透明度和可追溯性,亦方便雅芳婷實時追蹤及追溯產品於供應鏈中的動向。

從倉存角度出發,新的EPC/RFID系統讓員工能夠更有效率地接收、選取和發送貨品,發貨及倉存準確性因而獲得改善。

RFID系統使供應鏈運作更具效率,雅芳婷亦可憑全球通行的RFID標準擴展業務,開拓環球市場,尤其是在電子商貿市場中大展鴻圖,達成雅芳婷其中一個策略性發展目標。

回報

雅芳婷深知其供應鏈的傳統運作模式需要現代化,新供應鏈不但要符合全球標準,還要配合有效率的倉庫及存貨管理策略,方能促進企業的多方面發展。預計本項目可為雅芳婷提升倉存準確性,從而節省約10%的供應鏈運作成本。

EPC/RFID系統

China Certification & Inspection Group
Food Safety Traceability Center

中國檢驗認證集團食品安全溯源中心

Accelerating quarantine process through
high data exchange visibility

數據交換高透明度 加快檢疫程序

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、鑒定、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，負責貨品認證及檢驗工作，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
- 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
- 蹤橫網

Business challenge

China has seen the fastest growth in wine consumption, a leap of 142.1 percent from 2007 to 2011, reaching 159.25 million cases, or more than 1.91 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 - 71.63 million cases, or 858 million bottles - between 2012 and 2016.

Across its customs checkpoint 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 Enter-Exit Inspection and Quarantine Bureau (SZCIQ), the sample inspection of the wine with certificatio n 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, SZCIQ, Shenzhen Shizun 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 protect consumers' interest.

Solutions

To ensure a smooth roll-out of the project, GS1 Hong Kong developed "ccic315.com" based on an EPCIS-standard-based platform - ezTRACK, 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 ezTRACK platform, ensuring 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 viewed 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 ezTRACK platform which adapts GS1 Electronic Product Code Information Service (EPCIS) 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 SZCIQ's quarantine process has been boosted with the adoption of ezTRACK 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 CIQ 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 serialized 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.

在貨物從原產地運送到目的地港口的過程中，跨境追蹤貨物動向能力攸關重要。因此，全球供應鏈須作出相應調動，確保各單位可以順利傳送資訊，促成互動合作。「ccic315.com」採用GS1產品電子代碼訊息服務（EPCIS）作為資訊傳送標準，讓持份者可以查閱及審核商務檔以及每件貨品的動向。

透過「ccic315.com」，深圳的中國檢驗檢疫局人員在貨品運抵中國時，便可取得詳細的檢驗結果，預先進行風險評估，大大加快貨品清關檢驗的過程。

業務挑戰

國際酒類市場研究組織去年發表的調查結果顯示，中國近年的酒類消費總額正以前所未有的速度增長，在2007年至2011年間躍升142.1%，總消耗量達到1.5925億箱（即超過19.1億瓶）。調查報告同時預計，中國的酒類消費額將於2012年至2016年間再上升39.62%，約等同7,163萬箱或8.58億瓶酒類飲品。

內地的酒類消費也節節上升，部分原因是內地消費者日趨富裕，品酒逐漸成為日常風尚。內地品酒文化的崛起，增加了市場對酒類的需求，毗鄰的香港因此受惠，酒類交易越來越蓬勃。位處中國南部海關關口外的香港，於2008年廢除酒稅後，亦逐漸登上亞洲主要酒類貿易中心的寶座。

CCIC食品安全溯源中心經過一年的運行及設備測試，在加速進口葡萄酒清關流程上已初見成效，同時也得到深圳出入境檢驗檢疫局的政策支持，認可海外實驗室的分析報告，並給予CCIC食品安全溯源中心在原產地溯源過的葡萄酒到達深圳各口岸後可實施預報關報檢並減少抽檢的優先政策。

為加快進口酒類的清關流程，促進粵港兩地經濟的繁榮和發展，讓此項優惠政策也同樣適用於經香港轉口到內地的進口產品，CCIC食品安全溯源中心、深圳出入境檢驗檢疫局、深圳世尊物流攜手GS1 Hong Kong聯手開展溯源葡萄酒清關試驗計畫，為將來打擊假貨，規範市場正當經營，保障消費者的利益做出應有貢獻。

解決方案

為順利推行計畫，GS1 Hong Kong 開發「ccic315.com」平台，並引入「蹤橫網」(ezTRACK)服務，以供測試申請和貨品追蹤追溯，使追蹤跨境貨品動向的過程變得更為精簡。中國進口商可借平台向CCIC食品安全溯源中心提交溯源申請，由當地已獲授權的測試實驗室依據中國對進口食品檢測標準的要求，對送檢食品及酒類進行檢測。實地檢驗完成後，CCIC食品安全溯源中心便會給海外供應商發出證書，檢驗報告和葡萄酒資訊亦會上載至「蹤橫網」，確保貨物符合內地食品標準並已獲認證。取得證明書後，每件貨品會於CCIC的監察下貼上安全標籤，以QR碼記錄貨品序號。安全標籤有助相關持份者檢視物流訊息，所有消費者亦可以查看有關資訊。

效益

使用「蹤橫網」平台後，深圳出入境檢驗檢疫局的檢疫工作變得更有效率，清關速度亦比以往更快；由於酒類產品可以更迅速地完成檢疫程序，中國的葡萄酒進口商及其內地交易夥伴雙雙受惠。有見及此，深圳海關訂立目標，希望把清關程序由15至20個工作天縮短至兩天。本項目完成後，中國檢驗檢疫局既可節省人力，減少須檢驗的樣本數量，其營運效率亦得以提升，即使面對工作量上升，仍能遊刃有餘。

由於每瓶酒均貼上由CCIC發出的貨品序號安全標籤，消費者只須掃瞄QR碼，便可自行檢查手中貨品是否真品，並透過手提裝置讀取貨品的追蹤及追溯資訊。

VISIBILITY 可視性

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

廣東、香港及亞洲間跨境供應鏈可視化之可行性研究

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

鞏固香港作為亞洲物流樞紐的橋樑

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 entreport 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.

中國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。

雖然貿易世界的變遷嚴重威脅香港的轉口港地位,但自由港仍然是本港的重要優勢。跨境貨品貿易的最大障礙是過境延誤;為化解此一挑戰,有關當局宜善用科技,促進跨境供應鏈可視化,使貨品清關的過程更為順暢。

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
- 蹤橫網

"Following the 22nd APEC Economic Leaders' Declaration, the agenda to further strengthen the connectivity between our markets and develop supportive infrastructure to form a 'single window' – through which we can improve supply chain visibility – will be crucial for Hong Kong to move in lock-step with the rapidly evolving e-commerce landscape and remain competitive," said Mr. Chee-chen Tung, SBS, JP, Chairman of Sub-committee on Infrastructural Support, LOGSCOUNCIL and Chairman, President & CEO, Orient Overseas (International) Ltd.

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 highlight 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 Taipei supports EPCIS (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 EPCIS 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 EPCIS standards are part of GS1 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, hence 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.

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 Taipei, 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-seals were used along with other devices like RFID readers and tags that were affixed to the cargo at pallet and item levels.

Benefits

Cross-border supply chain visibility will benefit shippers, buyers, logistics service providers and the customs authorities.

Under the four business models outlined in the feasibility study, the three quantifiable value propositions identified include the reduction of customs inspection and related red tape; the reduction of supply chain visibility and lowered cost for transshipment certificates.

Using GS1 standards across borders mean that stakeholders can be sure that the information about each part of the process is reliable. They offer much better visibility of cargoes and goods throughout the supply chain, including being able to track and trace shipments back to their origin. There is also much better security throughout every step of the process, which guards against theft and in some areas, this can also help with regulatory compliance.

Quantified result

Both pilot cases demonstrate two major core values of supply-chain visibility, which are the abilities to provide advance cargo information and monitor cargo movement status and security, facilitated by technologies based on globally accepted standards.

Recommendations to realize cross-border SCV are made including, to diagnose the readiness and implementation capacity of cross-border SCV; encourage wider participation in cross-border SCV at a regional level, especially through government-to-government liaison with Mainland China, to facilitate the certification of origin/transhipment of FTA goods, as well as to leverage APEC/APEC Business Advisory Council's platform for public-private engagement and cooperation; and establish a framework for information connectivity by using data standards and data visibility platforms to provide interconnectivity to public-private stakeholders along the entire supply chain.
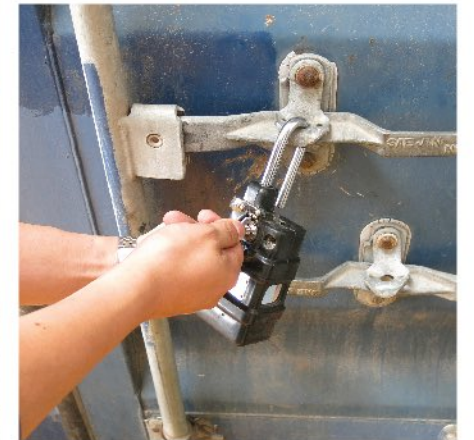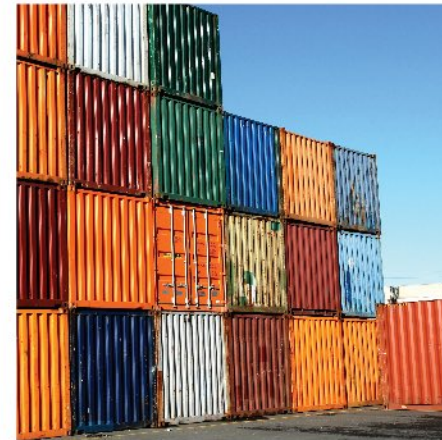
香港物流發展局基建支援小組主席小組主席暨東方海外 (國際) 有限公司總裁兼行政總監董建成，SBS，JP指出：「根據第二十二屆亞太經濟合作組織經濟領袖會議宣言，進一步加強我們各個市場之間的聯通並發展支援基建以建立『單一窗口』，藉以提升供應鏈透明化的舉措刻不容緩。這將對香港能否緊貼急速演變的電子商貿形勢和保持競爭力起著關鍵的作用。」

解決方案

透過兩個試點案例，本研究主要探討以下三大議題：

- 系統通訊缺乏統一的介面標準；
- 保障資料安全及真確性；
- 香港與鄰近地區缺乏互相認可的貨物處理設備。

兩個試點案例中，最備受關注的是一個長達20呎的貨櫃－這批貨物先經海路從台灣基隆港運送到香港，再在香港以貨車轉運至深圳或東莞。

試點案例的研究結論十分清晰：在跨境運輸過程中，兩地須使用互相兼容的通訊平台，以交換貨物訊息。因此，兩地必須達成訊息交流協議，並訂立兩地通用的數據標準。

香港及台北目前所使用的海關資訊平台支援產品電子代碼訊息服務（EPCIS）標準，這不但能作為電子系統間的通訊標準，兩地海關還能檢索並分享個別物件在同一企業內或多家企業之間的動向。產品電子代碼訊息服務標準對供應鏈可視化貢獻良多，其功能包括追蹤貨物的即時動向、追溯貨物來源、提供貨物履歷資訊（包括持分者身份、貨物經過的地方等等）以及驗證貨物真偽。此外，貨櫃/ 貨物流動的訊息必須實時發佈，方能充分彰顯供應鏈可視化的益處。

產品電子代碼訊息服務標準，是本會於試點案例中採用的「蹤橫網」服務的一部分。「蹤橫網」是一個網上追蹤平台，可於貨物由裝貨地運送至目的地途中，實時反映貨物及訊息的動向，有助跨國企業達成跨境供應鏈可視化的目標。

系統兼容性

由於內地的資訊系統無法兼容產品電子代碼訊息服務標準，當地的數據須以人手傳送至香港，以確保項目如期完成。但是長遠而言，兩地海關仍須建立系統通訊的標準介面，以預先或實時交換貨物數據。

數據安全及真確性

香港與台北的資訊系統互相兼容。用家必須使用事先分配的帳號及密碼方可閱讀數據，而本會亦為系統設立了基本的保安機制。由於跨境供應鏈可視化涉及機密數據，數據安全對可視化項目的成功可謂至關重要。

保安設備

貨物受電子鎖和電子封條保護，載貨架和貨物本身亦逐一加上無線射頻讀取器及識別標籤等保安設備。

效益

貨運商、採購商、物流服務供應商及海關皆可受惠於跨境供應鏈可視化。

是次可行性研究勾勒出四種商業模式，並在此基礎上提出三項可量化的價值定位，包括：減少海關查驗及繁文縟節，降低供應鏈的不確定性，以及節省海關批出轉運證明書的成本。

在跨境運輸過程中，GS1標準可確保持份者在各步驟均得到可靠的相關資訊。GS1標準大大提升貨物供應鏈的透明度，持分者得以追蹤貨物動向及追溯貨物來源。供應鏈流程中每個步驟的安全性也獲得顯著改善，不但能夠避免貨物被竊，在某些地區更有助持分者滿足法例要求。

回報

根據中港台實踐案例的結果，項目團隊發現供應鏈可視化的兩個重點價值在於透過採用建基於全球通用標準的技術，提前提供貨物信息和監控貨物移動及保安。

至於研究報告對有關落實跨境供應鏈透視化的建議行動，包括分析跨境供應鏈透視化的準備程度和部署能力；在區域層面鼓勵對跨境供應鏈透視化的更廣泛參與，特別是透過香港政府與中國政府之間的溝通，加快自由貿易協議貨品的來源地證明與中轉證明簽發，以至利用亞太經合組織或亞太經合組織商業委員會的平台來加強公營與私營機構的聯繫和合作；及利用數據標準和數據透明化平台，建立資訊聯通框架，使整條供應鏈的公私營機構相關人士得以互通互聯資訊。

What is GS1 Standards?
GS1標準是甚麼?

The GS1 System of Standards provides the foundation 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 - make 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,為供應鏈建立了具透明度的資料互享基礎。GS1 標準用於**識別**、**擷取**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。

Identify 識別

Used to uniquely distinguish all products (trade items), logistic units, locations and assets across the supply chain from manufacturer to consumer.

以不同的識別碼明確識別供應鏈中由製造商至消費者的所有產品(貿易貨品)、物流單位、位置和資產。

GRAI | GTIN GTIN | GLN GTIN GTIN SSCC | GIAI | GLN | GIAI | SSCC | GLN | GIAI | GTIN GTIN SSCC | GTIN GTIN | GLN | GSRN

MANUFACTURER — ITEM — CASE — PALLET — TRANSPORT — DISTRIBUTOR — TRANSPORT — PALLET — DISTRIBUTION CENTRE — TRANSPORT — CASE — ITEM — RETAILER HEALTHCARE PROVIDER OPERATOR — CONSUMER PATIENT CAREGIVER

COMPANY & LOCATION 公司及位置
- Global Location Number (GLN) 全球位置編碼

PRODUCT 產品
- Global Trade Item Number (GTIN) 全球貿易貨品編碼
- Serialised Global Trade Item Number (SGTIN) 全球貿易貨品編碼序號

LOGISTICS & SHIPPING 物流與貨運
- Serial Shipping Container Code (SSCC) 貨運容器序號
- Global Shipment Identification Number (GSIN) 全球貨運識別碼
- Global Identification Number for Consignment (GINC) 全球托運識別碼

ASSETS 資產
- Global Individual Asset Identifier (GIAI) 全球個體資產識別碼
- Global Returnable Asset Identifier (GRAI) 全球可回收資產識別碼

SERVICES & MORE 服務與更多
- Global Service Relation Number (GSRN) 全球服務關係識別碼
- Global Document Type Identifier (GDTI) 全球文件類別識別碼
- Global Coupon Number (GCN) 全球贈券編碼

Capture 擷取

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 條碼和產品電子代碼 / 無線射頻識別 (EPC / RFID) 是 GS1 識別碼的資料載體,它同時能容納批次或有效期等不同資料,以符合不同商貿所需。

GS1 BARCODES
GS1條碼

GS1 EPC / RFID
GS1 產品產品電子代碼 /
無線射頻識別

EAN / UPC | GS1 - 128 | ITF - 14 | GS1 DATA Bar | GS1 Data Matrix | GS1 QR Code | GS1 Composite | EPC HF Gen2 | EPC UHF Gen 2

Share 分享

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

透過識別碼、資料載體及電子資料交換訊息此三大標準,令供應鏈持份者能準確交換產品流向資訊,提高了商貿訊息的互通性。

MASTER DATA 主數據
GDSN Global Data Synchronisation Network
全球數據同步網絡

The GDSN connects trading partners to the GS1 Global Registry* via GS1-certified Data Pools, enabling automated electronic sharing of standardised, up-to-date, accurate, product information.

全球數據同步網絡透過 GS1 認可的數據池,讓貿易夥伴連接到 GS1 全球註冊資料庫,共同分享標準化、準確和最新的產品資訊。

TRANSACTIONAL DATA 交易數據
eCom Electronic Communication
電子商貿

GS1 eCom standards provide clear guidelines for Electronic Data Interchange (EDI), enabling electronics sharing of accurate business transaction information between trading partners.

GS1 電子商貿標準為電子數據聯通 (EDI) 提供清晰指引,讓貿易夥伴能互相分享準確的電子交易訊息。

EVENT DATA 具體事件數據
EPCIS Electronic Product Code
Information Services
產品電子代碼訊息服務

EPCIS is the standard for immediate sharing of information about critical events between trading partners. It provides evidence of what is occurring in the supply chain, and observations of the *what, when, where and why*.

產品電子代碼訊息服務 (EPCIS) 讓貿易夥伴實時分享重要的具體事件數據,就供應鏈上發生的事件,包括物件、時間、地點及事態提供可靠資料。

WHAT GOES INTO IT 這包括
- GTIN 全球貿易貨品編碼
  GLN 全球位置編碼
- Brand Owner Identification 品牌擁有者識別
- Product Descriptions 產品介紹
- Global Product Classification (GPC) 全球產品分類
- Target Market 目標市場

WHAT GOES INTO IT 這包括
- GTIN 全球貿易貨品編碼, GLN 全球位置編碼, SSCC 貨運容器序號, GSIN 全球貨運識別碼, GINC 全球托運識別碼, GDTI 全球文件類別識別碼, GRAI 全球可回收資產識別碼, GIAI 全球個體資產識別碼,
- Purchase Order 採購單
- Despatch Advice 出貨通知
- Transport Instruction 運輸指示
- Invoice 發票
- Payment 付款

WHAT GOES INTO IT 這包括
What 何物	SGTIN 全球貿易貨品編碼序號
Where 何地	GLN 全球位置編碼
When 何時	SSCC 貨運容器序號
Why 為何	GIAI 全球個體資產識別碼
	GRAI 全球可回收資產識別碼
	GSRN 全球服務關係識別碼
	GDTI 全球文件類別識別碼

Solutions & Services
解決方案及服務

Driving standards development and adoption 引領標準發展並促進業界採納	**GS1 BarCodes** Global Standards for Identification and Data Capture 應用於自動識別及數據擷取的全球標準	**GS1 eCom** Global Standards for Electronic Business Messaging 應用於自動識別及數據擷取的全球標準	**GS1 GDSN** Global Network for Data Synchronization 應用於全球數據同步的網絡
Engaging industries and assisting enterprises in solving business issues with relevant standards-based services and solutions 協助企業透過以標準為本的相關服務與方案解決業務上的問題	**GS1 BarCode numbers registration and administration GS1條碼編號之登記及管理** Supporting local businesses with the implementation of GS1 BarCode System and the BarCode quality assurance 為本地企業提供 GS1 條碼系統及條碼質素保證的支援 **BarcodePlus** A product and location information portal allowing users to access and share quality data using GS1 Keys like GTIN and GLN via the internet, mobile and smart kiosk 透過 GS1 識別碼如全球貿易貨品編碼及全球位置編碼，讓不同用戶經由互聯網、手機及智能資訊站擷取並分享產品及位置資料的資訊平台 **Global Electronic Party Information Registry (GEPIR) 全球電子公司資料庫** A global online directory of suppliers, with information of over 1 million companies worldwide, creating boundless business opportunities 一個儲存了世界各地逾一百萬個供應商資料的全球性網上資料庫，為業界帶來無界限的商機	**ezTRADE 通商易** An industry-wide B2B platform facilitating electronic transaction messaging via EDI and web to support electronic ordering, invoicing and shipment notices 一個經由 EDI 及互聯網以支援電子訂單、發票、貨運通知的跨業界商業對商業電子數據交換平台	**GS1 HK DataPool** **GS1 HK Datapool GS1 HK 數據池** A certified product information synchronization platform that interoperates with the GS1 Global Registry® enabling exchange of synchronized, accurate and up-to-date product information between buyers and suppliers 連接 GS1 全球註冊資料庫並獲國際認可的產品資訊平台，讓買家及賣家可適時互換準確無誤及最新的產品資料
Enabling knowledge exchange between multiple stakeholders throughout the supply chain ecosystem 透過供應鏈生態系統促進持份者之間的知識交流	Host a wide range of training courses to facilitate knowledge transfer for SCM principles, e-business strategies, global standards and the implementation of enabling technologies **Workshop and training course:** Barcode Workshops, SSCR Workshop, Digital Marketing Workshop, ECR Workshop, Internet of Things Certification Programs, etc. **Industry seminar and conference:** Annual Supply Chain Management Excellence Summit **Award Scheme:** Hong Kong IoT Awards, Consumer Caring Scheme **RFID Demonstration Centre:** Jiangyin Internet of Things RFID Demonstration Centre **Hong Kong Internet of Things Centre of Excellence (IoT Centre):** A centre to facilitate the development of IoT and extensive adoption of IoT/RFID technology		
Facilitating local-global collaborations 促進各行各業與本地及全球合作夥伴之間的協作	To enhance Hong Kong's industry competitiveness by the following solutions • Retail ECR • Food & Wine Traceability • Healthcare Supply Chain Modernization	• Apparel Item-level Tagging • Cross-border Logistics Supply Chain Visibility	

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	GS1 EPCglobal® Global Standards for RFID-based Identification and Traceability 利用全球標準以無線射頻識別為基礎的產品識別及追溯技術	**GS1 Traceability** A Traceability Process for Product Recall and Quality Management 支援產品召回及品質管理的追溯過程	**GS1 B2C** Global Network for Data Synchronization 應用於全球數據同步的網絡
	ezTRACK 蹤橫網 Cloud-based EPCIS-standard traceability network enabling real-time visibility of goods and information flow from point of manufacturing to point of destination 以雲端科技為基礎，並以產品電子代碼資訊服務為標準的追溯網絡，能提供由來源地至目的地之實時貨物流及資訊流的透明度 **Value+** An innovative consumer loyalty solution aimed at enabling companies to engage customers and build brand awareness through marketing promotion, offering value-added services, as well as enabling anti-counterfeiting and monitoring potential parallel imports issues 一個提升消費者忠誠度的方案，旨在讓企業透過各種增值服務、市場推廣來擴大客戶群及建立品牌知名度；同時，解決和監測偽冒品或潛在的水貨問題 **Cold Chain Management Solution 冷凍鏈管理方案** Traceability network enabling visibility of goods (such as food and pharmaceuticals), information flow, and thermo-humidity status from point of source to point of destination 能擷取及分享（如食品及藥物）的產品溫度、濕度、時間及位置的實時數據之解決方案 **Warehouse Management System 倉庫管理系統** Inventory management network to capturing in-stock, out-stock, and stock take information 用作擷取入倉、出倉及盤點紀錄的倉存管理網絡 **Item Level Tracking Solution 單件貨品追蹤方案** Providing manufacturer-to-store supply chain visibility by item-level EPC / RFID tagging 為業界提供由生產商至零售店舖的單件貨品供應鏈透明度	**GTC/GTS** **Global Traceability Conformance (GTC) 全球可追溯性準則** A methodology and set of tools to audit and access existing traceability systems based on the process described in the GS1 Global Traceability Standard and international standards such as ISO, HACCP and other food safety standards 一套以 GS1 全球追溯標準及其他國際性標準，例如 ISO, HACCP 及其他安全法則為基礎，用作稽核及評估現行追溯系統的方法及工具 **Global Traceability Standards (GTS) 全球追溯標準** A business process standard that enhances the ability to track forward the movement of products along stage(s) of the supply chain to trace backward the history, application or location of products in compliance with the appropriate GS1 identifiers 一套以特定的 GS1 識別碼為基準的商業流程標準，其作用是協助企業改善追蹤產品供應鏈流向，以及提高企業追溯產品歷史、應用及位置的能力	**Consumer Connect 物密嘟** A direct mobile communications platform for brand owners to provide trusted product information and interact with consumers anytime, anywhere 直接的流動通訊平台，讓品牌提供可信賴的產品資訊，並隨時隨地與消費者互動連繫
	舉辦有關供應鏈管理、電子商貿策略、全球標準與如何運用應用技術的培訓課程，以推動知識轉移 **工作坊與培訓課程：** 條碼工作坊、SSCR 工作坊、數碼營銷策略課程、ECR 課程、物聯網認證及培訓課程等 **業界研討會與會議：** 供應鏈管理高峰年會 **獎項計劃：** 香港物聯網大獎、「貼心企業」嘉許計劃 **無線射頻識別技術演示中心：** 江陰市物聯網無線射頻識別技術演示中心 **香港物聯網科技應用中心：** 一個促進物聯網發展及推動業界採納物聯網 / RFID 技術中心		
	透過以下方案提升香港業界的競爭力 • 高效消費者回應零售 • 食品及葡萄酒追溯 • 醫療供應鏈現代化	• 成衣單品標籤 • 跨境物流供應鏈透明度	

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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溯源中心

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
原味家作

Nex Medical Limited
Nex醫藥有限公司

Zuellig Group
裕利醫藥有限公司