

EFFICIENCY

QUALITY

MARKETING OUTREACH

TRUST

VISIBILITY



BUSINESS CASEBOOK 2013

Creating Values Through Business Innovations

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About GS1 Hong Kong

關於香港貨品編碼協會



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.

Our 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. The GS1 System of Standards is the world's most widely used supply chain standards, allowing the efficient and secure movement of products, services, and information between companies and facilitating the interoperability between different business systems.

GS1 Hong Kong is the authorized registration organization for GS1 BarCodes and Electronic Product Code System. It also offers platforms for trusted product information, BarcodePlus; e-ordering and replenishment, ezTRADE; a global traceability system, ezTRACK; and a B2C mobile application, Consumer Connect. The organization also offers training and consulting in supply chain management technologies and best practices, as well as membership and partnership programs to facilitate business matching and global trade collaboration.

GS1 Hong Kong currently has more than 6,500 corporate members covering close to 20 industries including retail consumer goods, food, wine, healthcare, apparel, consumer electronics, logistics, information and technology.

香港貨品編碼協會於 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。

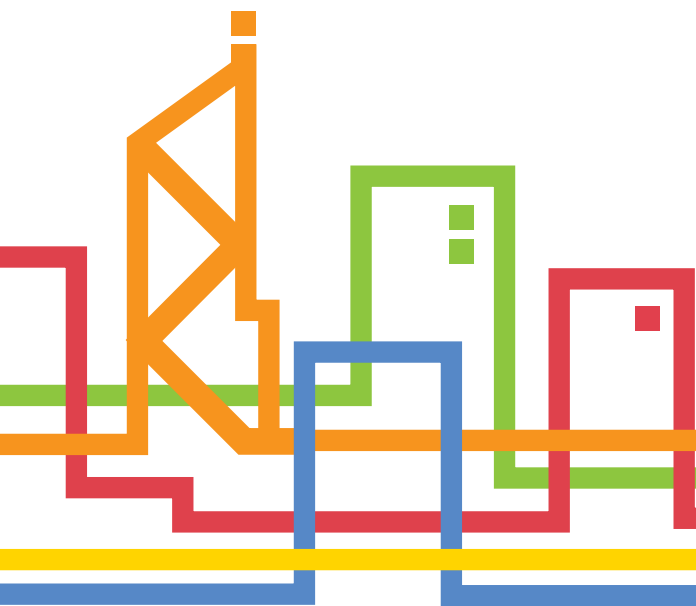
香港貨品編碼協會憑藉全球供應鏈標準和以標準為本的解決方案及服務，讓香港企業享用更有效率、更高透明度和更安全的供應鏈，以優化業務及創優增值。GS1 的標準系統是全球最廣泛採用的供應鏈標準，能促進和保障企業之間的貨物、服務及資訊流通，提升不同商業系統之間的互通性。

香港貨品編碼協會是唯一在香港獲授權註冊 GS1 條碼和產品電子代碼系統的機構。協會為業界提供多個平台，如搜尋可信產品資訊的 BarcodePlus、供業界進行電子採購的「通商易」、全球追溯平台「蹤橫網」及企業對個人推廣流動通訊平台「物密啱」。協會亦提供關於供應鏈管理技術及最佳實務的培訓和顧問服務，並且藉會員及夥伴計劃推動商業配搭及環球貿易協作。

香港貨品編碼協會目前有逾 6,500 名企業會員，涵蓋約 20 種行業，包括零售消費品、食品、葡萄酒、醫療護理、成衣、消費電子產品、物流及資訊科技。

Foreword

序



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

2013 marks the 40th anniversary of the barcode. In 1973, industry leaders came together to select a single standard for product identification, known today as the GS1 BarCode. What started as a way to speed grocery store checkout has become the global language of business – a common way for trading partners around the world to identify, capture and share information about products, locations and more.

For 40 years, GS1 has been bringing industries together to revolutionize the way they do business. As one of its local chapters, GS1 Hong Kong is serving over 6,500 corporate members across seven key industries, including retail consumer goods, food, wine, healthcare, apparel, transport and logistics, as well as ICT (Information and Communications Technology), by providing them a wide range of standard-based solutions and services. Through partnership it forges among trading partners, organizations and technology providers, GS1 Hong Kong constantly brings value to Hong Kong enterprises and help them strengthen their competitiveness in the ever-changing business environment.

As in the previous years, 2012 to 13 has seen a number of collaborative projects carried out by GS1 Hong Kong jointly with the government, brands and SMEs, both globally and locally. These efforts have helped enterprises and organizations to successfully drive financial profitability and cost control, customer service delivery, brand loyalty and corporate growth, through the adoption and use of standards. Nine success stories from the aforesaid projects have been selected for inclusion into this casebook, under the theme of “Creating Values through Business Innovations” to inspire those aspiring to similar levels of accomplishments. Equally noteworthy are the five core values championed by GS1 Hong Kong – Efficiency, Quality, Marketing Outreach, Trust and Visibility – which are encapsulated in these case studies.

With the commemoration of GS1 Hong Kong’s 25th anniversary next year, we will continue to persevere with our endeavors and collaborate with all our stakeholders from different industries in moving forward together towards a higher level of business excellence.

今年，GS1 條碼踏入四十周年。回首 1973 年，多位業界先驅研發了可全球識別產品的統一標準，並逐漸發展成今天的 GS1 條碼。最初，它只用於加快超市的付款過程，然而今天已成為環球商界不可或缺的共通語言。世界各地的商貿夥伴都可利用 GS1 條碼識別、擷取和分享各種資訊，包括貨物和業務位置等。

四十年來，GS1 一直聯同各行各業，為經營模式帶來重大變革。作為 GS1 其中一個本地成員組織，香港貨品編碼協會為其企業會員提供以標準為本的解決方案及服務，6,500 名企業會員涵蓋七大產業，包括零售消費品、食品、葡萄酒、醫療護理、成衣、運輸與物流，以及資訊及通訊科技業。本會與貿易夥伴、機構組織和技術供應商攜手合作，為本港企業創優增值，協助它們在瞬息萬變的商界提升自身競爭力。

一如既往，本會在 2012 至 13 年度亦夥拍本地及海外的政府、品牌和中小型企業，推行多項合作計劃，協助企業和機構組織採用 GS1 標準，從而促進它們的盈利能力、成本控制能力、客戶服務質素、顧客對品牌的忠誠度，以及企業的業務增長。本會從多項合作計劃中，挑選出九個成功個案，輯錄於這本題為《聚創新意念 締造成功價值》的特刊，希望為矢志爭取同等佳績的企業帶來啟示。這些成功個案同時彰顯了本會追求的五個核心價值：高效、優質、市場拓展、可信性和透明度。

本會將於明年踏入二十五周年，我們將繼續與各界持分者通力合作，向前邁進，再創佳績。



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Hospital Authority Hong Kong

香港醫院管理局

Successful Implementation in Pharmaceutical Supply Chain
Modernization Project

成功推行醫療藥物供應鏈現代化計劃



“Thanks to GS1 Hong Kong, with their professional support, the Supply Chain Modernization (SCM) project has adopted the GS1 Standards and this has turned out to be a successful healthcare system initiative that we have implemented recently to enable automation in the pharmaceutical procurement process and track-and-trace capability in the supply chain process in our hospitals, which is essential for the achievement of medication safety, supply chain efficiency, and traceability,” said Ms. S.C. Chiang, Senior Pharmacist, Chief Pharmacist’s Office, Hospital Authority Hong Kong.

香港醫院管理局總藥劑師辦事處高級藥劑師蔣秀珠女士表示：「有賴香港貨品編碼協會專業的支援服務，供應鏈現代化計劃採用了 GS1 標準，並證實是近期推行的其中一項成功的醫療系統改進措施。自此醫院供應鏈流程的藥物採購，以及追蹤及追溯工作均能自動化，那對加強藥物安全、提升供應鏈效率及藥品的可追溯性至關重要。」



INDUSTRY 行業

- Healthcare
- 醫療護理

SOLUTIONS APPLIED 推行方案

- ezTRADE¹
- 通商易¹
- BarcodePlus²
- BarcodePlus²

GS1 STANDARDS USED 應用的 GS1 標準

- GTIN (Global Trade Item Number)
- 全球貿易貨品編碼
- GLN (Global Location Number)
- 全球位置編碼
- SSCC (Serial Shipping Container Code)
- 貨運容器序號
- GS1-128 BarCode
- GS1-128條碼

¹ ezTRADE: An industry-wide B2B platform that facilitates electronic transaction messaging via EDI and web to support electronic ordering, invoicing and shipment notices.
通商易：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。

² BarcodePlus: This is a product and location information portal that allows users to access and share quality data using GS1 Keys like GTIN and GLN via the internet and mobile devices.
BarcodePlus：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及流動裝置擷取並分享產品及位置資料的資訊平台。

BACKGROUND

The Hospital Authority Hong Kong (HA) is a statutory body responsible for managing Hong Kong's public healthcare system. HA provides for 90% of public healthcare needs in Hong Kong. Under its auspices are 42 public hospitals and institutions, 48 specialist out-patient clinics and 73 general out-patient clinics grouped under seven clusters. It provides 27,000 beds and has served over 20.79 million patients from 2012 to 2013.

CHALLENGES

From 2011 to 2012, HA spent over HK\$4 billion on pharmaceutical supplies, a figure equivalent to the expenses of HK\$10 million incurred by the organization to procure these supplies on a daily basis.

According to the industry report "Strength in unity: The promise of global standards in healthcare," based on a survey conducted in 2012 by global management consulting firm McKinsey & Company, it was found that the adoption of a single global standard not only potentially saves up to 43,000 lives and averts up to 1.4 million patient disabilities, provides traceability for pharmaceutical supplies or medical devices along the supply chain all the way to the patients in hospital, it could also reduce obsolescence and inventory redundancy up to half a trillion dollars from a global perspective.

Back in the early 1990s, HA had foreseen the importance of medication safety, supply chain efficiency, and traceability. Even then, it intended to automate its manual procurement process by adopting GS1 Standards for pharmaceutical item identifications and Electronic Data Interchange (EDI). In 1996, HA started using GS1 Hong Kong's ezTRADE to send product orders to its medical suppliers through purchase order (PO) form. The suppliers, in turn, started forwarding the goods directly to HA. Pharmacy staffs who received the medication supplies would sign back the delivery notes to acknowledge receipts.

Despite the improvements made, the procurement process was not fully automated. Several procedures including data checking and input of product batch numbers and expiration dates for receipt and storage were still handled manually. Invoices were submitted to its Finance Department in paper copies, not electronically.

SOLUTIONS

The Supply Chain Modernization (SCM) project has been undertaken to facilitate automation of the pharmaceutical procurement process at HA. Costing several millions of dollars in design and implementation, it marks an important step towards achieving medication safety, supply chain efficiency and traceability for Hong Kong's public hospitals and clinics. Under this project, the GS1 Standards adopted include GTIN for individual product identification; GLN to identify delivery location and a comprehensive set of Electronic Data Interchanges (EDI) documents such as Purchase Order (PO), Purchase Order Response (POR), Advanced Shipping Notices (ASN) and Invoices.

Upon receiving an order for pharmaceutical products from HA, the suppliers will pack the required goods, to which Serial Shipping Container Code (SSCC) labels are attached, complete with a GS1-128 BarCode. This barcode associates with vital traceability data such as GTIN, batch number and expiry date for HA staff to scan at the point of delivery. Prior to product delivery, the suppliers will send an Advanced Shipping Notice (ASN) separately by electronics means to HA for advance validation. The ASN is an electronic document also containing the key procurement and traceability data about the products that HA has ordered, associating to the SSCC labels and data contained in GS1-128 BarCode.

Upon arrival of the products at HA's warehouses, the pharmacy staff will validate the products against the information from ASN to make sure that the product data from these sources match. The staffs collecting the product shipment from suppliers will also count the number of items delivered, ensuring that it tallies with the number of items ordered and that the right products are delivered. Pharmacy staff will scan the SSCC barcode upon satisfactory validation, and the traceable product data will be entered into the system from information on ASN, and the suppliers will send electronic invoices to HA Finance Department to process payment accordingly.

As the newly arrived pharmaceutical supplies will be distributed to different point-of-use, the SCM project will provide accurate tracking of the products from one location to another across the HA supply chain. More validation would follow in the individual pharmacies by staff with a scan of the GS1 BarCodes.

BENEFITS AND FUTURE PLAN

By June 2012, HA had completed pilot implementation of the project on two clusters of public hospitals under its management. A year later, the project had been extended to all its 7 clusters of 42 hospitals. With the full project rollout accomplished, HA saw the operational efficiency of its supply chain greatly bolstered, which helped it to reduce manpower input and other types of overheads in the process. The SCM project also enabled the organization to enhance the tracking and traceability of pharmaceutical supplies moving across HA stores, thanks to the automation in procurement and delivery made possible through adoption of GS1 Standards.

Despite the full rollout of the SCM project, it can still be extended further to more pharmaceutical items and their suppliers. Presently, the system covers only 70% of HA's pharmaceutical inventory, involving 13 suppliers. Some local suppliers, however, have yet to be part of HA's automated procurement process. This is why HA has been working with GS1 Hong Kong to educate its suppliers on the concept, mechanics and benefits pertaining to the adoption of GS1 Standards. Practical case and implementation experiences from the SCM project have been shared not only with suppliers, but healthcare professionals and organizations both locally and abroad. **"Thanks to GS1 Hong Kong, with their professional support, the Supply Chain Modernization (SCM) project has adopted the GS1 Standards and this has turned out to be a successful healthcare system initiative that we have implemented recently to enable automation in the pharmaceutical procurement process and track-and-trace capability in the supply chain process in our hospitals, which is essential for the achievement of medication safety, supply chain efficiency, and traceability,"** said Ms. S.C. Chiang, Senior Pharmacist, Chief Pharmacist's Office, Hospital Authority Hong Kong.

HA is looking into the feasibility of taking the pharmaceutical traceability it has achieved to a higher level. Ultimately, it aims to extend such traceability beyond the pharmacy and dispensary level, to the point-of-use: each and every hospitalized patient. This might require the pharmaceutical products to be repackaged at individual item level, to ensure that the right medication is administered to the right patient in the right dosage at the right time by the right route, which will help enhance pharmaceutical traceability and safety in the public hospitals and clinics of Hong Kong.

背景

香港醫院管理局 (醫管局) 是管理本港公營醫療系統的法定機構，服務全香港九成的公共醫療需求。醫管局轄下共有七大聯網，涵蓋 42 家公立醫院和醫療機構、48 間專科門診及 73 間普通科門診。在 2012 至 13 年度，醫管局提供 27,000 張病床，服務超過 2,079 萬位病人。

挑戰

在 2011 至 12 年度，醫管局耗資超過 40 億港元購買醫療藥物，相當於每天耗資 1,000 萬港元採購藥物。

跨國管理顧問機構麥肯錫公司 (McKinsey & Company) 於 2012 年進行醫療行業調查，並發表《團結就是力量：全球統一醫療標準的願景 (暫譯)》報告。當中指出統一的全球標準可以拯救多達 43,000 條生命，及可避免 140 萬個病人導致殘障。統一標準亦能建立由醫療藥物或儀器生產以至留院病人使用上每一環節的供應鏈可追溯性。除此之外，統一標準還可以減少藥物及儀器的報廢率和避免購入過多存貨，為全球醫療系統節省高達 5,000 億美元的營運成本。

早於 1990 年代早期，醫管局已預見藥物安全、供應鏈效率及可追溯性的重要性，並計劃引入電子數據聯通 (EDI)，透過採用 GS1 標準識別藥物，從而把人手採購藥物的過程自動化。1996 年開始，醫管局使用香港貨品編碼協會的通商易服務，向藥物供應商送出訂單，而供應商亦開始直接把藥物送到醫管局。局方的藥劑部職員收到藥物後，便會簽署送貨單確認已經收貨。

採購過程雖比之前有所改善，但仍未完全自動化，部份工序仍須人手執行，包括檢查藥品批次編號及到期日，並將有關資料透過人手輸入電腦系統作收貨記錄及資料儲存之用。此外，醫管局財務部接收的仍是紙本發票，而非電子發票。

方案

為了在藥物採購過程實行自動化，醫管局展開了供應鏈現代化計劃。此項計劃從設計到推行共耗資了數百萬元，它加強了藥物安全，提升了供應鏈效率並建立了藥品的可追溯性，帶領本港公立醫院和診所邁出重要一步。此項計劃採用多項 GS1 標準，包括

以全球貿易貨品編碼識別個別藥物，並利用國際位置編碼識別付運地點，與此同時也應用了整套電子數據聯通文件，包括採購訂單、採購訂單回覆、預先付運通知和電子發票。

供應商收到醫管局的藥物採購訂單後，會把所需藥品包裝妥當，然後貼上貨運容器序號標籤和 GS1-128 條碼，以便讓藥劑部職員在收貨點進行掃描，就可查對關鍵的追蹤資料，包括全球貿易貨品編碼、藥品批次編號及到期日。送貨前，供應商會以電子方式向醫管局發送預先付運通知，以作預先查對之用。電子預先付運通知是電子文件，內容正對應以條碼形式儲存於貨運容器序號的資料，它包含了醫管局所購藥品的重點採購和追溯資料。

藥物送抵醫管局倉庫後，藥劑部職員便會按照預先付運通知文件核對來貨資料，確保產品資料無誤。職員從供應商取得付運藥品後，亦會數算來貨數目，確保藥物的種類和數量與採購資料一致。核對完成後，藥劑部職員會掃描貨運容器序號條碼，並按預先付運通知內的資訊，把藥品追溯資料直接輸入電腦系統。然後，供應商會向醫管局財務部發出電子發票，以便完成付款過程。

這些新到藥品接著會分發到多個使用點，供應鏈現代化計劃亦會準確追蹤藥物在醫管局供應鏈裡的點到點運送過程。當某使用點的藥劑部門收到藥物，職員便會掃描 GS1 條碼，進一步核對藥物資料。

效益和未來展望

截至 2012 年 6 月，醫管局已於轄下兩個公立醫院聯網完成試點計劃。時隔一年，供應鏈現代化計劃已擴展至全部七個聯網轄下的 42 所醫院。本計劃全面推行後，醫管局供應鏈的運作效率大幅提升，所需人手上的資料輸入及其他營運開支亦因而減少。透過採用 GS1 標準，藥物的採購及運送過程已自動化，使醫管局更容易追蹤及追溯藥品於倉庫之間的流動情況。

供應鏈現代化計劃雖已順利推行，但仍有擴展空間，以涵蓋更多藥品和供應商。新系統現時只覆蓋由 13 家供應商供應至醫管局共七成的藥品倉存。然而，一些本地供應商仍未採用醫管局的自動化採購程序。因此，局方不斷與香港貨品編碼協會合作，讓其他供應商認識 GS1 標準的概念、運作模式和效益。除了供應商，雙方亦透過不同方式供本港及海外的醫護人員和機構參考本計劃的實務個案和實施經驗。醫管局總藥劑師辦事處高級藥劑師蔣秀珠女士表示：「有賴香港貨品編碼協會專業的支援服務，供應鏈現代化計劃採用了 GS1 標準，並證實是近期推行的其中一項成功的醫療系統改進措施。自此醫院供應鏈流程的藥物採購，以及追蹤及追溯工作均能自動化，那對加強藥物安全、提升供應鏈效率及藥品的可追溯性至關重要。」

醫管局正研究進一步加強藥品可追溯性的可行性，最終目標是延伸至藥劑部門和配藥處以外，使藥物的流動可被追溯至最終使用點——即每一位住院病人。為此，每一單件藥品自身都可能需要重新包裝，以確保正確的藥物可依正確途徑在適當時間給所需病人施以正確劑量，那將可加強本港公立醫院和診所藥品的可追溯性及安全性。

Three key components in pharmaceutical supply chain traceability: 在供應鏈裡追溯藥物流動的三項要素：



DBHK Trading Company

上海黛彼貿易有限公司

Facilitating a higher level of efficiency via RFID Item-Level Tagging
透過單品無線射頻識別標籤，提升更高效率



“At warehouse level, stocktaking time is now reduced by 70% and repacking time by 30%, with a 99% increase in stock accuracy. At retail store level, real-time inventory updates can be achieved, with stocktaking time reduced by 90% and stock accuracy elevated by 99%. 30% of manpower use has been eliminated due to automation. Logistically, delivery time has been reduced 80%, accompanied by a 100% increase in accuracy of products check in-and-out,” said Mr. Edison Chok, Director of DBHK Trading Co., Ltd.

上海黛彼貿易有限公司總監卓耀豪先生表示：「在倉庫方面，點貨時間現大大縮短 70%，重新包裝的時間也減少了 30%，點貨準確率更上升了 99%。在零售店方面，員工可實時更新倉存記錄，點貨時間不單縮短了 90%，準確率亦提升了 99%；倉存管理自動化後，更節省了 30% 人手。於物流方面，送貨時間縮短了 80%，貨品交收的準確度亦提升至 100%。」



INDUSTRY 行業

▪ Apparel

▪ 成衣

SOLUTIONS APPLIED 推行方案

▪ EPC / RFID Item Level Tagging

▪ 產品電子代碼 / 無線射頻識別單品標籤

GS1 STANDARDS USED 應用的 GS1 標準

▪ GIAI (Global Individual Asset Identifier)

▪ 全球個體資產識別碼

▪ GLN (Global Location Number)

▪ 全球位置編碼

▪ GS1 EPC Class 1 Gen 2

▪ GS1 EPC Class 1 Gen 2



One of the significant improvements made was the adoption of RFID handheld readers, rather than traditional barcode scanning, to read item-level tags for merchandise delivery and checkouts. With the implementation of RFID solutions, DBHK is capable of faster and more efficient stocktaking. All the other operational problems it faced along the supply chain are also addressed.

BACKGROUND

DBHK, which stands for “Designed, Developed and Distributed by Hong Kong”, is a multi-brand apparel retail chain founded by a group of Hong Kong entrepreneurs. Its inaugural flagship store officially opened in Xintiandi of Shanghai’s Pudong District in February 2010. Representing more than 30 domestic and international brands, DBHK retails fashion outfits and accessories and stages catwalk performances to promote its products.

CHALLENGES

During its start-up phase, the enterprise was besieged by a number of supply-chain problems, including inventory loss, wrong shipment, confusions in product check-in / check-out and excessively tight repackaging schedules, they also faced the challenges of incorrect data entries and slow data transfers. The manual stock-taking process it undertook also resulted in low efficiency and inaccuracy. Without a systematic warehouse management system, the company encountered a considerable challenge in cost control.

SOLUTIONS

To address the above challenges, DBHK Trading Co., Ltd partnered with U.R. RFID Limited and QBS System Ltd to develop EPC / RFID Item-Level Tagging solutions for its apparel chain operation in China. To commence the project, a feasibility study, combined with a workflow analysis, was conducted to determine users’ requirements. Trials and demonstrations were conducted to ensure the system designed was viable. Hardware like high-performance tags were selected and tested and software development followed.

GS1 Global Location Numbers (GLN), which can identify store, warehouse and rack locations, were embedded to the products to track their movements from one location to another, in order to elevate the overall supply chain visibility. Furthermore, GS1 Global Individual Asset Identifiers (GIAI) were used to track internal assets, such as reusable plastic boxes deployed for storage purpose, to better company assets throughout the logistics and distribution processes.



BENEFITS

“At warehouse level, stocktaking time is now reduced by 70% and repacking time by 30%, with a 99% increase in stock accuracy. At retail store level, real-time inventory updates can be achieved, with stocktaking time reduced by 90% and stock accuracy elevated by 99%. 30% of manpower use has been eliminated due to automation. Logistically, delivery time has been reduced 80%, accompanied by a 100% increase in accuracy of products check in-and-out,” said Mr. Edison Chok, Director of DBHK Trading Co., Ltd.

背景

上海黛彼貿易有限公司由數名香港企業家共同創立，是集合多個品牌的成衣零售集團，傳承著「香港設計、發展及批發」的理念。首家旗艦店於 2010 年 2 月在上海浦東新天地正式開業。集團代理 30 多個本地及國際時裝及飾物品牌，並不時舉辦時裝表演，以推廣集團售賣的衣飾。

挑戰

上海黛彼貿易有限公司成立初期，在供應鏈上遇到不少問題，包括遺失存貨、送貨失誤、貨物出入混亂及緊迫的包裝時間；此外，他們亦曾面對資料輸入錯誤及傳送緩慢等問題。由於集團初期以人手進行點貨，效率及準確性均未如理想，而當時亦缺乏一套精密的倉庫管理系統，造成上海黛彼貿易有限公司在成本控制上遇上頗大挑戰。

方案

為解決上述挑戰，上海黛彼貿易有限公司、植富射頻商標有限公司及比斯系統有限公司合作，為該集團於中國的成衣連鎖銷售業務設計出產品電子代碼 / 無線射頻識別單品標籤方案。計劃的第一步是進行可行性研究及工作流程分析，以了解用家需求。然後是一連串的執行試驗及示範，確保新系統切實可行；各種硬件如高效能標籤均進行了測試，繼而編寫了系統所需的軟件。

上海黛彼貿易有限公司為貨品貼上 GS1 全球位置編碼 (GLN)，以識別商店、倉庫和貨架的位置，從而追蹤貨品在不同位置之間的流動，提升供應鏈的整體透明度。此外，上海黛彼貿易有限公司還採用了 GS1 全球個體資產識別碼 (GIAI)，以追蹤公司的內部資產，例如可循環再用的儲物膠箱，從而改善公司資產的物流和分發過程。

其中一項重要的改進是棄用傳統條碼掃描，改用手攜式無線射頻讀取器，在送貨和結帳時讀取單品標籤。引入無線射頻系統後，上海黛彼貿易有限公司的點貨過程變得更快和更有效率，供應鏈上的其他運作問題亦迎刃而解。



效益

上海黛彼貿易有限公司總監卓耀豪先生表示：「在倉庫方面，點貨時間現大大縮短 70%，重新包裝的時間也減少了 30%，點貨準確率更上升了 99%。在零售店方面，員工可實時更新倉存記錄，點貨時間不單縮短了 90%，準確率亦提升了 99%；倉存管理自動化後，更節省了 30% 人手。於物流方面，送貨時間縮短了 80%，貨品交收的準確度亦提升至 100%。」

By introducing the EPC / RFID Item Level Tagging, it helps to keep track of apparel items in real time:
透過引入產品電子代碼 / 無線射頻識別單品標籤，有助實時對每件服裝產品進行追蹤追溯：



Reduce 90% stocktaking time at retail level
於零售店的點貨時間縮短了 90%

DBHK's management is able to analyze the business performance in real time
公司管理層能實時分析營運績效



Reduce 70% stocktaking time at warehouse level
於倉庫的點貨時間縮短了 70%





အသံစုံ

city'super Group

city'super 集團

Reducing food safety risk through quality monitoring of perishable products
via GS1 Hong Kong's Cold Chain Management Solution

透過香港貨品編碼協會冷凍鏈管理方案監控產品品質，減低食品安全風險



“ezTRACK Cold Chain Management Solution enables city’super to monitor the quality of its temperature-sensitive food items, from the point of origin all around the world to their storage location in Hong Kong. Through trace-and-track, we can detect deterioration of the perishable food items along supply chain more easily, thereby minimizing potential financial losses, while ensuring that they remain fresh and safe for customer consumption,” said Mr. K. L. Chan, Senior Head of Supply Chain Division, city’super Group.

city’super 集團 Senior Head of Supply Chain Division 陳鑫鈴先生表示：「透過由『蹤橫網』支援的冷凍鏈管理方案，city’super 可對需恆溫保質的食品作全程監控。透過追蹤及追溯，我們可較易地發現食品是否已變質。這不但可減少財政損失風險，還可確保食品新鮮和安全，讓顧客可以安心享用。」



INDUSTRY 行業

- Retail
- 零售

SOLUTIONS APPLIED 推行方案

- ezTRACK¹
- 蹤橫網¹
- Cold Chain Management Solution²
- 冷凍鏈管理方案²

GS1 STANDARDS USED 應用的 GS1 標準

- GIAI (Global Individual Asset Identifier)
- 全球個體資產識別碼
- EPCIS (EPC Information Services)
- 產品電子代碼訊息服務

¹ ezTRACK: Cloud-based EPCIS-standard traceability network enabling real-time visibility of goods and information flow from point of manufacturing to point of destination
蹤橫網：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

² Cold Chain Management Solution: 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
冷凍鏈管理方案：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

BACKGROUND

city'super Group, which positions itself as a "Mega Lifestyle Specialty Store", is a high-end supermarket and retail chain based in Hong Kong. Targeting busy urban professionals, the Group's international gourmet food market offers fresh food – including vegetables, meats, poultry, cheeses, wines, sake, groceries, snacks and spices – sourced from different parts of the world. All these products are subject to quality control to ensure consumer health and safety.

CHALLENGES

A significant portion of city'super's product portfolio consists of fresh perishable items, such as frozen and chilled meat, vegetables, fruits, dairy products that easily rot, decayed or degraded in quality when exposed to unfavourable temperatures, thereby posing risks of financial losses for the company and food safety for consumers.

Although city'super has been using data loggers to monitor the temperature of food imports during shipment from overseas to Hong Kong, the information visibility provided to the company's management team is slow. As the data loggers take a lengthy loading time to obtain the temperature information along the freight journey, this might cause delays for operational staff in reviewing the temperature data of products before shipping them out to shops. As a result, the freshness and quality of perishable product items might be affected by the time they reach the supermarket shelves.

SOLUTIONS

Approached by city'super to help tackle the above challenges, GS1 Hong Kong recommended the ezTRACK Cold

Chain Management Solution, whereby thermo-sensor RFID tags are mapped with GS1 Global Individual Asset Identifiers (GIAI) which are capable of identifying each individual tag to monitor the temperature of each batch of goods. The proposed solution was accepted by city'super, but prior to its implementation, a user acceptance test (UAT) was carried out. The findings proved that the thermo-sensor RFID tags offered a higher accuracy rate with faster data downloading speed than the data logger.

The first implementation was carried out in August this year, the thermo-sensor RFID tags were sent to city'super Japan, who placed the tags in each pallet for shipment to Hong Kong. With the use of a RFID reader, the temperature data of RFID tags embedded with the pallets were collected immediately and uploaded to the ezTRACK Cold Chain Management Portal, throughout the shipment process, from the point of origin to the airports or seaports and cargo release, all the way to their arrival at city'super distribution centre for loading, then finally, at the warehouses.



BENEFITS

city'super achieved a higher visibility of its perishable items during their transit along the supply chain, following implementation of the Cold Chain Management Solution offered by GS1

Hong Kong. With the products' temperature data accurately captured and uploaded onto ezTRACK, city'super is now able to call up the data and analytic graphs through GS1 Hong Kong's Cold Chain Portal more quickly for regular review and monitoring once the cargoes arrive at its warehouses in Hong Kong.



"ezTRACK Cold Chain Management Solution enables city'super to monitor the quality of its temperature-sensitive food items, from the point of origin all around the world to their storage location in Hong Kong. Through trace-and-track, we can detect deterioration of the perishable food items along supply chain more easily, thereby minimizing potential financial losses, while ensuring that they remain fresh and safe for customer consumption," said Mr. K. L. Chan, Senior Head of Supply Chain Division, city'super Group.

背景

city'super 集團以「大型生活專門店」為定位，是本港的高檔超級市場及零售連鎖集團，服務對象為都市中忙碌的專業人士，city'super 網羅了世界各國的新鮮美食，包括蔬菜、肉類、家禽、芝士、葡萄酒、日本清酒、小食和香料等。為保障顧客的健康和安全，所有貨品均須進行嚴格的品質監控。

挑戰

city'super 供應的貨品中，有不少產品是需要冷藏或恆溫保存的食品，例如肉類、蔬菜、水果、乳製品等。它們很容易會因不適當的溫度儲存而引致腐爛、變壞或影響品質，這可能令公司蒙受財政損失，亦會對消費者產生安全風險。

雖然 city'super 曾使用數據記錄器監控從海外進口至香港的食品溫度，但管理團隊發現需要很長時間才能獲取有關數據及資訊。主要原因是數據記錄器須花頗長的時間載入整個貨運旅程的溫度監控資料，這可能會拖慢負責人員檢查貨品溫度的流程，貨品因而無法迅速付運到店舖而導致產品在超市上架時，其新鮮程度和質素均可能受到影響。



方案

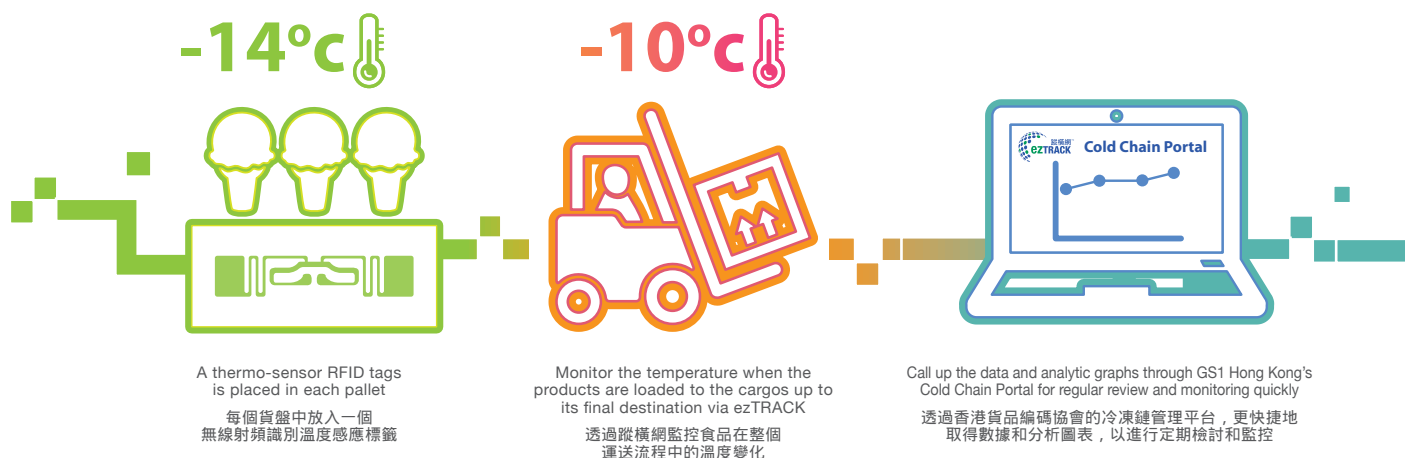
為解決上述的挑戰，香港貨品編碼協會建議 city'super 採用一套由「蹤橫網」支援的冷凍鏈管理方案。具體做法是以 GS1 全球個體資產識別碼 (GIAI) 識別每一個具備溫度感應功能的無線射頻識別標籤來監控每批貨品的溫度。city'super 接納了此項建議，並在實行方案前進行用戶驗收測試。測試結果證明，與數據記錄器相比，具備溫度感應功能的無線射頻識別標籤能提供更準確的數據資料，而擷取數據的速度亦更快捷。

今年八月，第一階段的冷凍鏈管理方案正式推行。在運送食品到香港前，日本 city'super 將具溫度感應功能的無線射頻識別標籤放於每批裝載產品的貨箱中。從貨品源產地、機場或海港、卸貨地點，直至貨品送抵香港 city'super 配送中心，最後至倉庫的整個運送過程，工作人員都可以利用無線射頻識別讀取器，即時收集標籤內所紀錄的溫度數據，並把資料同步上載到「蹤橫網」支援的冷凍鏈管理平台。

效益

city'super 採納香港貨品編碼協會的冷凍鏈管理方案後，食品在供應鏈的品質控制更具透明度。由於溫度數據已準確地上載到「蹤橫網」，因此貨品送抵香港倉庫後，city'super 便可以透過香港貨品編碼協會的冷凍鏈管理平台，更快捷地取得數據和分析圖表，以進行定期檢討和監控。

city'super 集團 Senior Head of Supply Chain Division 陳鑫鈴先生表示：「透過由『蹤橫網』支援的冷凍鏈管理方案，city'super 可對需恆溫保質的食品作全程監控。透過追蹤及追溯，我們可較易地發現食品是否已變質。這不但可減少財政損失風險，還可確保食品新鮮和安全，讓顧客可以安心享用。」



Dutch Kitchen

Ensuring product quality through GS1 Global Traceability Programme

善用 GS1 全球可追溯性系統，以保證產品質素



“Food quality and hygiene means everything to Dutch Kitchen, as it is obliged to serve in-patient meals under this project. To deliver a high level of quality excellence, we must be able to track and trace all individual items, from the time we receive the raw ingredients from vendors, to the point where we deliver the prepared meals that are ready for patients’ consumption. Through the GTC programme implemented under GS1 Hong Kong’s guidance, Dutch Kitchen has been made aware about the areas we can enhance our food-handling practices and how we can leverage on global standards to deliver a better job.”

「為住院病人提供膳食，最重要的是食品質素及衛生。為提供最高質素的服務，我們必須能夠追溯及追蹤所有有關食品，從接收供應商的食材，到把膳食送交病人享用為止，每個步驟都不能鬆懈。香港貨品編碼協會的全球可追溯性準則評估，使我們了解到可以怎樣完善食品處理過程，並透過善用全球標準來提升服務水平。」



INDUSTRY 行業

▪ Food Services

▪ 餐飲

SOLUTIONS APPLIED 推行方案

- GTC (Global Traceability Conformance)¹ ▪ 全球可追溯性準則¹
- GTS (Global Traceability Standard)² ▪ 全球追溯標準²

¹ Global Traceability Conformance (GTC): A methodology and set of tools to audit and assess existing traceability systems based on the processes described in the GS1 Global Traceability Standard and international standards such as ISO 9001, ISO 22005, HACCP, and other food safety standards.
全球可追溯性準則：一套以 GS1 全球追溯標準及其他國際性標準(例如：ISO 9001, ISO 22005, HACCP 及其他食品安全法則)為基礎，用作稽核及評估現行追溯系統的方法及工具。

² Global Traceability Standard (GTS): A business process standard that enhances the ability to track forward the movement of products along stage(s) of the supply chain and to trace backward the history, application or location of products in compliance with the appropriate GS1 identifier.
全球追溯標準：一套以特定的 GS1 識別碼為標準的商業流程標準，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。

BACKGROUND

Established in 1992, Dutch Kitchen is a catering services company under the Maxim's Group. In 2005, Dutch Kitchen, which operates a Halal Kitchen in Maxim's Food Production Centre at Ta Po, was appointed by the Hospital Authority of Hong Kong to provide in-patient meals for the New Territories West Cluster and Queen Elizabeth Hospital. In 2006, Dutch Kitchen was accredited with ISO9001:2000 (Quality Management System), ISO 14001:2004 (Environmental Management System), OHSAS 18001:1999 (Occupational Health and Safety Management System), HACCP (Hazard Analysis and Critical Control Point).

In September of 2013, Dutch Kitchen approached GS1 Hong Kong to assess its existing traceability system through the GS1 Global Traceability Conformance (GTC) programme, in order to identify room for further improvement to its service quality provided to the Hospital Authority, particularly in terms of food traceability.

PROCESS

The GS1 Global Traceability Conformance (GTC) programme is derived from ISO22005 and interoperated with all international standards including those that Dutch Kitchen has already been accredited with, such as HACCP.

The assessment exercise, under the GTC programme, covered a traceability audit plan, a non-conformance report, a comprehensive audit report on the assessment findings and a recommendation report, together with a physical audit onsite. The assessments carried out by GS1 Hong Kong covered the entire supply chain, from delivery of food ingredients by vendors, to food preparation and delivery of prepared meals to Queen Elizabeth Hospital. The one day on-site exercise was designed to evaluate Dutch Kitchen's traceability system in five areas:

Identification : Dutch Kitchen's identification of its delivered food items, including how they were tracked and traced.

Information : The information and data gathered and used to facilitate food traceability.

System and technology : The systems and technologies deployed to meet the company's traceability needs.

Operation mode : Whether the physical operation was correlated to the traceability requirements.

Procedures : The documentation or people development programs instituted to support the traceability process.

RESULT

Based on the GTC framework, the assessment carried out by GS1 Hong Kong on 104 control points at the Dutch Kitchen yielded largely positive findings. Overall, the company maintained a tight traceability system, in full compliance to the Hospital Authority's requirement. Dutch Kitchen has also developed a comprehensive documentation and training system in relation to food traceability. It has also demonstrated a structured, up-to-date maintenance of its traceability procedures.

RECOMMENDATION

In order to further increase visibility between Dutch Kitchen and the Hospital Authority network, GS1 Hong Kong offered its recommendations in two key areas.

Firstly, GS1 Hong Kong recommended Dutch Kitchen to rationalize its method of identifying, tracing and tracking its food items, from raw ingredients to finished patient meals. Some shortcomings in the existing practices were identified, such as the presence of dual code systems for single items. In addition, it was found that certain critical information such as food production dates or best-before dates were not managed in unified ways.

In view of this, it was suggested that Dutch Kitchen reference its food traceability to the fresh food implementation guidelines developed by GS1 Hong Kong. Dutch Kitchen was also advised to adopt GS1 standards to help rationalize its product identifications and manage its freshness data in a single place.

Secondly, GS1 Hong Kong also recommended Dutch Kitchen to implement a tote-level tracking system as well as a cold chain monitoring solution by using a single traceability platform in order to achieve higher visibility and efficiency from the vantage points of Dutch Kitchen itself as well as the Hospital Authority. Through such a traceability platform, Dutch Kitchen can monitor the progress of its order fulfillment from food production stage to meal delivery at the hospital. With such a system in place, Dutch Kitchen can fully monitor its kitchen performance on an anytime, anywhere basis simply by accessing an Internet-based traceability platform, which also enables it to review its order fulfillment status and cold chain monitoring status at the same time.

"Food quality and hygiene means everything to Dutch Kitchen, as it is obliged to serve in-patient meals under this project. To deliver a high level of quality excellence, we must be able to track and trace all individual items, from the time we receive the raw ingredients from vendors, to the point where we deliver the prepared meals that are ready for patients' consumption. Through the GTC programme implemented under GS1 Hong Kong's guidance, Dutch Kitchen has been made aware about the areas we can enhance our food-handling practices and how we can leverage on global standards to deliver a better job."

背景

Dutch Kitchen 成立於 1992 年，是美心集團旗下的餐飲公司，其清真食品廚房設於大埔的美心食品廠，2005 年獲醫院管理局任命，為新界西聯網及伊利沙伯醫院的病人提供膳食；2006 年更取得 ISO 9001:2000 (質量管理)、ISO 14001:2004 (環境管理)、OHSAS 18001:1999 (職業健康和安全管理系統) 及 HACCP (危害分析及關鍵控制點) 認證。

2013 年 9 月，香港貨品編碼協會受 Dutch Kitchen 委託，透過 GS1「全球可追溯性準則」評估 Dutch Kitchen 現有的追溯系統，分析醫院膳食服務的不足之處，尤其是食品可追溯性方面的改善空間。

流程

GS1 可追溯性準則評估以 ISO22005 為藍本，並以 Dutch Kitchen 已取得的認證如 HACCP 等國際標準同時進行評估。

透過香港貨品編碼協會進行實地考察，全球可追溯性準則評估包括一套可追溯性審計方案、一份不符合項目報告、一份收錄各項評估結果的審計報告，以及一份建議書。評估範圍涵蓋 Dutch Kitchen 供應鏈的所有環節，從供應商送遞食材，到準備膳食，最後送餐至伊利沙伯醫院，每個步驟都經協會評估。為時一天的實地考察，則評核了 Dutch Kitchen 追溯系統於五大範疇的表現：

識別:如何識別已送出的食品，包括追蹤及追溯食品的方式。

資訊:為提高食品的可追溯性所收集及使用的資料和數據。

系統與科技:具追溯功能的系統與技術。

運作模式:供應鏈的實際運作是否符合追溯要求。

程序:支援追溯過程的文件編製和員工培訓計劃。

結果

香港貨品編碼協會以「全球可追溯性準則」為基準，評估了 Dutch Kitchen 共 104 個控制點，結果相當正面。整體而言，Dutch Kitchen 的追溯系統頗為嚴密，完全符合醫管局的要求。為維持食品的可追溯性，企業設有全面的文件編製和培訓系統，整個追溯程序亦有系統地定期維護和更新。

建議

為加強 Dutch Kitchen 及醫管局聯網之間的供應鏈透明度，香港貨品編碼協會提出了兩項建議。

首先，協會建議 Dutch Kitchen 改善其識別、追溯及追蹤旗下食品 (由食材以至病人膳食成品) 的程序。協會指出了現行做法的一些問題，例如同一件物品竟由兩個不同系統發出雙重編碼，而食品生產日期或使用期限等重要資訊亦缺乏統一的處理方式。



有見及此，協會建議 Dutch Kitchen 參考協會發出的新鮮食品追溯指引，改善食品的可追溯性。協會又提議 Dutch Kitchen 引入 GS1 標準，以改善其產品識別程序，以一套系統集中處理新鮮產品的數據。

第二，協會建議 Dutch Kitchen 在一個統一的追溯平台上引入食品追蹤系統及冷凍鏈管理方案，從而改善供應鏈透明度及效率，Dutch Kitchen 及醫管局將因此而雙雙受惠。透過此追溯平台，Dutch Kitchen 可監控其膳食準備程序，管理從煮食到送餐至醫院的各個步驟。引入此系統後，企業人員無論身處何時何地，都可透過網上追溯平台輕易監控廚房各方面的表現，並同時掌握公司的膳食準備進度及冷凍鏈管理實況。

「為住院病人提供膳食，最重要的是食品質素及衛生。為提供最高質素的服務，我們必須能夠追溯及追蹤所有有關食品，從接收供應商的食材，到把膳食送交病人享用為止，每個步驟都不能鬆懈。香港貨品編碼協會的全球可追溯性準則評估，使我們了解到可以怎樣完善食品處理過程，並透過善用全球標準來提升服務水平。」





Marketing Outreach

www.mhhe.com

ANGEL Cosmetics International Limited

天使化粧品國際有限公司

Enhance consumer experience and loyalty through delivery of brand / product values using the Consumer Connect mobile marketing platform

透過物密啲流動市場推廣平台展示品牌 / 產品價值，提升顧客體驗及忠誠度



“Consumer Connect provides a cost-effective mobile platform for us to engage our consumers directly and give them unique product and marketing information to generate sales opportunities. Without having to incur a huge investment on mobile development, we are now capable of building and reinforcing consumer loyalty to the Angel Cosmetics brand by way of marketing campaign tactics, such as the offer of digital gift and cash coupons,” said Mr. Navis Or, Marketing Manager, Angel Cosmetics International Limited.

天使化粧品國際有限公司市場部經理柯尊文先生表示：「物密啲是一個符合成本效益的流動平台，讓我們可以直接與顧客溝通，為他們提供關於產品及市場推廣的獨家資訊，從而創造商機。我們無須為發展流動平台投放大筆資金，透過推出電子禮品券或現金券等市場推廣策略，也能建立並鞏固顧客對天使化粧品品牌的忠誠度。」



INDUSTRY 行業	
▪ Beauty and Cosmetics	▪ 美容及化粧品
<hr/>	
SOLUTIONS APPLIED 推行方案	
▪ Consumer Connect ¹	▪ 物密啲 ¹
▪ BarcodePlus ²	▪ BarcodePlus ²
<hr/>	
GS1 STANDARDS USED 應用的 GS1 標準	
▪ GTIN (Global Trade Item Number)	▪ 全球貿易貨品編碼
▪ GLN (Global Location Number)	▪ 全球位置編碼
▪ EAN / UPC BarCode	▪ EAN / UPC條碼
▪ QR Code	▪ QR碼

¹ Consumer Connect: Available on Apple App Store and Android Google Play Store, this direct mobile communications platform helps brand owners and retailers to deliver their product, service and brand values, made accessible to consumers with a scan of the GS1 BarCodes.
物密啲：一個流動通訊平台，讓品牌商和零售商與消費者共同建立溝通和互動的新模式。用戶只需掃描一次 GS1 條碼，品牌商就能展示其產品、服務和品牌价值。於蘋果 App Store 和安卓 Google Play Store 均可下載。

² BarcodePlus: This is a product and location information portal that allows users to access and share quality data using GS1 Keys like GTIN and GLN via the internet and mobile devices.
BarcodePlus：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及流動裝置擷取並分享產品及位置資料的資訊平台。

BACKGROUND

Angel Group established in 1979. Through the continuous development in these 35 years, it becomes one of the largest beauty group today. To serve the customer of different needs and in different geographical areas, Angel Group has opened over 30 retails and beauty centers in Hong Kong and Macau, offering high quality beauty related product and service. Today, Angel Group has more than 100,000 consumers purchasing its beauty and cosmetics products and services daily.

CHALLENGES

In view of the fast-rising popularity of mobile devices, people can access online information instantly with their smartphones. Websites and apps have also become a must for enterprises and organizations to promote their products and services and connect with their consumers effectively. According to a report released by PricewaterhouseCoopers LLP in 2012, approximately 60% of global consumers (including China and Hong Kong) are in the habit of checking out product information online, before making purchases online or from physical stores. Catering to this trend, it has become necessary for brand owners and retailers to explore and adopt mobile marketing strategies to connect directly with their consumers.

However, the initial cost of setting up a mobile marketing infrastructure can be substantial for enterprises with an extensive consumer database and complicated inventory. Furthermore, they are required to commit additional manpower for the development of apps and maintain the mobile marketing operations on a regular basis.

"Mobile marketing has become essential given the proliferation of new consumer trends and purchase patterns driven by mobile technology. Given our limited manpower and budget resources, one of the foremost challenges is to find the most cost effective way in designing and implementing mobile marketing campaigns. We are looking for a solution not only to eliminate the investment cost of application development, but also it

does not required to assign staff personnel to maintain the mobile marketing operations, including the development of product information and news, and promotional offers on an ongoing basis," said Mr. Navis Or, Marketing Manager, Angel Cosmetics.

SOLUTIONS

After studying the various online marketing solutions available in the market, Angel Cosmetics has chosen the Consumer Connect mobile platform, in combination with the prevailing use of GS1 BarCodes tagged to every product sold at its specialty and retail stores.

To address increasing consumer demand for product information prior to purchase, Angel Cosmetics has compiled a full inventory list of its popular products associated with their respective GS1 BarCodes and product images, all of which are uploaded on the GS1 Hong Kong's cloud-based product information portal BarcodePlus.

Just by following simple steps and procedures to upload information, consumers are able to retrieve the product information they look for, with a simple scan of the GS1 BarCodes on the beauty and cosmetics products from the retail shelves via Consumer Connect. In addition to individual brand names, product images as well as countries of origin, consumers are also able to access additional information on the products they are interested in, to better understand their unique features, usage instructions, benefits and the industry awards they have garnered.

Extending its marketing reach further, Angel Cosmetics ran a marketing campaign across all its 12 retail shops in Hong Kong, based on a simple Content Management System (CMS) in BarcodePlus and Consumer Connect. During the promotion period from 3 July to 31 August 2013, consumers who downloaded the Consumer Connect would be offered a mobile digital coupon that could be saved in their mobile after scanning the designated products they had an interest in. By showing the digital coupon to sales staff at any Angel Cosmetics store, consumers would be presented with a

acomplimentary gift upon purchase. Furthermore, each digital mobile coupon shown by the consumer could also be used as a HK\$50 cash coupon for designated products valued above HK\$300. The company's marketers have since stepped up the marketing campaign by encouraging greater consumer use of Consumer Connect for its products.

BENEFITS

A low-cost mobile marketing platform to help brand owners and retailers to engage and interact with consumers directly and cost efficiently, thereby building their loyalty to the brands.

One of the service objectives of Consumer Connect is to support brand owners and retailers to extend their mobile marketing reach to consumers. Angel Cosmetics is one of the first beauty and cosmetics retailers from Hong Kong to adopt Consumer Connect to drive its mobile marketing strategy to effectively address consumer trends and their purchase patterns.

"Consumer Connect provides a cost effective mobile platform for us to engage our customers directly and give them unique product and marketing information to generate sales opportunities. Without having to incur a huge investment on mobile development, we are now capable of building and reinforcing customer loyalty to the Angel Cosmetics brand by way of marketing campaign tactics, such as the offer of digital gift and cash coupons," concluded Mr. Navis Or. The company is also exploring the use of promotional videos to communicate with customers via Consumer Connect.



背景

天使集團成立於 1979 年，經過 35 年不斷發展，今天已經成為大型美容集團之一。為照顧不同地區顧客的各種需要，天使集團於香港及澳門開設超過 30 間零售及美容中心，提供高質素的美容產品及服務。現時天使集團每天都有超過 100,000 名顧客購買其美容化妝產品及服務。

挑戰

流動裝置迅速普及，透過智能手機便可即時閱覽各種網上資訊。企業和機構若要成功推廣產品和服務，並有效地與客戶溝通，網頁與應用程式可謂不可或缺。根據羅兵咸永道會計師事務所於 2012 年發表的報告，全球（包括中國內地及香港）約 60% 的消費者習慣先在網上查閱產品資訊，然後才在互聯網或實體商店購物。因應這個潮流，品牌商和零售商都必須探索和採用流動裝置的市場推廣策略，以求與客戶直接連繫。

然而，對於客戶資料庫龐大、存貨種類繁複的企業來說，設立流動市場推廣平台可能所費甚巨。而且，這些企業還必須聘用額外人手來開發應用程式，並維持流動平台長期運作。

天使化妝品市場部經理柯尊文先生表示：「流動裝置帶來了新的消費趨勢和購物模式，因此流動市場推廣已是勢在必行。受人手和資金所限，我們策劃和落實流動市場推廣計劃時，其中一大挑戰就是找出最符合成本效益的策略。我們須要一套方案既可省略開發應用程式投資成本，亦無須調配人手以維持流動平台的運作，包括定期更新產品資訊、發佈新消息，以及提供最新優惠。」

方案

天使化妝品研究過市面上各式各樣的流動市場推廣方案，由於 GS1 條碼已獲廣泛使用，其集團旗下專門店和零售店的产品亦經已貼上條碼，因此天使化妝品最後選擇了物密嘞流動平台。

今時今日，顧客都希望在購物前先了解更多資訊。為此天使化妝品已就其人氣產品整理出完整的產品清單，並連繫 GS1 條碼及圖片，上載至香港貨品編碼協會的雲端產品資訊平台 BarcodePlus。

品牌商只要跟從簡單的上載資訊步驟，然後消費者掃描商店貨架上美容化妝產品上的 GS1 條碼，便可找到所需的產品資訊。除了品牌、圖片及來源地外，顧客還可得知更多額外資訊，包括其獨特之處、使用說明、效用以及曾經獲得的業界殊榮。

為進一步擴闊市場，天使化妝品利用 BarcodePlus 和物密嘞裡簡單的內容管理系統，於旗下十二間遍佈香港的零售店進行市場推廣活動。天使化妝品的顧客只要於 2013 年 7 月 3 日至 8 月 31 日下載物密嘞並掃描指定的產品後，均可獲得流動電子優惠券一張。優惠券會儲存於其流動裝置，只要向任何天使化妝品分店的售貨員出示優惠券，購買產品時便可獲贈禮品。此外，只要購買價值港幣 300 元以上的指定產品，每張電子優惠券更可作港幣 50 元現金券使用。透過鼓勵更多顧客使用物密嘞，公司的推廣規模更與日俱增。



效益

一個低成本的流動市場推廣平台，可協助品牌商及零售商與顧客溝通，以符合成本效益的直接方式與消費者進行互動，從而建立顧客對品牌的忠誠度。

物密嘞其中一項服務宗旨，就是支援品牌商及零售商，協助它們於流動市場推廣上擴闊地連繫消費者。在本港美容化妝品零售商之中，天使化妝品是採用物密嘞的先鋒。它順應了消費趨勢及購物模式，利用物密嘞來推動其流動市場推廣策略。

柯尊文先生總結：「以物密嘞流動平台的成本效益表現，讓我們可以直接與顧客溝通，為他們提供有關產品及市場推廣的獨家資訊，從而創造商機。我們無須為發展流動平台投放大筆資金，透過推出電子禮品券或現金券等市場推廣策略，也可建立並鞏固顧客對天使化妝品品牌的忠誠度。」天使化妝品現時亦正探索日後在物密嘞透過宣傳影片來與顧客溝通。

Consumer Experience Flow: 顧客體驗流程：



余仁生(香港)有限公司

以全球標準化編碼加強商貿合作，擴大市場商機



Top management of Eu Yan Sang (Hong Kong) Limited pointed out: "With the use of just one global standard, it has now become possible for Eu Yan Sang to conduct identification of over 100 types of its products, simplify business exchanges with its trading partners and reduce the rate of manual errors and operation hours as well as build better collaborative ties with the retail partners. Ultimately, customers can easily find our products they intend to purchase from the retail shelves, gain more extra information and experience a higher level of brand loyalty, which reinforce Eu Yan Sang's competitive position in the market."

余仁生(香港)有限公司管理層指出：「只需一個全球標準化編碼，不單可為余仁生過百款產品進行識別，更可簡化與貿易夥伴的商貿往來，減少傳統人手方法的錯亂機率及行政工時，與零售商建立良好的合作關係。最終，顧客可在貨架上找到想要的產品，獲知更多額外資訊，對品牌的忠誠度提升，鞏固市場地位。」



INDUSTRY 行業

- Retail Consumer Goods
- 零售消費品

SOLUTIONS APPLIED 推行方案

- ezTRADE¹
- 通商易¹
- BarcodePlus²
- BarcodePlus²
- Consumer Caring Scheme³
- 「貼心企業」嘉許計劃³

GS1 STANDARDS USED 應用的 GS1 標準

- GTIN (Global Trade Item Number)
- 全球貿易貨品編碼
- GLN (Global Location Number)
- 全球位置編碼
- GS1 EANCOM[®]
- GS1 EANCOM[®]

¹ ezTRADE: An industry-wide B2B platform that facilitates electronic transaction messaging via EDI and web to support electronic ordering, invoicing and shipment notices.
通商易：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。

² BarcodePlus: This is a product and location information portal that allows users to access and share quality data using GS1 Keys like GTIN and GLN via the internet and mobile devices.
BarcodePlus：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及流動裝置擷取並分享產品及位置資料的資訊平台。

³ Consumer Caring Scheme: It is to recognize local enterprises which demonstrate excellence in consumer care through effective use of technology and practice of consumer value-related strategies with ultimate goal to lift industry's overall capabilities in delivering consumer product and service.
「貼心企業」嘉許計劃：旨在表揚「以消費者為先」的本地企業，通過應用資訊科技，實踐與消費者價值相關策略，最終全面提升各行各業的產品及服務水平。

BACKGROUND

Established in 1879, Eu Yan Sang is one of Asia's largest healthcare and wellness corporations with a strong foundation in Traditional Chinese Medicine (TCM). Combining modern technology with its longstanding TCM legacy, the Eu Yan Sang Group remains dedicated towards developing products to meet the needs of modern life. The Group operates over 300 retail stores in Hong Kong, Macau, Mainland China, Malaysia, Australia and Singapore. Apart from them, its products are also sold in pharmacies, Chinese medicinal stores and supermarkets around the world. In the recent years, Eu Yan Sang has pursued an expansion of its TCM services, with more than 20 Chinese medicinal clinics under its flagship across Hong Kong, Singapore and Malaysia.

CHALLENGES

Eu Yan Sang started out as a Chinese grocery store more than a century ago and has since grown into a supplier of over 1,000 herbal products and 300 brand-name items. 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.

Top management of Eu Yan Sang (Hong Kong) Limited said: "Despite its small geographical size, Hong Kong has a diverse, rapidly changing market. Every year, about 40 million visitors pass through the city, generating huge business potential for our company. To capture these opportunities, it has become necessary for us to find better ways to facilitate a faster flow of information, alongside higher accuracy in the transactions, with our trading partners. Improving the speed of our stock replenishment at retail level and expanding our customer base are equally important."

SOLUTIONS

Eu Yan Sang joined GS1 Hong Kong in 1992 in order to address its business development challenges. As a full member of this organization, the company has been administered a range of unique and standardized GS1 identification numbers with Hong Kong Prefix "489", which can be used to identify the trade items under its brand. As of now, Eu Yan Sang has assigned its product items with Global Trade Item Numbers (GTIN). Every cash counter at its major retail points in Hong Kong has been using the same GS1 BarCode for product identification, through which payment procedures could be automated to expedite sales.

Along with the Internet's popularization, Eu Yan Sang went a step further to become an ezTRADE member of GS1 Hong Kong in 2000. This has enabled it to employ GS1 identification keys, including the Global Location Number (GLN) and Global Trade Item Number (GTIN), to carry out paperless exchanges of business information with its retail partners. Through ezTRADE, Eu Yan Sang has seen the safe, reliable automated deliveries of its purchase orders, shipment advices and invoices with retailers such as Watsons, Mannings and Wellcome on GS1 EANCOM® Electronic Data Interchange (EDI) format, thereby guaranteeing the highest security of every transaction and critical data.

In addition, Eu Yan Sang has been able to upload over 40 types of product data through the BarcodePlus platform provided by GS1 Hong Kong. As a result, the company's customers are now capable of scanning the GS1 BarCodes or QR code using the Consumer Connect mobile phone app developed by GS1 Hong Kong, to retrieve comprehensive product information, such as product content, packaging images and nutritional details, in a bid to enhance their understanding and trust of Eu Yan Sang products and brands.

For two consecutive years from 2011 to 2013, GS1 Hong Kong offered recognition to Eu Yan Sang (Hong Kong) Limited under the "Consumer Caring Scheme", in commendation of the company's efforts at raising its product and service standards through technology application and implementation of related strategies designed to deliver greater consumer value.

BENEFITS

A top management of Eu Yan Sang (Hong Kong) Limited pointed out: "With the use of just one global standard, it has now become possible for Eu Yan Sang to conduct identification of over 100 types of its products, simplify business exchanges with its trading partners and reduce the rate of manual errors and operation hours as well as build better collaborative ties with the retail partners. Ultimately, customers can easily find our products they intend to purchase from the retail shelves, gain more extra information and experience a higher level of brand loyalty, which reinforce Eu Yan Sang's competitive position in the market."





背景

創立於 1879 年，余仁生以傳統中醫藥為基礎，積極推動中藥現代化，是亞洲最大的中藥保健企業之一。余仁生集團以悠久的優良製藥傳統結合現代科研，在產品質量和研發創新方面不斷精進，配合現代生活需求。憑著對中醫藥的熱忱和進取精神，余仁生在香港、澳門、中國大陸、馬來西亞、澳洲及新加坡擁有超過三百間門市，產品於世界各地的藥房、中藥店、超級市場售賣，近年更積極拓展中醫醫療服務，於香港、新加坡及馬來西亞經營二十多間中醫診所。

挑戰

余仁生由百多年前的一間中藥雜貨店，發展成現在供應上千種中草藥及逾 300 種品牌產品，面對時代、技術和消費者的不斷變更，品牌必需求新求變，持續開創全新商機，以保持市場競爭力。

余仁生(香港)有限公司管理層表示：「香港雖只是彈丸之地，但零售市場急速及多元化，而每年四千多萬的訪港旅客，亦為公司帶來商機。因此，如何能加快與貿易夥伴間的資訊流通及商貿交易的準確性，以及改善上架速率和擴大顧客群尤為重要。」

方案

為回應業務發展的需求，余仁生於 1992 年成為香港貨品編碼協會全面會員，獲編配一組附有 489 字首，全球獨一無二及標準的 GS1 識別碼，用以識別其品牌產品。至今，余仁生已為其產品配上全球貿易貨品編碼 (GTIN)，香港各大零售點的付款櫃位皆以同一個 GS1 條碼來識別個別產品，讓付款程序進行自動化，加快銷售速度。

至 2000 年，隨著網路普及化，余仁生進一步成為協會的「通商易」會員，利用 GS1 識別碼，包括全球位置編碼 (GLN) 及全球貿易貨品編碼 (GTIN)，與零售商以無紙化進行商業訊息交換。透過「通商易」，余仁生與屈臣氏、萬寧及惠康等的購貨訂單、發貨通知及發票往來，以標準化的 GS1 EANCOM® 電子數據聯通 (EDI) 格式自動傳遞，並透過安全可靠的網絡輸送，令每項交易及重要資料得到最高防禦。此外，余仁生更透過香港貨品編碼協會提供

的 BarcodePlus 資訊平台，上載逾 40 款產品資料，讓顧客可透過協會開發的「物密啲」手機程式掃描包裝盒上的 GS1 條碼或 QR code，獲取全面的產品資料，例如產品成份、使用方法、包裝圖像、營養細節等，提升顧客對產品的了解及品牌的信任。

香港貨品編碼協會於 2011-2013 連續 2 年頒發「貼心企業」嘉許計劃予余仁生(香港)有限公司，表揚其多年來通過應用資訊科技，實踐與消費者價值相關策略，最終全面提升其產品及服務水平。

效益

余仁生(香港)有限公司管理層指出：「只需一個全球標準化編碼，不單可為余仁生過百款產品進行識別，更可簡化與貿易夥伴的商貿往來，減少傳統人手方法的錯亂機率及行政工時，與零售商建立良好的合作關係。最終，顧客可在貨架上找到想要的產品，獲知更多額外資訊，對品牌的忠誠度提升，鞏固市場地位。」





Trust

DCH Logistics Company Limited & Sims Trading Company Limited

大昌行物流有限公司及慎昌有限公司

Uplifting consumer trust through better wine quality management and information visibility from warehouse to dining table

透過從倉庫至餐桌的葡萄酒品質管理和資訊透明度，提升消費者信任



The General Manager of DCH Logistics, Mr. Ken Chung said: "Through the implementation of GS1 Hong Kong's Cold Chain Management Solution, we have gone a step further to add value to the services we provide. With the continual increase in information visibility, we have not just strengthened customers' trust in our services, but also enabled them to disseminate the related information to other consumers, in order to increase consumer understanding of the quality guarantees offered by the brands or companies."

大昌行物流有限公司總經理鍾鴻興先生表示：「透過香港貨品編碼協會提供的冷凍鏈管理方案，我們進一步為現有的服務增值。隨著資訊透明度提升，我們不單加強了客戶對我們服務的信任，更可協助客戶將有關資訊與消費者分享，令消費者更了解品牌或公司對產品的品質承諾。」



INDUSTRY 行業

- Wine
- 葡萄酒

SOLUTIONS APPLIED 推行方案

- ezTRACK¹
- 蹤橫網¹
- Cold Chain Management Solution²
- 冷凍鏈管理方案²
- BarcodePlus³
- BarcodePlus³
- Consumer Connect⁴
- 物密啣⁴

GS1 STANDARDS USED 應用的 GS1 標準

- GTIN (Global Trade Item Number)
- 全球貿易貨品編碼
- SSCC (Serial Shipping Container Code)
- 貨運容器序號
- GIAI (Global Individual Asset Identifier)
- 全球個體資產識別碼
- EPCIS (EPC Information Services)
- 產品電子代碼訊息服務

¹ ezTRACK: Cloud-based EPCIS-standard traceability network enabling real-time visibility of goods and information flow from point of manufacturing to point of destination
蹤橫網：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

² Cold Chain Management Solution: 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
冷凍鏈管理方案：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

³ BarcodePlus: This is a product and location information portal that allows users to access and share quality data using GS1 Keys like GTIN and GLN via the internet and mobile devices.
BarcodePlus：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及流動裝置擷取並分享產品及位置資料的資訊平台。

⁴ Consumer Connect: Available on Apple App Store and Android Google Play Store, this direct mobile communications platform helps brand owners and retailers to deliver their product, service and brand values, made accessible to consumers with a scan of the GS1 BarCodes.
物密啣：一個流動通訊平台，讓品牌商和零售商與消費者共同建立溝通和互動的新模式。用戶只需掃描一次 GS1 條碼，品牌商就能展示其產品、服務和品牌价值。於蘋果 App Store 和安卓 Google Play Store 均可下載。

BACKGROUND

DCH Logistics Company Limited provides a one-stop range of professional logistics services for clients in mainland China, Hong Kong and Macau. With a combined floor area of over 1 million square metres, which all equipped with multi-temperature warehousing, DCH logistics centres handle large volumes of food and beverage items such as wine, frozen meat, etc. Apart from warehousing, DCH Logistics also supports distribution and cold chain delivery services.

Sims Trading Company Limited has grown to become a leading importer and distributor of world-renowned wine, food, beverage, healthcare and household brands since its establishment in the 1960s. Today, its extensive distribution network offers unprecedented access to the dynamic markets of Mainland China, Hong Kong and Macau.

CHALLENGE

Since the abolition of Hong Kong's wine tax in February 2008, wine imports into the city have continually risen, with a 80% increase registered during the first year of the policy's implementation, at a total import value of HK\$8 billion. Since then, Hong Kong has grown importance as a major wine trading hub of Asia, partly due to its proximity to mainland China, where market demand for wine is burgeoning along with the increasing popularity of a wine-tasting culture. A diversity of positive factors has prompted the mushrooming of companies in the wine business, resulting in intensifying market competition.

As one of the leading providers of logistics services, DCH Logistics has been accredited with the Wine Storage Management Systems Certification Scheme from the Hong Kong Quality Assurance Agency for three consecutive years, but in order to maintain its competitiveness, the company sought to provide its clients with a higher level of service excellence.

As for the Beverage Solutions Division of Sims Trading, it has established a Sims Wine Club, through which a range of membership activities is regularly held,

including wine-tasting events, dinner functions with sommeliers, to promote the different wine brands under its distributes and establish a longstanding relationship with its clients. The company aims to further enlarge its customer base and raise customer loyalty to a higher level.

SOLUTIONS

Following discussions among DCH Logistics, Sims Trading and GS1 Hong Kong, a wine-tasting session was held on 3 October, 2013. Combined with a Cold Chain Management Solution, this event was conceived as a pilot project to increase the visibility of wine information from warehouse to dining table for customers, through the use of the GS1 Hong Kong's Consumer Connect mobile application, to enhance their wine-tasting pleasure.

Prior to the wine tasting event, Sims Trading uploaded wine information on five types of Vina Echeverria wine from Chile to the BarcodePlus platform provided by GS1 Hong Kong. This including the Global Trade Item Numbers (GTIN) identical to those printed on the wine bottles, product names, countries of origin, varieties, serving temperatures and distributor's information; the product images will also be uploaded through the Consumer Connect's Content Management System, together with tasting notes, food pairing recommendations and other extended information. At the wine tasting session, members simply downloaded the Consumer Connect app onto their mobile phones, then scanned the GS1 BarCodes on the wine bottles, which offered them instantaneous access to additional information about the wine they were tasting and enabled them to share their reviews of the wine with their friends on the social network media or to review the content in the future.

To raise customer trust towards the wine products distributed by Sims Trading, DCH Logistics adopted a Cold Chain Management Solution proposed by GS1 Hong Kong. Before shipment of the product batch, DCH Logistics placed a temperature and humidity sensor RFID tag, which identified by GS1 Global

Individual Asset Identifier (GIAI), in one of the cartons, and then associated it against the pallet's Serial Shipping Container Code (SSCC) to establish association and for uploading to the EPCIS standard-based traceability network - ezTRACK. This enabled full monitoring of product quality in real time on the batch of wine products throughout the transportation. During the wine-tasting session, members only needed to scan the QR code provided, with the Consumer Connect, to retrieve temperature and humidity information of the wines instantly.



BENEFITS

The General Manager of DCH Logistics, Mr. Ken Chung said: "Through the implementation of GS1 Hong Kong's Cold Chain Management Solution, we have gone a step further to add value to the services we provide. With the continual increase in information visibility, we have not just strengthened customers' trust in our services, but also enabled them to disseminate the related information to other consumers, in order to increase consumer understanding of the quality guarantees offered by the brands or companies."

"GS1 Hong Kong's Consumer Connect mobile app added elements of fun to the wine-tasting event. It also enabled our members to familiarize themselves with the wine distributed by our company, in a completely novel way, while sharing their feedback and reviews with their friends immediately, which serve to promote our products effectively," said Ms. Daisy Lee, Assistant General Manager of Beverage Solutions Division, Sims Trading Company Limited.



效益

大昌行物流有限公司總經理鍾鴻興先生表示：「透過香港貨品編碼協會提供的冷凍鏈管理方案，我們進一步為現有的服務增值。隨著資訊透明度提升，我們不單加強了客戶對我們服務的信任，更可協助客戶將有關資訊與消費者分享，令消費者更了解品牌或公司對產品的品質承諾。」

慎昌有限公司飲品拓展部助理總經理利杏茹女士表示：「香港貨品編碼協會的『物密啲』手機應用程式令試酒會更添趣味，會員能以嶄新的方式認識我們代理的葡萄酒，亦可以即時與朋友分享，直接而有效地推介我們的產品。」

背景

大昌行物流有限公司為中國大陸、香港及澳門客戶提供一站式的專業物流服務。大昌行物流中心於三地的總面積共超過 100 萬平方米，擁有具國際水準的常溫、恆溫、冷凍倉儲，以處理大量食品和飲料產品，如葡萄酒和冷藏肉類等。大昌行物流除提供倉儲外，亦配備多溫度配送服務。

自 1960 年代成立至今，慎昌有限公司為不同類別國際知名品牌的葡萄酒、食品、飲品、保健產品及家居用品的代理及分銷商，在市場上佔領導地位。廣泛的商業網絡讓慎昌緊貼中國大陸、香港及澳門瞬息萬變的市場。

挑戰

自香港於 2008 年 2 月起取消葡萄酒入口關稅後，葡萄酒入口量持續上升。首年升幅已高達 80%，入口總值約 80 億港元；而由於香港鄰近中國，面對龐大的中國市場及日漸普及的品酒文化，亦加速香港成為亞洲主要的葡萄酒貿易樞紐。種種有利因素令投入葡萄酒行業的公司數量增加，令市場競爭日趨激烈。

作為物流業的領導者之一，大昌行物流已連續 3 年獲取由香港品質保證局頒發的葡萄酒儲存管理體系認證，為繼續保持競爭力，大昌行物流正尋求提供更多優質服務予客戶。

另一方面，慎昌飲品拓展部於年前成立「美酒匯」，目的是透過各類會員活動，如試酒會、與釀酒師共進晚膳等，推廣旗下代理的葡萄酒及與客戶建立更長久的關係。故此，如何進一步擴大客戶群及提升顧客的忠誠度尤為重要。

方案

有見及此，香港貨品編碼協會與大昌行物流及慎昌商討後，決定以十月三日的一個「美酒匯」試酒會作試點，透過協會提供的冷凍鏈管理方案及「物密啲」手機應用程式，提供由倉存至餐桌的資訊透明度，讓會員在品嚐美酒的同時，亦可獲取更多相關資訊，提升品酒的樂趣。

首先，慎昌於試酒會前，在協會提供的 BarcodePlus 資訊平台上載五款 Vina Echeverria 智利葡萄酒資料，當中除印於酒樽標籤上的全球貿易貨品編碼 (GTIN)、品牌名稱、原產國、葡萄品種、最佳享用溫度及代理商等資料外，更透過「物密啲」內容管理系統上載該五款葡萄酒的產品照片、品酒筆記、食物配對及獎項等伸延資料。試酒會當日，會員於其智能手機下載「物密啲」手機應用程式，並掃描酒樽上的條碼，即可在品酒的同時，了解更多有關該款酒的額外資料，更可即時於社交平台與朋友分享，或日後隨時翻查內容。

為令會員對慎昌代理的葡萄酒更有信心，大昌行物流在運送該批葡萄酒至試酒會的時候，採用了協會的冷凍鏈管理方案。大昌行物流在送出該批葡萄酒前，以 GS1 全球個體資產識別碼 (GIAI) 識別具溫度及濕度感應的無線射頻識別標籤，並放於其中一箱貨品中，並將其與貼於貨板上的貨運容器序號 (SSCC) 進行互聯，上載至以產品電子代碼訊息服務 (EPCIS) 標準為基礎的追溯網絡「縱橫網」，令該批葡萄酒在運送過程中可作全程實時品質監控。會員在試酒會當晚，透過「物密啲」掃描提供的 QR 碼，即可獲取該葡萄酒的溫度及濕度資料。



Maxim's Group

美心集團

Building up consumers' trust through better quality and traceability management systems via GS1 Global Traceability Programme

以 GS1 全球可追溯性準則，提升品質及可追溯性系統，建立顧客信心



"GS1's Global Traceability Programme is well applicable to food industry, from packaged products to catering meals. The group's existing traceability capability can be assessed in compliance with most of the global standards and that increase consumer's trust."

「GS1 全球可追溯性準則能應用於食品行業，不論是預先包裝的產品或餐飲美食。本集團透過評估現有的產品追溯能力，從而了解是否符合現時的全球標準，增加顧客的購買信心。」



INDUSTRY 行業

- Food & Catering
- 食品及餐飲

SOLUTIONS APPLIED 推行方案

- GTC (Global Traceability Conformance)¹
- 全球可追溯性準則¹
- GTS (Global Traceability Standard)²
- 全球追溯標準²

¹ Global Traceability Conformance (GTC): A methodology and set of tools to audit and assess existing traceability systems based on the processes described in the GS1 Global Traceability Standard and international standards such as ISO 9001, ISO 22005, HACCP, and other food safety standards.
全球可追溯性準則：一套以 GS1 全球追溯標準及其他國際性標準(例如：ISO 9001, ISO 22005, HACCP 及其他食品安全法則)為基礎，用作稽核及評估現行追溯系統的方法及工具。

² Global Traceability Standard (GTS): A business process standard that enhances the ability to track forward the movement of products along stage(s) of the supply chain and to trace backward the history, application or location of products in compliance with the appropriate GS1 identifier.
全球追溯標準：一套以特定的 GS1 識別碼為標準的商業流程標準，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。

BACKGROUND

Founded in 1956, the Maxim Group is one of the largest local catering groups with over 760 outlets under its name in Hong Kong and China. The Group also offers a broad diversity of catering services, through its Chinese, Asian and European restaurants, fast food outlets, cake shops, coffee shops, Japanese chain restaurants and institution-based canteens. Operating under this network is Maxim's Cakes, which started as a corner shop confectionary store but is currently one of the city's largest bakery chains with over 160 retail outlets located along the MTR stations and Airport Express line. In 2008, Maxim's group acquired Arome Bakery (HK) Company and started operating over 50 Arome confectionary stores in the city. Another catering brand of the Group is Hearty Meal, which provides lunch boxes to students. Every stage of the catering process – from ingredients sourcing to menu designs, cooking and delivery – is executed under the supervision of an internal management team.

CHALLENGE

A number of food safety incidents that occurred recently have weakened consumer confidence towards the commercial food and catering market. This has generated demands for transparency about the source of food production, the ingredients composition and processing process. To reinforce consumer trust, food suppliers and retailers have increasingly realized the importance of effective collaboration with other supply-chain stakeholders to upgrade food traceability, all the way back to the product source.

PROCESS

Maxim's Group believes that it is necessary to enhance the tracking and traceability of food items marketed under its flagship, for consumer confidence

towards its brands and products to be substantially bolstered. Two of its catering brands Maxim's Cakes and Hearty Meal approached GS1 Hong Kong for assistance to provide an evaluation of their existing food traceability systems. Through Global Traceability Conformance, GS1 Hong Kong looks into the feasibility of the traceability systems of its various corporate clients for such an evaluation, based on best practices and global standards, and help them develop improvement measures after carrying out an audit and evaluation of their existing systems, in order to help them meet customers and regulatory demands.

Both Maxim's Cakes and Hearty Meal had been conducting evaluation exercises for the traceability systems of their respective food manufacturing bases. Following up on these efforts, GS1 Hong Kong carried out evaluation and analysis according to the 12 areas of its "Global Traceability Conformance" covering 104 control points. The scope of evaluation covers:

Identification : How to identify the targeted objects and their serial numbers?

Information : What information has been gathered, obtained and provided?

System and technology : What kinds of traceability systems and technology were used?

Operation mode : How does the traceability flow work? How are crises situations handled?

Procedures : How is the traceability process endorsed and recorded?

RECOMMENDATION

After auditing the traceability system of Maxim's Cakes, GS1 Hong Kong recommended the use of RFID labels on the plastic cartons of its bread products, in order to track and record the basic product information and vehicle route during the delivery process, in order to ensure food safety and accurate delivery of products to the store fronts. In addition, GS1 Hong Kong also advised Maxim's Cakes to use GS1 BarCodes to

retrieve production lot numbers and / or product expiry dates, to ensure that the products remain fresh.

Through stringent audit inspection, GS1 Hong Kong found that the product orders, product records and delivery notices in Hearty Meal's traceability system reflected just the product names, without any barcode identifications. This made it difficult for the company to track the continuity of product information. Due to this, GS1 Hong Kong recommended Hearty Meal to adopt GS1 Standards for the registration and identification of its every product. Furthermore, it suggested incorporating the corresponding GS1 BarCodes to the related documents, such as product orders, product records and delivery notices. The rationale is that besides identifying products, the GS1 BarCodes also capture salient data information (such as production dates, batches and best-for-consumption periods), which helps facilitate swift and effective product tracking and traceability.

Maxim's attained greater clarity into its existing traceability systems, with the detailed auditing and evaluation carried out. GS1 Hong Kong also advised them to further collaborate with their trading partners to strengthen and expand the scope of their product tracking, from inspection of ingredients to the manufacturing and distribution processes. In this way, the companies could further improve the goods, service and information flow along their overall supply chains, to provide for stronger safeguards of food safety, reduced risks and increased supply-chain visibility, so that customers would consume their products with peace of mind and enhanced trust towards the catering brands.

"GS1's Global Traceability Programme is well applicable to food industry, from packaged products to catering meals. The group's existing traceability capability can be assessed in compliance with most of the global standards and that increase consumer's trust."

背景

美心集團創立於 1956 年，是香港最大型的飲食集團之一，目前於香港及內地擁有超過 760 間分店。集團的餐飲業務範疇廣泛，包括中菜、東南亞和歐洲菜、快餐、西餅、咖啡店、日式連鎖餐飲及機構飲食堂。集團旗下的美心西餅，由咖啡小店發展至全港最具規模的西餅連鎖店之一，分店超過 160 間，遍佈港鐵沿線及機場快線車站。2008 年，美心正式收購香港東海堂有限公司，經營全港 50 多間「東海堂」。另一美心旗下飲食品牌「原美」，則專責為學童提供午膳，從選購新鮮食材、設計餐單以至烹調，每個步驟均由集團的管理團隊仔細監督。

挑戰

近期食品安全事故頻生，打擊了消費者對飲食業的信心。不少聲音呼籲企業提升透明度，披露食品來源、原料成分以及加工過程。為鞏固消費者信心，食品供應商及零售商都逐漸意識到改善食品可追溯性的重要性。他們必須與供應鏈各持分者充分合作，把食品可追溯性一直擴展到產品來源層面。

流程

美心集團相信，若要顯著提升消費者對美心品牌和產品的信心，集團就必須加強追蹤及追溯旗下食品的能力。為此，美心旗下兩個飲食品牌「美心西餅」和「原美」委託香港貨品編碼協會評估品牌現有的食品追溯系統。協會根據「全球可追溯性準則」，並參考各種最佳實務及全球標準，為企業客戶的追溯系統進行可行性評估。審計和評估完成後，協會還會建議客戶改善相關方案，以滿足消費者和法例的要求。

「美心西餅」和「原美」都曾評估其食品工場的追溯系統。在過往評估的基礎上，香港貨品編碼協會根據其「全球可追溯性準則」的 12 個範疇，於 104 個監察點進行評估和分析。評估範疇包括：

識別：如何識別目標物品及其序號？

資訊：追溯系統可收集並提供甚麼資訊？

系統與科技：工廠運用了哪些追溯系統和科技？

運作模式：追溯流程如何運作？如何應付危機？

程序：如何批核及記錄追溯流程？

建議

為「美心西餅」的追溯系統進行審計後，香港貨品編碼協會建議品牌在裝載麵包產品的塑膠箱貼上無線射頻識別標籤，以便在運輸過程中追蹤及記錄產品基本資訊和送貨路線，從而保障食物安全，並確保產品準確送抵門市。另外，協會亦建議「美心西餅」使用 GS1 條碼擷取貨品編碼及 / 或到期日，以確保產品新鮮度。

至於原美的追溯系統，協會通過嚴謹的審計，發現其訂單、產品記錄和送貨通知上的存貨單位只有產品名稱的記錄，並無任何條碼標識，對產品信息的連貫性追蹤追溯造成了相當的困難。有見及此，協會建議原美使用 GS1 全球通用的條碼來登記並標識每一件產品，同時在相關文件諸如訂單、產品記錄和送貨通知單等列印本中加入相應的 GS1 條碼。GS1 條碼除了標識產品之外還可以記載產品的重要訊息（例如生產日期，批次，最佳賞味日期等等），可以極大程度上方便原美進行迅速有效的追蹤追溯。

經過仔細的審計和評估，美心集團對現有追溯系統有了更清晰的認知。香港貨品編碼協會亦建議集團與商業夥伴更緊密地合作，以擴展產品的追蹤系統，務求能涵蓋原料檢驗、食品製作以及批發等各個程序。這些措施可進一步改善供應鏈裡的貨品、服務及資訊流動，從而加強食品安全、降低風險，並提升供應鏈透明度，讓顧客可以放心食用美心產品，並對這個飲食品牌更有信心。

「GS1 全球可追溯性準則能應用於食品行業，不論是預先包裝的產品或餐飲美食。本集團透過評估現有的產品追溯能力，從而了解是否符合現時的全球標準，增加顧客的購買信心。」





[illegible]

Penta (China) Manufacturing Co Ltd

浚港(中國)皮具制品有限公司

Facilitating a higher level of supply chain visibility via RFID
Item-Level Tagging

透過單品無線射頻識別標籤，提高供應鏈透明度



“Our RFID project has resulted in an increase of inventory accuracy from 90% to 99.9%. It has also enabled us to accurately identify the reasons behind the regularly low rate of order fulfillment and stock shrinkage. Based on the information provided, it is now possible for us to take remedial measures promptly and efficiently, to achieve flawless order fulfillment. Cartons passing through the RFID tunnels can now be 100% read within five seconds, at individual item level, and this has culminated in a ten-fold increase in the speed of product movements and handling,” said Ms. Freda Lok, Financial Controller of Penta (China) Manufacturing Group.

浚港財務總監駱少萍小姐表示：「引入無線射頻識別單品標籤計劃後，我們的倉存紀錄準確率從 90% 提升至 99.9%，有效協助我們準確識別訂單履行率長期偏低以及存貨減少的原因。根據當中所提供的資訊，我們可以快捷有效地採取補救措施，準確無誤地履行所有訂單。現在，貨箱穿過無線射頻識別通道，便可於五秒內 100% 讀取個別貨品，產品流向及處理的速度亦提升了十倍。」



INDUSTRY 行業

- Apparel
- 成衣

SOLUTIONS APPLIED 推行方案

- EPC / RFID Item Level Tagging
- 產品電子代碼 / 無線射頻識別單品標籤

GS1 STANDARDS USED 應用的 GS1 標準

- GIAI (Global Individual Asset Identifier)
- 全球個體資產識別碼
- GLN (Global Location Number)
- 全球位置編碼
- GS1 EPC Class 1 Gen 2
- GS1 EPC Class 1 Gen 2

BACKGROUND

Penta (China) Manufacturing Group is a Hong Kong company established in 1988 to engage in the manufacturing, wholesale distribution and retail of leather products, including laptop bags, suitcases, wallets and shoes. Targeting the Guangdong province as its major market in China, all of their self-owned and franchised stores are required to follow a uniform set of operational and logistics requirements.

CHALLENGES

Penta attained only 90% inventory accuracy. Despite its manual stocktaking efforts, the company was unable to pinpoint whether the stock losses were due to pilfering or order fulfillment problems. With its warehouse inventory problems unsolved, it ran into an operational bottleneck.

At the retail level, more than 10 SKUs (stock-keeping units) in its stores were missing. The company was unable to find out more about these display management and sales issues, due to the limited information produced from its manual shop audits. In addition, to protect its brand image against unethical practices from distribution channels, the company needs to tightly monitor all channel sales especially the online market to ensure retail price standardization at all time.

Furthermore, given its decision to adopt a franchising business model, the company was challenged to overcome the shortcomings in operational standardization, inventory track and trace and sales strategy, as it had to issue clear guidelines for its franchisees.

SOLUTIONS

Penta introduced EPC / RFID Item-Level Tagging to enhance its logistics efficiency, preceded by pilot runs involving all its supply-chain partners, including its outsourced manufacturers and distributors, to let them experience the benefits. Their cooperation, particularly in picking the best-performing RFID tags under each product category, was also indispensable for the project's eventual rollout.

The project was incorporated with a number of global GS1 standards. One of them is the Global Individual Asset Identifier (GIAI), which helps identify the products as part of a fixed asset inventory system. Another was Global Location Number (GLN) to identify the locations the objects have passed through, from warehouse racks to the retail shelves, in order to elevate visibility of product movement. GS1 EPC Class 1 Gen 2 tags were also attached to every garment and accessory piece, to provide accurate, cost-efficient visibility end to end. The EPC Lower Level Reader Protocol (LLRP) has also been introduced as a communication interface between the RFID readers and the middleware to facilitate smooth, accurate capturing of data.

RFID tags were attached to different items in their standard packing, to achieve a 100% read rate, within two seconds of scanning. This uplifted their supply chain traceability, from manufacturing to receipt, quality inspection, warehouse check-in, storage, internal transfer, stocktaking and repacking in the warehouses as well as check-ins, inventory count and inspection of display configuration at retail level.

BENEFITS

"Our RFID project has resulted in an increase of inventory accuracy from 90% to 99.9%. It has also enabled us to accurately identify the reasons behind the regularly low rate of order fulfillment and stock shrinkage. Based on the information provided, it is now possible for us to take remedial measures promptly and efficiently, to achieve flawless order fulfillment. Cartons passing through the RFID tunnels can now be 100% read within five seconds, at individual item level, and this has culminated in a ten-fold increase in the speed of product movements and handling," said Ms. Freda Lok, Financial Controller of Penta (China) Manufacturing Group.

The company has also become capable of identifying distribution channel operators behind the unauthorized online sales of its products. In addition, daily checking of display management at store level takes only minimal effort and the RFID scanning to accomplish the task can be delegated to just a single part-time operator.





零售貨架的位置，提升了產品流向的透明度；所有服裝和配飾均貼上 GS1 EPC Class 1 Gen 2 標籤，以提供準確、具成本效益和透明度高的點到點資訊；此外亦應用了 LLRP 讀取器協定標準，作為無線射頻識別閱讀器和中介軟件之間的溝通介面，確保能快捷而準確地擷取數據。

由於所有產品的標準包裝均附有無線射頻識別標籤，只需掃描兩秒，便能百分百讀取。從生產、收貨、品質檢查、入倉、儲存、內部轉移、在倉庫內進行點貨和重新包裝，到零售部門進貨、點貨和檢視陳列配置，貨品不論處於供應鏈的任何一環，可追溯性都有所提高。

效益

浚港財務總監駱少萍小姐表示：「引入無線射頻識別單品標籤計劃後，我們的倉存紀錄準確率從 90% 提升至 99.9%，有效協助我們準確識別訂單履行率長期偏低以及存貨減少的原因。根據當中所提供的資訊，我們可以快捷有效地採取補救措施，準確無誤地履行所有訂單。現在，貨箱穿過無線射頻識別通道，便可於五秒內 100% 讀取個別貨品，產品流向及處理的速度亦提升了十倍。」

最後，浚港透過此方案找出未經授權而在網上出售貨品的批發商。現在只需聘用一名兼職員工便可完成掃描無線射頻識別標籤的程序，即使每天對商店進行陳列管理查核也變得相當輕鬆。

背景

浚港(中國)皮具制品有限公司成立於 1988 年的香港企業，主要業務為生產、批發和零售旗下的皮革產品，包括手提電腦袋、行李箱、錢包、鞋履等。浚港以廣東省作為主要市場，採用統一營運及物流準則。

挑戰

浚港的倉存紀錄準確率只有 90%。企業一向以人手盤點貨物，故無法確定存貨遺失是源於被竊還是在履行訂單時出現問題。由於倉存問題一直無法得以解決，令企業運作陷入了瓶頸。

在零售方面，浚港的商店曾發現遺失超過 10 個庫存單位。由於商店是以人手查帳方式，令所得資訊有限，公司遂難以詳細了解陳列管理及銷售方面的問題。此外，浚港必須嚴格監控所有渠道銷售，尤其是網上銷售市場來

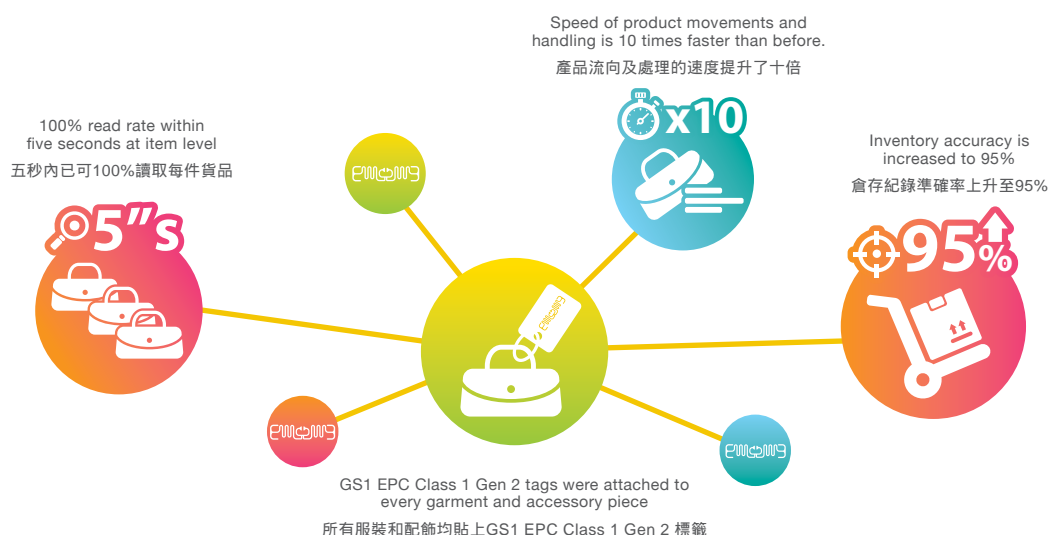
確保零售價的統一，以免被批發渠道的不良行為影響企業形象。

由於浚港銳意發展特許經營模式，因此，公司必須先修正其在營運標準化、倉存追蹤和追溯，以及銷售策略方面的不足之處，才能向特許經營商提供更清晰的營運指引。

方案

為提升企業的物流效率，浚港引入產品電子代碼 / 無線射頻識別單品標籤，並事先與供應鏈中的合作夥伴包括外判生產商和批發商試行運作，讓他們親自了解推行的益處。於正式啟用時，雙方更攜手合作，為每項產品類別挑選表現最佳的無線射頻識別標籤。

本計劃亦引入了多項 GS1 全球標準，其中全球個體資產識別碼 (GIAI) 可識別個別產品，有助企業建立不動產的庫存系統；全球位置編碼 (GLN) 則可識別物件由貨倉貨架以至



What is GS1 Standards?

GS1標準是甚麼?



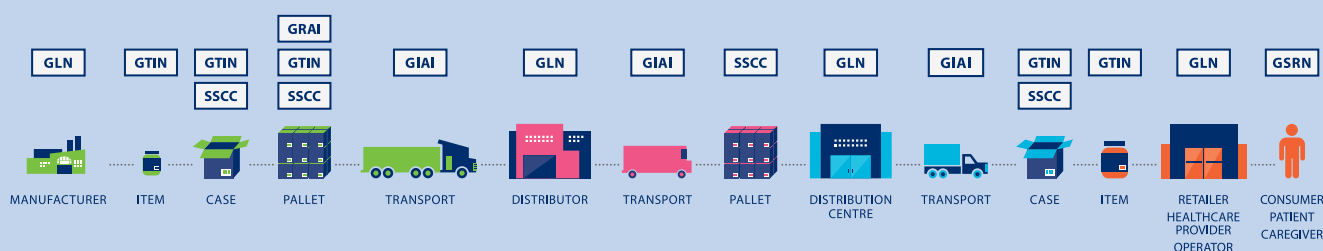
The GS1 System of Standards provides the foundation for enhancing open supply chains through the use of digital information. GS1 Standards for **identifying, capturing** and **sharing** information - about products, business locations, and more - make it possible for companies to speak the same language, 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。



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

EAN / UPC

GS1 - 128

ITF - 14

GS1 DATA Bar

GS1 Data Matrix

GS1 QR Code

GS1 Composite



GS1 EPC / RFID

GS1 產品電子代碼 /
無線射頻識別

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 SGITN 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

GS1 Hong Kong Solutions & Services

香港貨品編碼協會解決方案及服務

The Global Language of Business

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 應用於電子商業訊息傳遞的全球標準	GS1 GDSN Global Network for Data Synchronization 應用於全球數據同步的網絡
<p>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</p>	 <p>GS1 BarCode numbers registration and administration GS1 條碼編號之登記及管理</p> <p>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</p>  <p>BarcodePlus</p> <p>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</p> <p>Global Electronic Party Information Registry (GEPIR) 全球電子公司資料庫</p> <p>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</p>	 <p>ezTRADE 通商易</p> <p>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</p>	<p>GS1 HK DataPool</p> <p>GS1 HK Datapool GS1 HK 數據池</p> <p>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</p>
<p>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</p>	<p>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 RFID 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</p>		
<p>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</p>	<p>To enhance Hong Kong's industry competitiveness by the following solutions</p> <ul style="list-style-type: none"> • Retail ECR • Food & Wine Traceability • Healthcare Supply Chain Modernization • Apparel Item-level Tagging • Cross-border Logistics Supply Chain Visibility 		

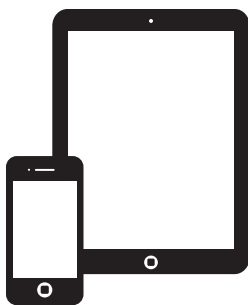


環球貿易的共通語言

GS1 EPCglobal®	GS1 Traceability	GS1 B2C						
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	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	Mobile Application for Connecting Consumer 流動電話應用程式促進消費者連繫						
<div><p>縱橫網</p></div> <p>Cloud-based EPCIS-standard traceability network enabling real-time visibility of goods and information flow from point of manufacturing to point of destination</p> <p>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</p> <div><p>Value+</p></div> <p>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</p> <p>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</p> <p>Cold Chain Management Solution 冷凍鏈管理方案</p> <p>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</p> <p>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</p> <p>Warehouse Management System 倉庫管理系統</p> <p>Inventory management network to capturing in-stock, out-stock, and stock take information</p> <p>用作擷取入倉、出倉及盤點紀錄的倉存管理網絡</p> <p>Item Level Tracking Solution 單件貨品追蹤方案</p> <p>Providing manufacturer-to-store supply chain visibility by item-level EPC / RFID tagging</p> <p>為業界提供由生產商至零售店鋪的單件貨品供應鏈透明度</p>	<div><p>GTC/GTS</p><p>Global Traceability Conformance (GTC) 全球可追溯性準則</p><p>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</p><p>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</p><p>Global Traceability Standards (GTS) 全球追溯標準</p><p>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</p><p>一套以特定的 GS1 識別碼為標準的商業流程標準，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</p></div>	<div><p>物密嘢</p></div> <p>Consumer Connect 物密嘢</p> <p>A direct mobile communications platform for brand owners to provide trusted product information and interact with consumers anytime, anywhere</p> <p>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</p>						
<p>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</p> <p>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</p> <p>業界研討會與會議：供應鏈管理高峰年會</p> <p>獎項計劃：香港無線射頻識別大獎、「貼心企業」嘉許計劃</p> <p>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</p> <p>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</p>								
<p>透過以下方案提升香港業界的競爭力</p> <table><tr><td>高效消費者回應零售</td><td>成衣單品標籤</td></tr><tr><td>食品及葡萄酒追溯</td><td>跨境物流供應鏈透明度</td></tr><tr><td>醫療供應鏈現代化</td><td></td></tr></table>			高效消費者回應零售	成衣單品標籤	食品及葡萄酒追溯	跨境物流供應鏈透明度	醫療供應鏈現代化	
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