



*One Code.  
Infinite Possibilities*



*Celebrating.....*

**25**

*years of success.....*

*Annual Report 2014*



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# Purpose & Beliefs

## 使命和信念



GS1 believes in the power of standards to transform the way we work and live

GS1 相信標準的力量能改變我們的工作及生活

We **create** a common foundation for business by uniquely identifying, accurately capturing and automatically sharing vital information about products, locations and assets.

We **enable** visibility through the exchange of authentic data.

We **empower** business to grow and to improve efficiency, safety, security and sustainability.

我們為商界創造一個共同的基礎，以獨有識別、準確擷取及自動分享重要的產品資訊、位置及資產。

我們透過交換可靠數據提供透明度。

我們推動業務發展，提升效率、安全性、保安及可持續發展能力。



### WE ARE :

- neutral and not-for-profit
- user-driven and governed
- global and local
- inclusive and collaborative

### 我們是 :

- 中立及非牟利的組織
- 由用戶作主導的組織
- 環球及本地的組織
- 融合協作的組織

# Role of GS1 Hong Kong

## 香港貨品編碼協會的角色



- Driving standard adoption in industry by solving business challenges
- Providing training and knowledge transfer to build competence and share best practices in the complex supply chain environment
- Providing standard-based platforms for Products, Trade and Logistics
- Facilitating local-global trade / industry collaborations to enhance business competitiveness
- 推動全球標準的發展及應用，通過解決業務的挑戰，確保整個供應鏈的效率和透視化
- 提供知識轉移，以提升業界在複雜的供應鏈環境中之能力和分享最佳實務
- 提供以標準為本的平台予產品，貿易及物流
- 促進本地與全球的貿易/企業合作，以加強香港的產業競爭力

### GS1 Global Reach

#### GS1 環球數據

For more than 40 years

111 national chapters

Serving 2,000,000 companies worldwide in 150 countries

Covering more than 20 industries

超過40年經驗

111個GS1成員組織

為全球2,000,000家公司服務

遍佈150個國家

覆蓋20多個行業





## Chairman's Message 主席獻辭

### Chairman's Message 主席獻辭

#### Retail Transformation with One Code

Throughout the development of civilization, the growth of society has been based on the ability of people to work together. Without a common standard such as language, even a simple conversation would be an insurmountable challenge. And, without a shared and well-understood standard for writing, measurement and currency, trade would never have flourished, and our world would be smaller and much less exciting.

Today, the importance of standards is undiminished.

#### Connecting the Supply Chain Dots with Standards

As a pioneer in setting and promoting the use of global supply chain standards, GS1 has been collaborating with the Hong Kong business community for quarter of a century. During the last 25 years, we have added value and created incredible possibilities for pillar industries, all based on a key standard – the barcode.

With a firm belief in innovation inspired by standards, GS1 Hong Kong introduced the barcode to the Hong Kong market and, in the process, revolutionized the retail check-out and supply chain. The impact of this revolution has been dramatic and certainly played a major role in the healthy growth of Hong Kong's economy during the last two decades, especially in the retail industry.

#### Advancing Supply Chain Efficiency

Barcodes have become an indispensable facet of daily life. Shoppers around the world hear the familiar "beep" six billion times each day as items are scanned. Barcodes are the essential keys that enable businesses to trade and explore opportunities. This is especially true when it comes to helping SMEs, which represent 80% of our membership base, capture business opportunities around the globe.

In the last few decades, business transactions between suppliers and retailers have increased exponentially amidst the explosive growth of the retail industry. ezTRADE, a paperless transaction platform used for procurement and payment, was introduced in 1995 to enhance the efficiency of business operations. Today, more than 2,000 corporations, 90% of which are SMEs, use ezTRADE in Hong Kong and China to automate their 'order to cash' processes, conducting over 30 million EDI transactions each year.

#### Changing the World with RFID

We first introduced RFID in the early 2000s. Since then, RFID has played an increasingly significant role in optimizing business processes and automating asset and inventory management.

It has enabled industry players to better automate the counting and tracking tasks required for faster and more accurate supply chain logistics. By the end of 2012, three leading U.S. retailers had rolled out EPC-enabled RFID item level tagging (ILT) in more than 5,400 stores.

European retailers are also picking up fast and riding the

#### 一個條碼 扭轉零售業

隨著文明發展，社會的成長建構於人們攜手合作的能力，如果缺少像語言這種通用的標準做為溝通橋樑，即使一段普通的對話也會變成艱難的挑戰。又倘若文字、度量衡和貨幣都欠缺一個統一規範，國際貿易就難以蓬勃發展，而我們的世界亦會顯得渺小，了無生氣。

即使到了今日，標準的重要性仍是毋庸置疑的。

#### 以標準連繫供應鏈上每一點

香港貨品編碼協會(協會)是建立全球供應鏈標準的先驅，在過去四分之一個世紀與香港的商界通力合作，積極推廣這些標準的應用。在這25年裡，我們不斷為本地的支柱行業創優增值，為它們締造無限商機，全賴有一個重要的標準——條碼。

我們深信標準會啟發創新，於是把條碼引入香港市場，且在過程中革新了零售業的結帳與供應鏈運作。這項突破性的發展對香港過去二十多年急速的經濟增長有重大的貢獻，零售業尤其受惠。

#### 提升供應鏈效率

其實條碼對日常生活早已不可或缺。每當掃描條碼時，全球的消費者都會聽到熟悉的「嗶」聲，現時每天掃描條碼的次數更達60億次。條碼不僅已成為企業交易和開拓商機的重要鑰匙，更是協助中小企(約佔協會八成會員)掌握環球商機的一大法門。

在過去數十年，零售業的爆炸性增長使供應商與零售商之間的商業交易激增。有見及此，協會早於1995年推出用於採購和支付的無紙交易平台「通商易」，旨在促進商業運作的效率。時至今日，已經有逾2,000家企業(當中有九成為中小企)在香港及中國內地，利用「通商易」將「訂單到現金」的整個過程自動化，每年更藉此完成超過3,000萬宗電子數據交易(EDI)交易。

#### 以無線射頻識別改變世界

協會於廿一世紀初引入無線射頻識別(RFID)技術。自此以後，RFID在優化業務營運過程，以及把自動化資產與庫存管理方面擔當起日益吃重的角色。

該技術使業界得以成功將點算和追蹤任務自動化，促進了更快、更準確的供應鏈物流程序。到了2012年年終，三大美國零售巨擘更在超過5,400間店舖推行了EPC/RFID單品標籤(ILT)。

另一邊廂，歐洲零售企業亦迅速趕上ILT風潮。例如馬莎百貨會在2014年為四億件服飾貨品加上這種標籤。到了2016年，該公司甚至會把計畫擴展到旗下全部500間分店。

EPC/RFID單品標籤日益普及，C&A、Macy's和Zara等領導零售商都已經一一採用。到了2014年年終，全球將會有30億件服裝產品首附上這種標籤，標誌著7%的滲透率。(註)

本地方面，香港機場管理局躋身世界前列，成功把RFID技術整合到行李調度和管理系統。目前，這個負責管理其中一個位列最佳及最繁忙國際乘客與貨物機場的機構，每天都利用第二代EPC UHF標準的RFID標籤來管理逾8萬件行李。



ILT wave. For example, Marks & Spencer will be tagging 400 millions apparel items in 2014. In 2016, it will roll out to all 500 of its stores.

EPC-enabled RFID item level tagging is gaining popularity and has been adopted by leading retailers such as C&A, Macy's and Zara. By the end of 2014, a total of three billion apparel items will have been tagged, representing a 7% penetration rate\*.

In Hong Kong, Airport Authority Hong Kong was one of the first pioneers and successful users to integrate RFID technology in its baggage reconciliation and management system. Now, responsible for one of the world's best and busiest international passenger and cargo airports, the Authority utilizes EPC UHF Gen2 standard for RFID tags that manage over 80,000 bags each day.

### Converging the Physical and Digital

The Internet boom and the arrival of the mobile era have enabled the convergence of the physical and digital worlds. The most immediate and noticeable effect of this transformation is that customer behavior has changed profoundly, largely driven by the ways that technology is now being used as part of the shopping process.

The emergence of the Internet prompted retailers and brands around the world to develop interactive websites, engage with social media and embrace the mobile web. Today, consumers can shop not only in a bricks-and-mortar store, but also using computers, mobile devices, television, direct mail and catalogs. This kind of "always-on, always-open" omni-channel shopping experience has created a whole new class of competitors and consumers, and has spawned a new wave that is taking the retail experience to a higher level through the use of virtually every available shopping channel.

### Continuing Our Innovation Journey with One Code

Fueled by a continuous commitment to uplift industry competitiveness through innovations based on globally recognized standards, GS1 Hong Kong has reinvented itself and embraced the changing business landscape.

With a raft of technical innovations, such as barcodes, digital product information for e-commerce, RFID and product traceability, GS1 Hong Kong will continue to work closely with industries to tackle the challenges that the new omni-channel reality will bring. That includes web-ready products, inventory accuracy, logistics fulfillment and data accuracy – all of which represent winning factors in the omni-channel retail world.

As our 25th Anniversary theme – "One Code, Infinite Possibilities" – signifies, the adoption of a global standard has worked myriad miracles for Hong Kong's entire business community.

GS1 Hong Kong is committed to continuing to work closely with our partners to innovate and pave the way to a more technologically-advanced, digital world where organizations can reap the tremendous business opportunities and enjoy the successes that lie ahead.

It's been a great ride partnering with you during the last 25 years. And we at GS1 Hong Kong look forward to the next 25!

### 融合實體與數碼世界

互聯網的興起加上流動新世代的來臨，促使實體世界與數碼世界融合。這種轉變最即時、最明顯的影響，就是顧客樂於運用科技去購物，大大改變了他們的行為模式。

互聯網的流行帶動全球的零售商與品牌紛紛建立互動式網站，同時投入社交媒體，甚至發展流動網頁。現在，消費者不僅可以在實體店舖購物，更可透過電腦、流動設備、電視、直銷郵件，以至商品目錄選購心頭好。這種「永遠運作，永遠開放」的全方位購物體驗造就了新型的業務對手和消費者，還掀起了前所未見的零售浪潮，讓消費者能夠憑藉各種各樣的購物渠道打造全新的購物體驗。

### 一個條碼延續創新之旅

香港貨品編碼協會一直履行承諾，利用一個全球認可的標準提升香港商界競爭力的同時，不斷推陳出新，緊貼瞬息萬變的營商環境。

我們將憑藉多元化的創新發展，諸如條碼、電子商貿的數碼產品資訊，以及RFID和產品可溯性，繼續與各行各業緊密合作，克服由新興的全方位購物渠道所帶來的挑戰。這包括了網上產品、庫存準確程度、物流程序的履行以至數據準確性，全都是全方位零售世界的致勝關鍵。

一如協會25週年的主題——「條碼在手 締造無限可能」，採納全球標準為香港整個商界締造了奇蹟。

協會將繼續致力與合作夥伴攜手創新，邁向更先進的數碼世界，使企業得以運籌帷幄，盡享先機，達到成功。

回首過去25年，香港貨品編碼協會有幸能與你合作無間，就讓我們繼續並肩，向未來更光明的25年邁進！

### Joseph Phi 彭焜耀

Chairman 主席



# Chief Executive's Report 總裁報告

\*註： <http://www.idtechex.com/research/reports/rid-forecasts-layers-and-opportunities-2014-2024-000368.asp>



## Chief Executive's Report 總裁報告

### Igniting a New Era of Supply Chain Excellence with Global Standards

There is a saying that there's no shortcut or magic recipe to success. A dream will only come true with efforts, determination and persistence.

It's my tremendous honor to be with GS1 Hong Kong in the past 25 years to experience this long, challenging but rewarding journey. Thanks to the unfailing support from the industry and the Hong Kong SAR Government, we started from a small organization and gradually grew to what we are today – a genuine supply chain industry pioneer with more than 6,500 corporate members from nearly 20 industries including retail and consumer goods, food, healthcare, apparels, electronics, logistics and information technology, etc.



### The Perfect Match of Innovation and Standards

This past 25 years has been a wonderful journey. Not only has GS1 Hong Kong created a supply chain eco-system, but we have also established an extensive portfolio of value chain services in the past two decades. Driving us ahead is a mission to resolve supply chain complexity with global standards.

Barcode, the first innovative breakthrough GS1 brought about, has doubtlessly revolutionized retail operation while boosting supply chain efficiency and accuracy, deriving maximum benefits for the entire value chain – including consumers.

With barcode undeniably becoming a critical part of our daily lives, it can be seen everywhere today including retail stores and hospitals, and appears on a comprehensive range of products, logistic units, books and even boarding passes. In Hong Kong, how many times could you hear the familiar barcode scanning "beep" sound on average a day? Believe it or not, the answer is more than eight million times!

### 以全球標準推動供應鏈新世代

成功非僥倖，要夢想成真就必須全力以赴、果敢決斷、堅持不懈。

能夠在為香港貨品編碼協會服務二十五年，一同經歷這段充滿挑戰卻碩果纍纍的漫長之旅，我感到無限光榮。衷心感激各行各業的朋友及香港特區政府，對我們從沒間斷的支持。本會由一個小組開始，不斷茁壯成長，成為今天供應鏈的先驅，擁有逾六千五百家來自二十個不同行業的企業會員，全面涵蓋零售及消費品、食品、醫療護理、服裝、電子、物流及資訊科技等範疇。

### 創意與標準的完美結合

毋庸置疑，我們度過了二十五年精彩輝煌的歲月。香港貨品編碼協會不僅創造出盡善盡美的供應鏈生態系統，還建立了一應俱全的價值鏈服務。驅動大家奮勇向前的是我們矢志肩負的使命：善用全球標準把供應鏈化繁為簡。

回顧協會首個突破性創新項目，莫過於讓零售運作脫胎換骨、供應鏈效率和準確性更上一層樓，同時為價值鏈以至消費者創優增值的「產品條碼」。

時至今天，條碼已成為人們生活的一部分，處處可尋。無論是商店或醫院，以至各類產品、物流單元、書籍甚至登機證，條碼俯拾皆是。到底香港人每天平均聽到多少次條碼過機的聲音？答案是超過八百萬次！<sup>[註一]</sup>

### Linking up Supply Chain with Standards

The Hong Kong retail market has experienced exponential growth throughout the past 25 years, with record high monthly increase of 4,000 times. This results in more demanding consumers, more diversifying products, more dynamic shelf life and shorter order cycles, with efficiency becoming the critical winning factor.

By capitalizing on global standards, we launched the ezTRADE electronic data interchange (EDI) service to connect major retailers with suppliers seamlessly, which facilitates paperless transfer of electronic business documents and data between trading partners in a cohesive and high-performing business model.

### Real-time Supply Chain Visibility

During the supply chain evolution, complexity is multiplied due to increased product choices and extended customer segments, competitive players and globally distributed suppliers. More sophisticated industrial supply chain is therefore needed for accelerating the extended production chains and global spread.

Nevertheless, the lack of supply chain visibility has become a major obstacle in today's global supply chain networks which usually span across different enterprises around the globe.

By leveraging the Internet protocol, GS1 Hong Kong launched a supply chain visibility cloud ezTRACK based on the global Electronic Product Code Information Service (EPCIS) standard. In essence, this visibility cloud provides a clear view of product inventory and supply chain activities, creating an agile global supply chain.

With ezTRACK, companies are able to enjoy real-time visibility of consumer demands, product inventory and shipment status. Obviously, "standard" has proven to be a key catalyst for resolving emerging supply chain complexities.

### Sharing Supply Chain Best Practices

The skills, knowledge and best practices required for value chain management are widely distributed across the supply chain instead of coming from a single player. In 2001, GS1 Hong Kong successfully organized the first ever Supply Chain Management Summit, and has since then established a sustainable platform for experts, scholars and government officials to come together and share views, knowledge and best practices. Now becoming an annual event, the Summit is attracting thousands of audience across the entire supply chain.

### 藉標準把供應鏈一脈相連

二十五年來，香港零售業經歷前所未有的高速增長，每月銷售總額創下四千倍增長的歷史性佳績。在此情況下，客戶要求也日趨嚴謹、產品類型更趨多元化、動態貨架壽命變得更短。效率因而成為致勝關鍵。

為回應這方面的需求，我們以全球標準創建了「通商易」電子數據交換服務，使主要零售商與供應商聯繫無間，透過緊密融合的高效商業模式，在貿易夥伴間實現電子化商業文件及數據傳輸，加快無紙化步伐。

### 供應鏈運作實時可見

供應鏈與時並進，市場也出現了更多產品選擇，和更廣泛的客戶界別。業界競爭因而日趨白熱化，供應商亦遍佈全球，導致複雜性與日俱增。我們需要更完備周全的行業供應鏈，務求加快大型生產鏈及全球化運作。

然而，供應鏈透明度的不足，成為了現今全球供應鏈網絡一大障礙。因為這些網絡一般橫跨全球，無遠弗屆。

香港貨品編碼協會善用互聯網協定，在全球「電子產品編碼資訊服務標準」的基礎上開發出名為「縱橫網」的供應鏈可視化雲端平台，使產品貨品水平及各類供應鏈活動一目了然，打造穩健完善的全球供應鏈運作。

透過「縱橫網」，公司用戶可即時洞悉消費者需求、產品存貨水平及最新付運狀況。「標準」成為了簡化供應鏈運作的重要催化劑，這是不爭事實。

### 共享供應鏈實務典範

所謂集思廣益，價值鏈管理所需的技巧、知識及成功策略，往往遍佈整個供應鏈的不同角落，並非來自單一參與者。有見及此，協會在二零零一年舉辦了首個「供應鏈管理高峰會」，建立了可持續發展的平台，讓不同專家、學者及政府官員聚首一堂，分享獨到見解、寶貴經驗及成功之道，繼往開來，承先啟後。這項活動現已成為每年的盛事，吸引數以千計的供應鏈業人士參與。



## Leading in New Ways

In nowadays' rapidly shifting marketplace, physical-digital convergence is optimizing consumer experience through the integration of online and offline retail channels. To enable brand owners to better serve their mobile consumers, GS1 Hong Kong launched an advanced mobile application to provide consumers with extended information about products on store shelves, such as product origin, authenticity, warranty and even usage guidelines. Amazing enough, these details can be accessed simply by scanning product barcodes.

In celebrating our Silver Jubilee, we are looking back with pride at our past innovations and accomplishments. All these confirm our belief – supply chain complexity can be reduced with global standards. The GS1 standard has alerted the way companies conduct business around the world.

By playing an integral part in this evolution, GS1 Hong Kong is dedicated to sharpening the competitive edge of Hong Kong businesses. We remain committed to meeting the increasingly diverse and sophisticated needs of a burgeoning user base.

## Forging Ahead with Innovation

45 years ago, human being dreamed about flying to the moon and finally did it. 25 years ago, a small barcode scan took place in Hong Kong which has radically changed the rule of our business world, marking a great advance in human life. It is all about innovation.

Without your support, however, we would never have achieved what we have and generated unprecedented benefits for people in the industries as well as the Hong Kong consumers.

Last but not least, I would like to take this opportunity to thank our past chairmen, present chairman Mr. Joseph Phi, our board members, our valued members and partners for offering invaluable guidance to GS1 Hong Kong passionately in the past. Let's strive for a brilliant future together!

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



## 積極創新 開拓未來

在現今日新月異、瞬息萬變的市場，物理與數碼技術的融會貫通、在線與離線零售渠道的合而為一，使消費體驗更臻完善。為了讓不同品牌可以為流動消費者提供更佳服務，香港貨品編碼協會推出了嶄新的流動應用程式，為消費帶來有關商店架上產品的多元資訊，例如產品來源、真實性、保用詳情以至使用指引。只需掃描條碼，這些資訊便盡現眼前。

在本會銀禧紀念的重要時刻，我們對過去的創新及成就深以為榮，也充份印證了本會的信念 – 供應鏈因全球標準而更趨簡化。GS1標準成功改變了各行各業在全球營運業務的定律。

香港貨品編碼協會在這個進化過程中扮演著不可或缺的角色，積極提升香港企業的競爭優勢。我們緊守崗位，致力服務不斷遞增的用戶群，滿足日趨廣泛及嚴謹的用戶需求。

## 憑創意乘夢飛翔

四十五年前，人類渴望登陸月球，最終願望成真。二十五年前，香港第一個小小條碼成功過機，從此改寫了商業世界的面貌，人類生活大躍進。一切源於「創意」。

全賴大家的支持，我們才能締造一切一切的驕人成就，為業界人士以至本港消費者帶來前所未有的效益。

謹此向歷屆主席、現屆主席彭焜耀先生、各董事會成員、我們敬愛的會員及夥伴致以衷心謝意。感激大家在過去的日子裡為本會提供寶貴的意見及指導。讓我們繼續邁步向前，攜手創造更璀璨的未來！

## Congratulatory Messages 賀辭

<sup>1</sup> GS1 Hong Kong & HKRMA Joint Barcode Survey 2014

註一 資料來自香港貨品編碼協會及香港零售管理協會在2014年進行的聯合條碼研究。





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商務及經濟發展局局長  
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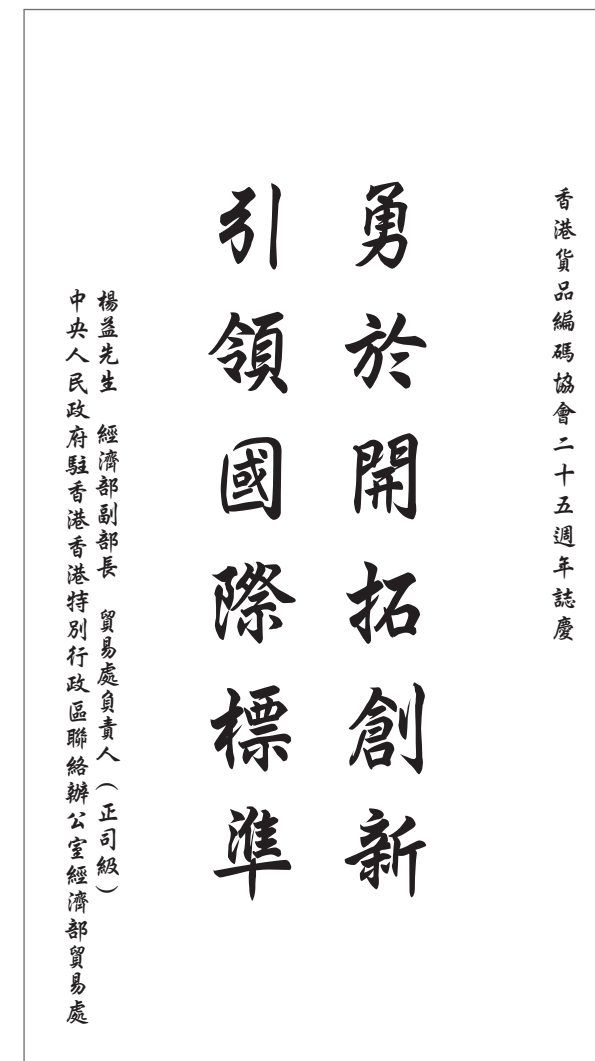
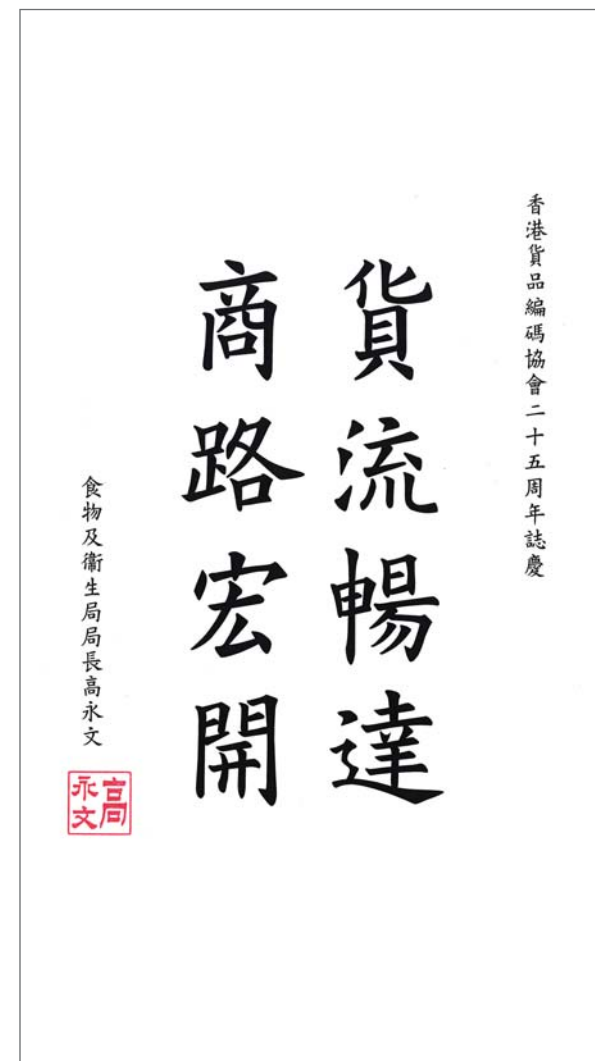
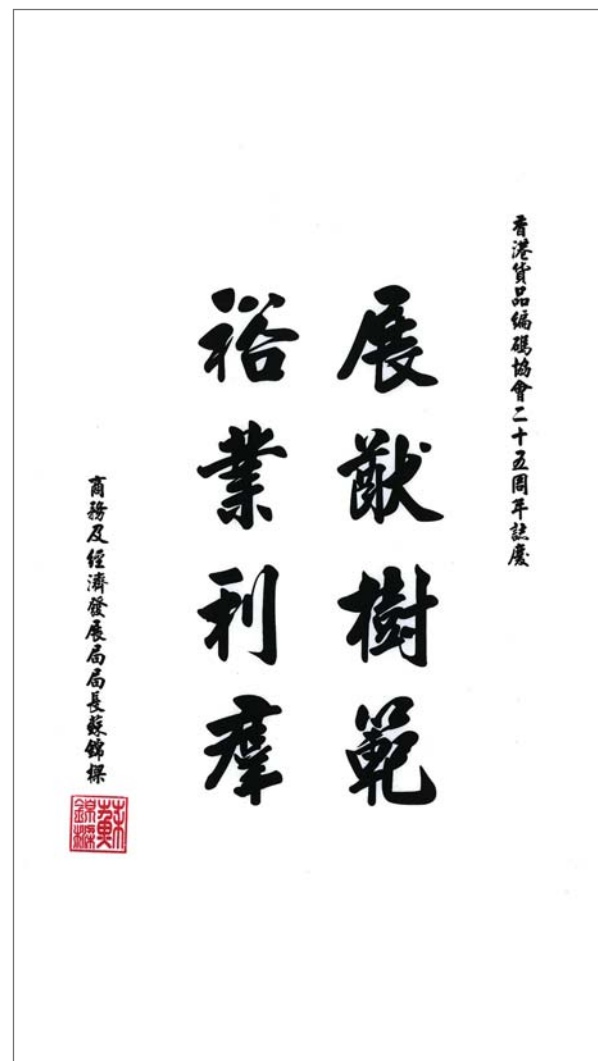
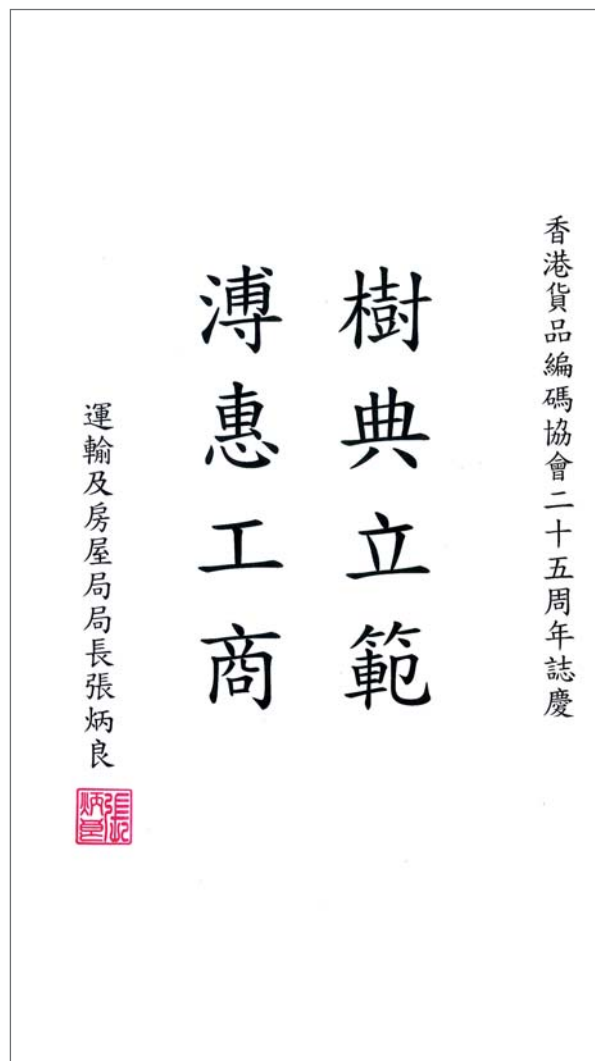
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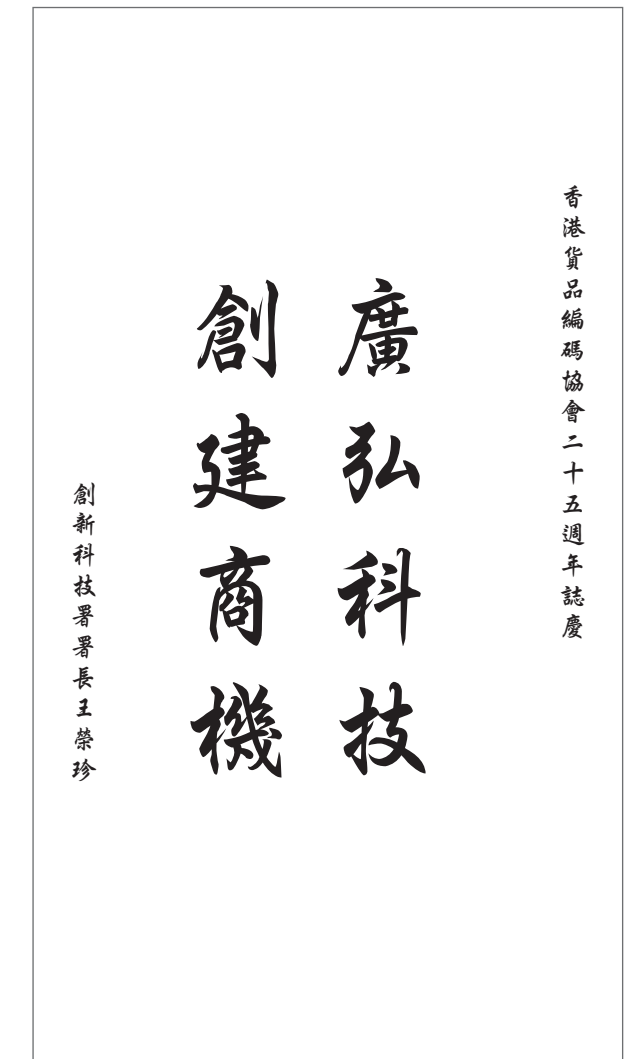
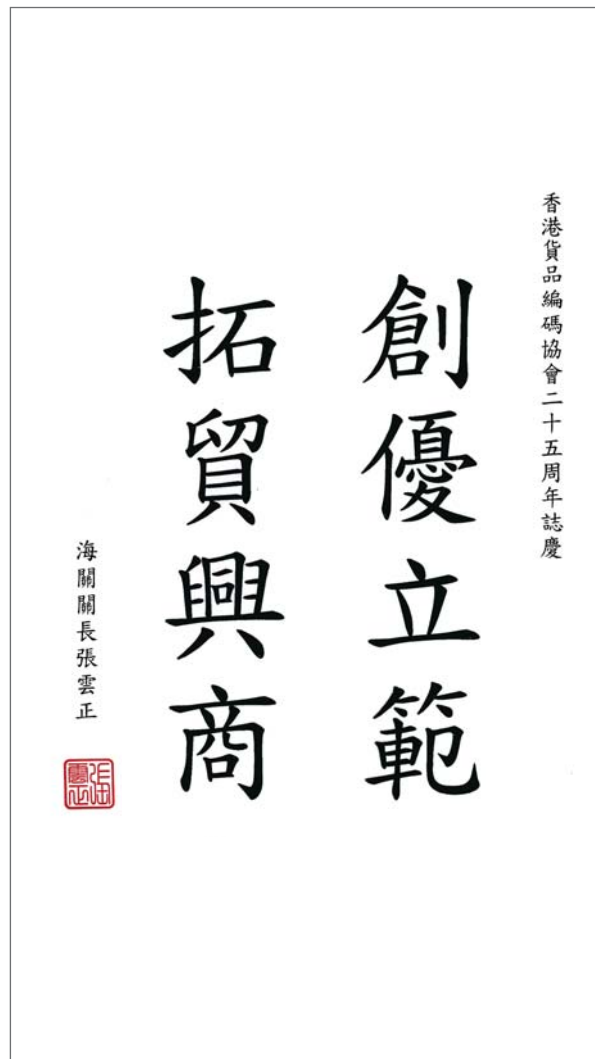
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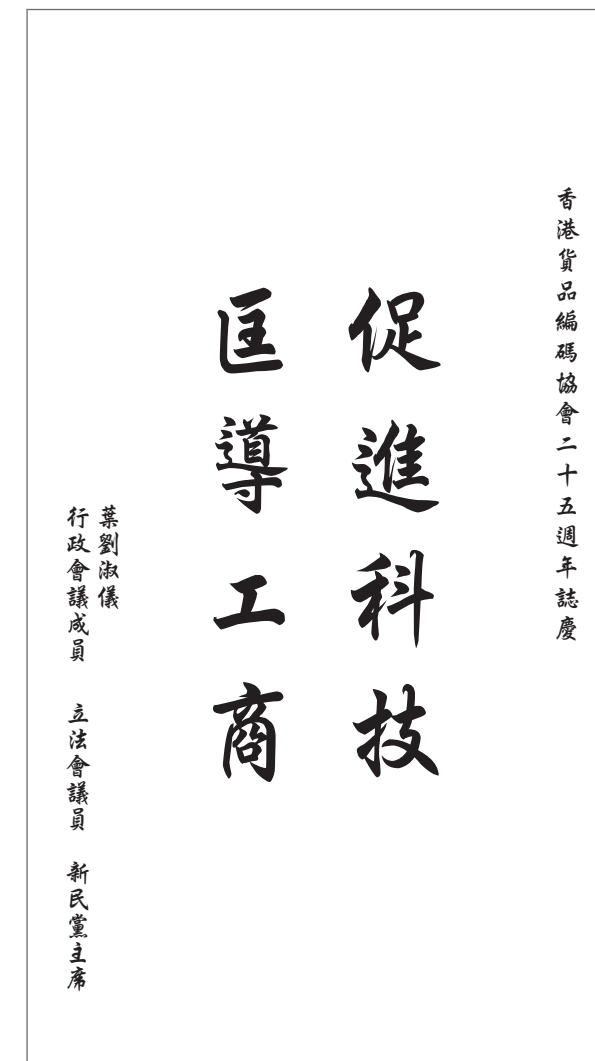
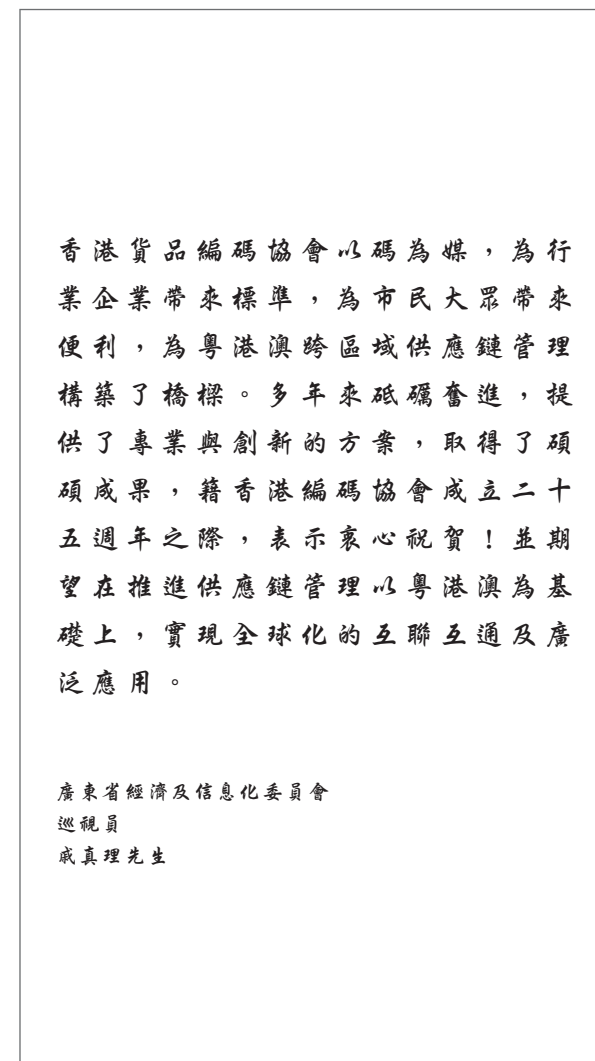
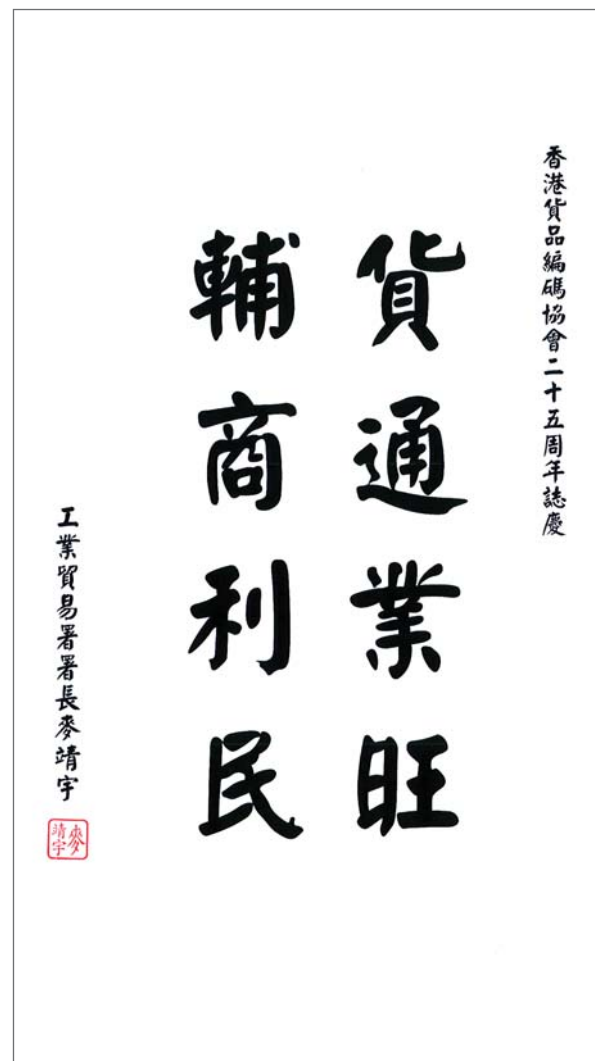
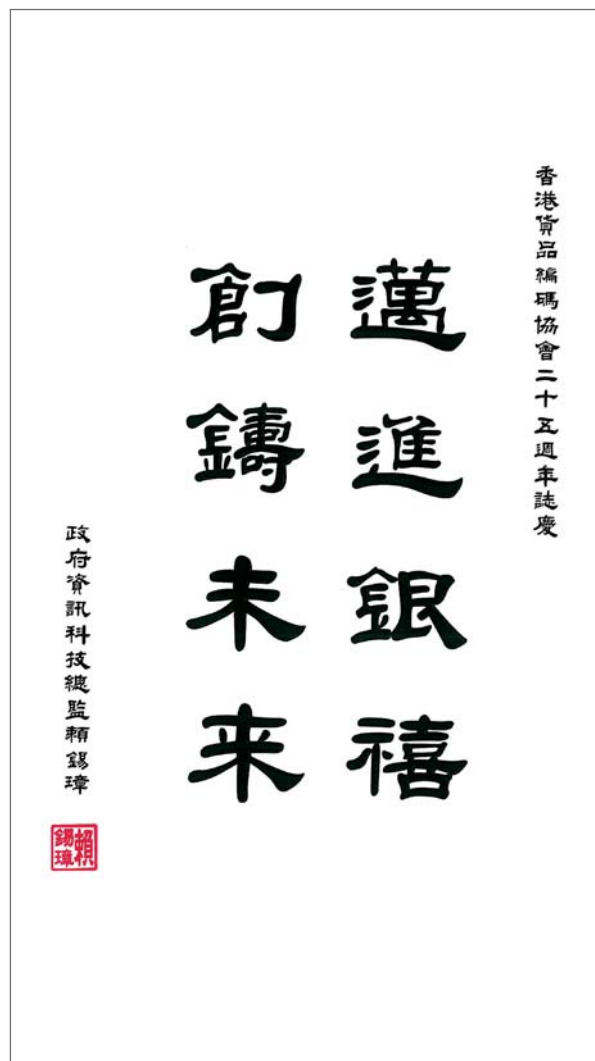
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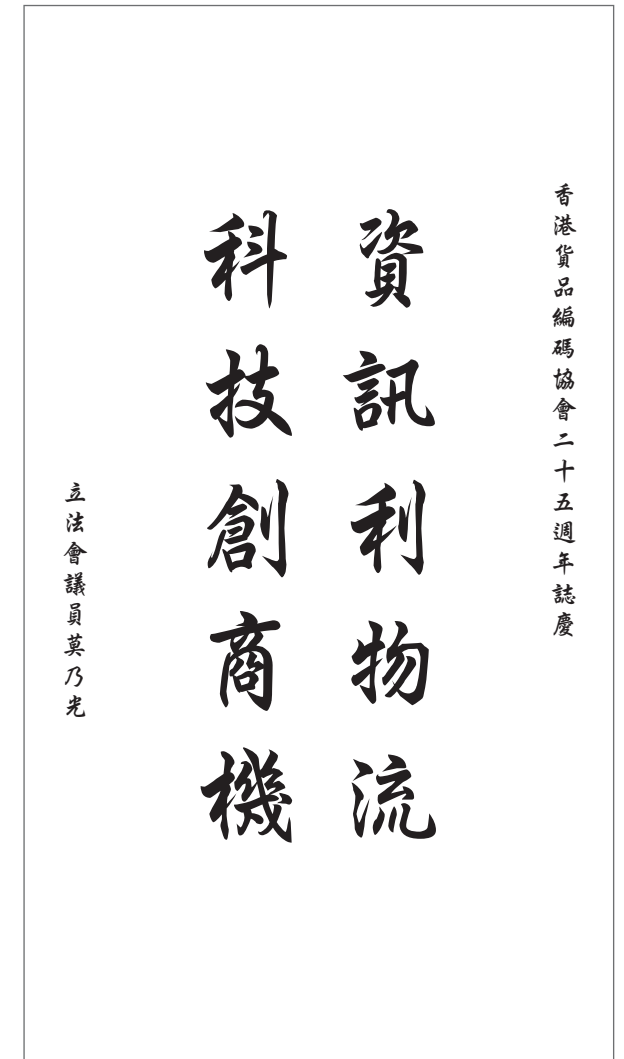
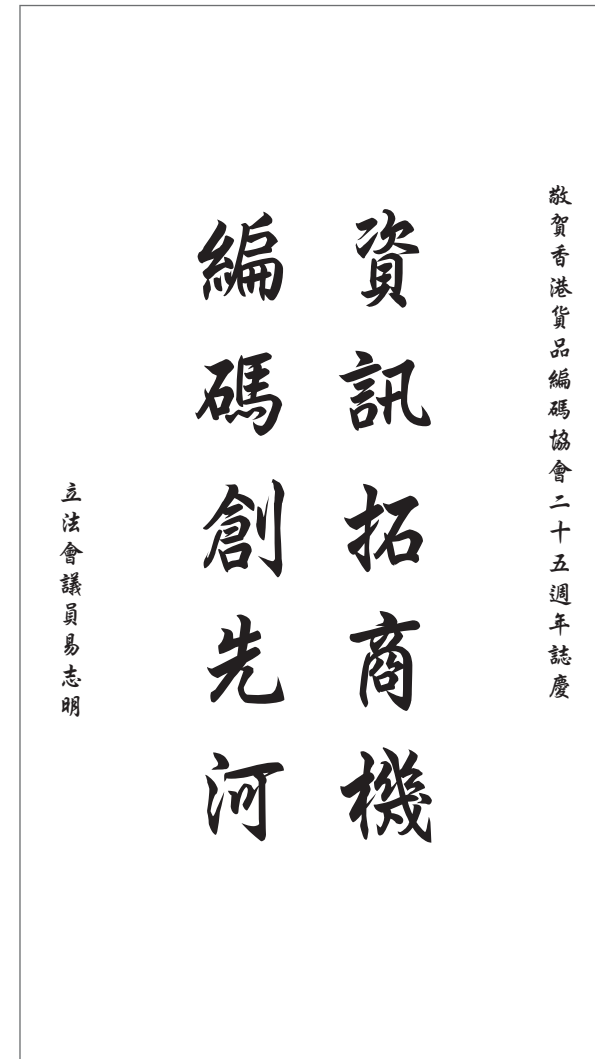
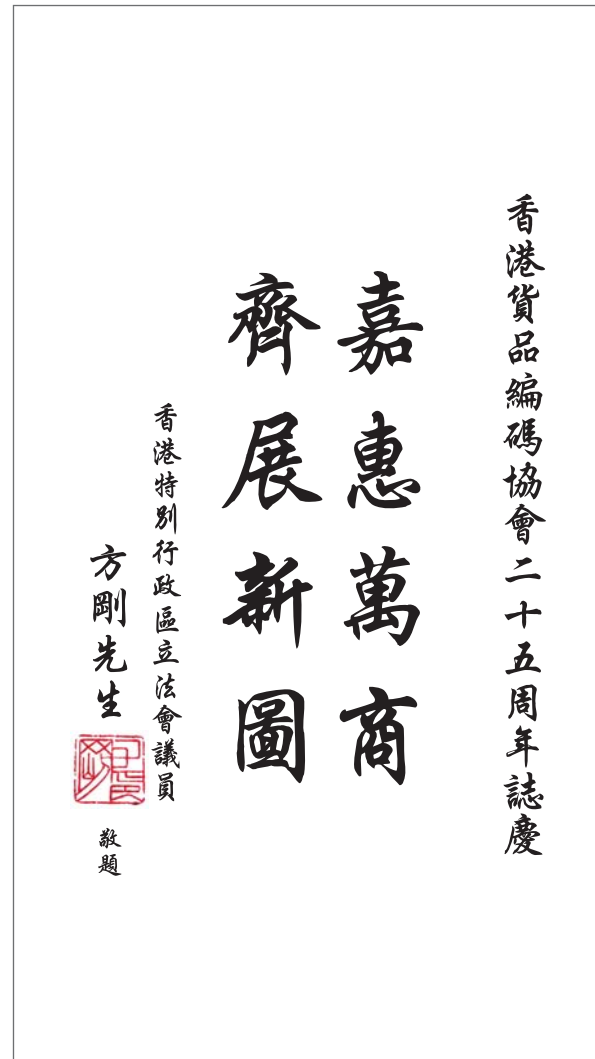
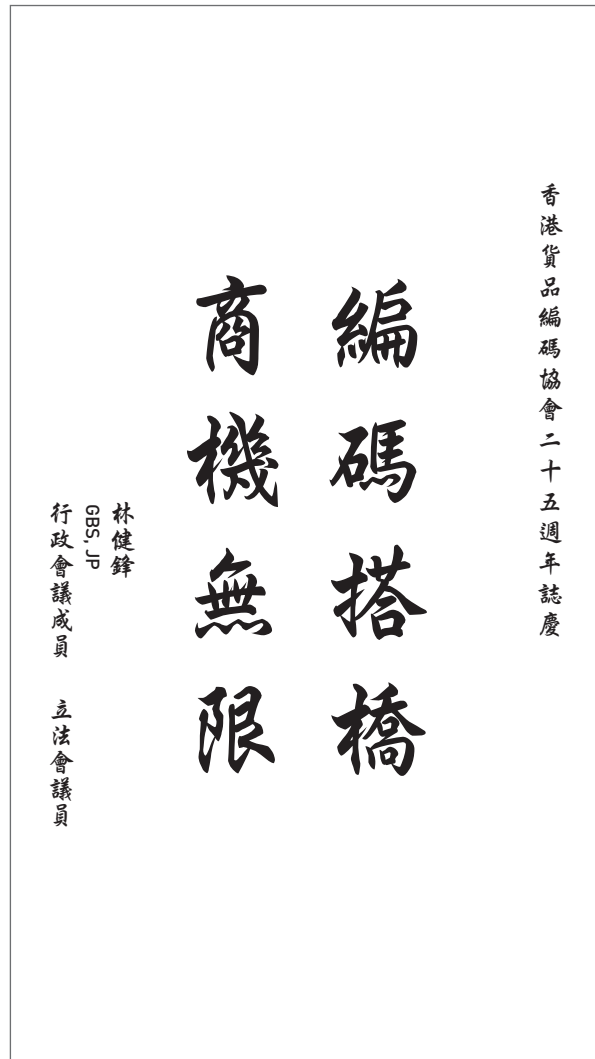
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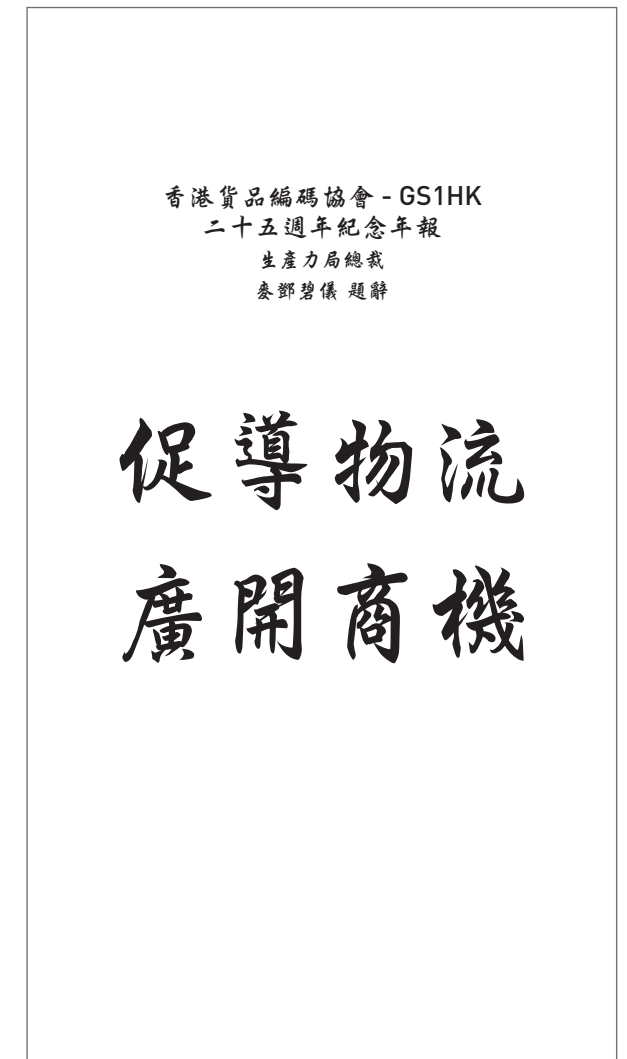
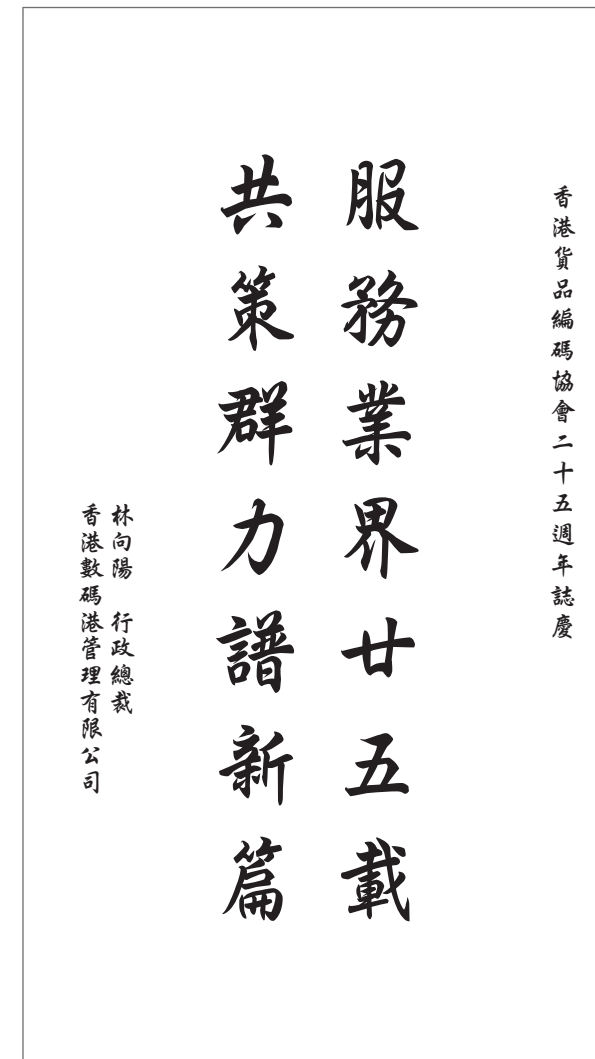
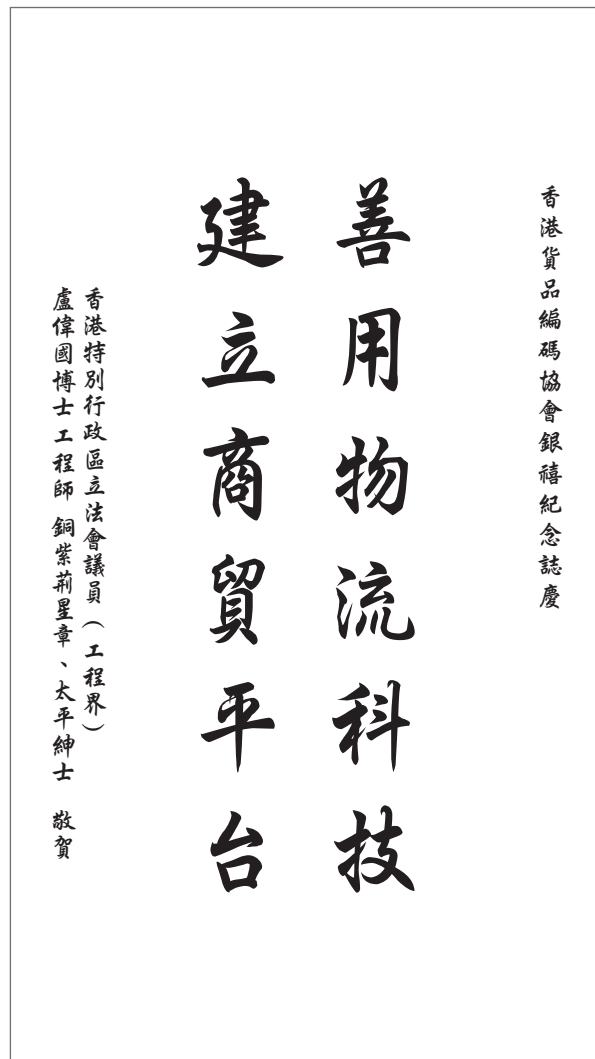
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馬錦星先生

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Parks Corporation  
行政總裁  
香港科技園公司



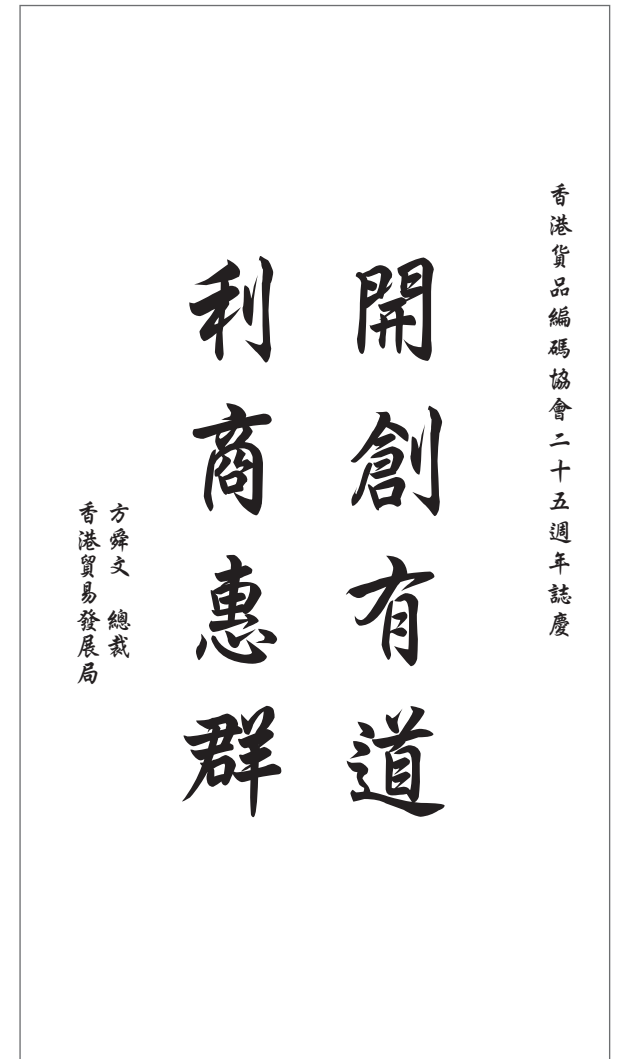
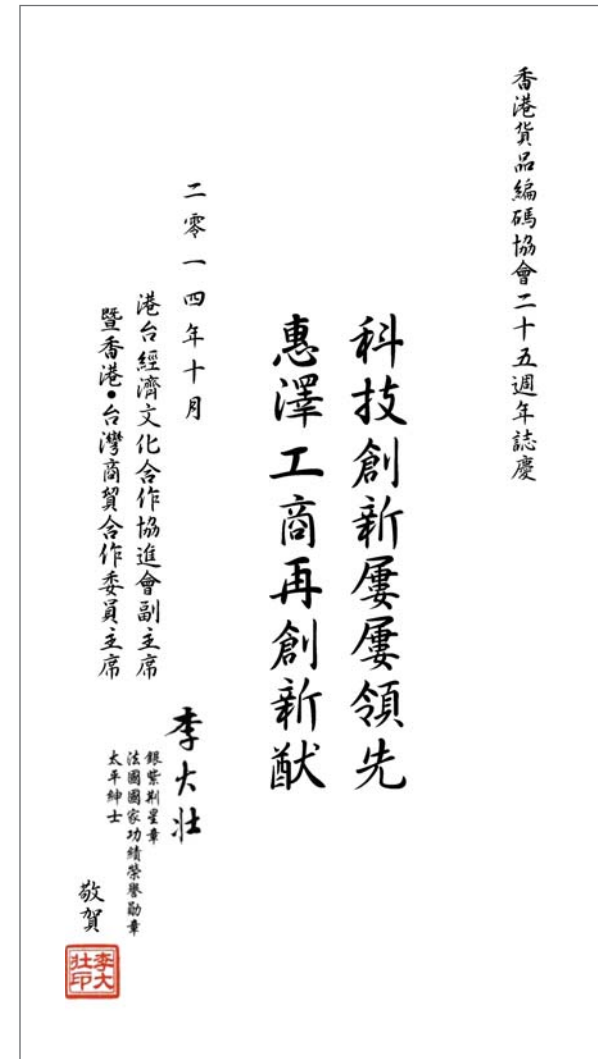
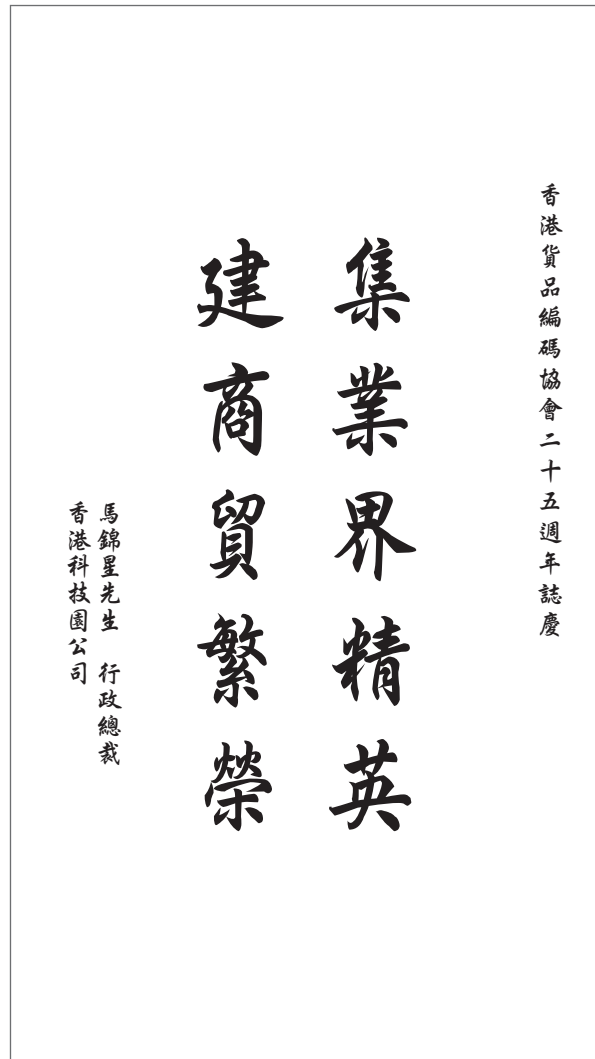
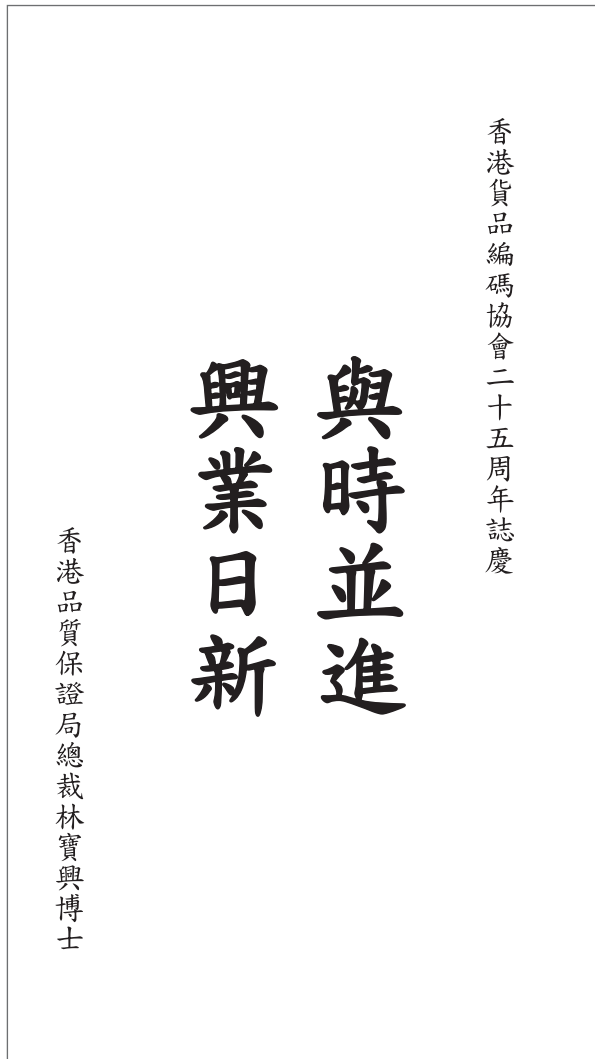
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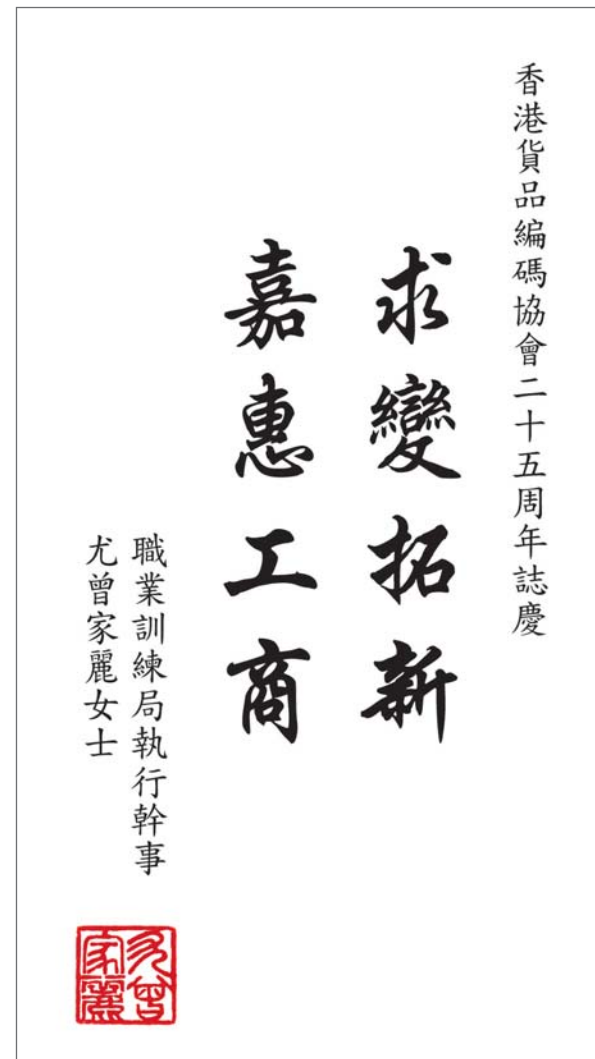
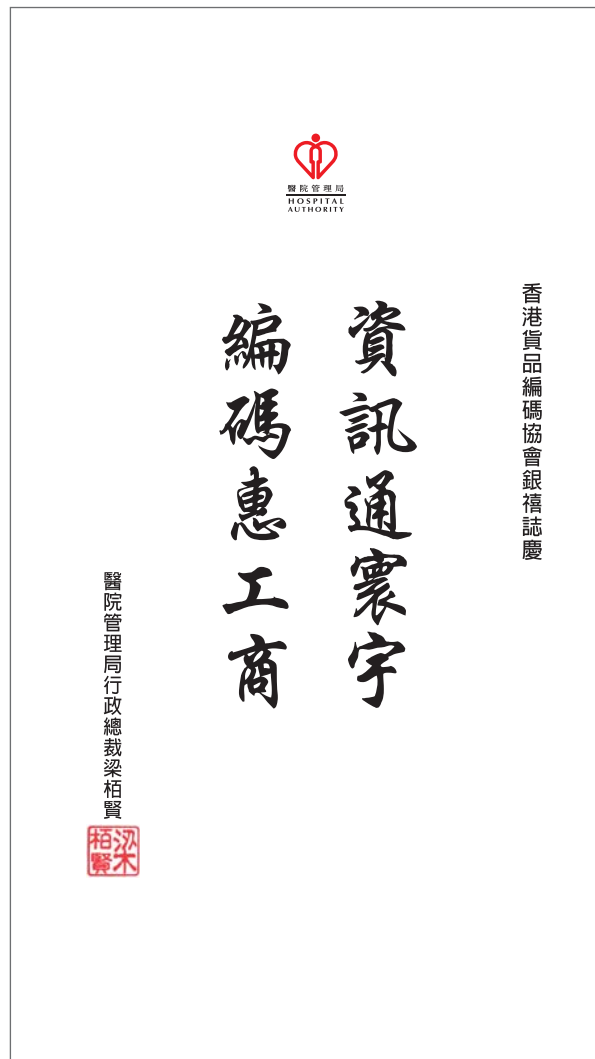
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Tesco



**Mr. Miguel Lopera**  
President & CEO  
GS1 Global





The list is in alphabetical order by organization name.  
以下名單以機構英文字母次序排列。



**Mr. Anthony Rose**  
ECR AP Council Co-chair  
House of Rose Professional



**Ms. Joy Rice**  
ECR AP Council Co-chair  
Diageo plc

On behalf of ECR Asia Pacific, we would like to wish GS1 Hong Kong the very best on this VERY SPECIAL 25<sup>th</sup> anniversary. GS1 Hong Kong, under the guidance of its CEO Anna Lin, is playing a very important role on the ECR Asia Pacific Executive Council and is leading many of the significant achievements that are directly impacting consumers. Sustainability, supply chain best practices, diversity and even our upcoming ECR Asia Pacific conference in Hong Kong in March 2015. We truly value the GS1 support and collaboration as we continue our mission to serve consumers.

**Mr. Anthony Rose**  
ECR AP Council Co-chair  
House of Rose Professional

**Ms. Joy Rice**  
ECR AP Council Co-chair  
Diageo plc



**Professor John CHAI**  
查逸超教授  
Chairman  
Business Environment Council  
主席  
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JOHN CHAI



**Mr. Simon WONG, JP**  
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黃家和



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**Mr. Henry HO**  
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Textile Council of Hong Kong Ltd.  
主席  
香港紡織業聯會





About GS1 Hong Kong  
關於香港貨品編碼協會

# Organization Structure 協會架構





# Board Of Directors 董事局

**Chairman**  
主席

**Directors**  
董事



**Mr. Joseph PHI**  
彭焜耀先生  
President  
LF Logistics  
總裁  
LF Logistics



**Dr. David HUI**  
許章榮榮譽博士  
Chairman  
A-Fontane Group Ltd.  
集團主席  
雅芳婷集團有限公司



**Mr. CHOO Peng Chee**  
朱秉志先生  
Regional Director  
North Asia - Food  
The Dairy Farm Group  
北亞區地區董事 - 食品  
牛奶公司集團



**Mr. Saunders TAM**  
譚澤生先生  
Chief Executive Officer  
Forewide Company (HK) Ltd.  
行政總裁  
福揚行(香港)有限公司



**Mr. Philippe GIARD**  
簡力宏先生  
Regional Managing Director,  
Greater China  
PARKnSHOP  
區域董事總經理 (大中華區)  
百佳超級市場



**Mr. Glenn SMITH**  
史密夫先生  
Chief Executive  
Sims Trading Co Ltd.  
總裁  
慎昌有限公司



**Mr. Allen LI**  
李家強先生  
Director & General Manager  
Swire Coca-Cola HK Ltd.  
董事兼總經理  
太古可口可樂香港有限公司



**Mr. Jackson LEUNG**  
梁兆賢先生  
Director & Executive  
Deputy General Manager  
C&C Joint Printing Co (HK) Ltd.  
董事總經理  
中華商務聯合印刷(香港)有限公司



**Dr. Kelvin LEUNG**  
梁啟元博士  
Chief Executive Officer,  
Asia Pacific  
DHL Global Forwarding(HK) Ltd.  
行政總裁 (亞太區)  
敦豪全球貨運物流(香港)有限公司



**Ms. Shirley YUEN**  
袁莎妮女士  
Chief Executive Officer  
Hong Kong General  
Chamber of Commerce  
總裁  
香港總商會



**Dr. Gordon YEN**  
嚴震銘博士  
Managing Director  
Radiant Venture Capital Ltd.  
董事總經理  
慧科資本有限公司



**Mr. Roy NG**  
伍俊達先生  
Chairman & CEO  
Star Lite (HK) Ltd.  
主席及行政總裁  
暉星(香港)有限公司



**Ms. Caroline MAK**  
麥瑞琮女士  
Group Director,  
Health and Beauty  
The Dairy Farm Group  
集團董事 - 健康及美容  
牛奶公司集團



**Mr. Peter LEE**  
李雨川先生  
Chairman  
Euroasia Group  
主席  
華實實業集團



**Mr. Sandroff MA**  
馬智駒先生  
Director  
Kingsway International  
Holdings Ltd.  
執行董事  
港基國際集團有限公司



**Company Secretary**  
公司秘書

**Mr. Nicholas HORVATH**  
鮑皓華律師  
Bodnar Horvath  
鮑皓華律師行



**Ex-Officio Member**  
當然委員

**Ms. Anna LIN, JP**  
林潔貽太平紳士  
Chief Executive  
GS1 Hong Kong  
總裁  
香港貨品編碼協會



# Industry Advisory Boards 業界諮詢委員會

GS1 Hong Kong has established various advisory boards to provide strategic advice on the new and ongoing initiatives implemented by the organization to improve industry core competencies and competitiveness, across a number of sectors in Hong Kong.

Each of these four boards is comprised of industry representatives, in addition to experts drawn from related fields of expertise, to maximize the practicality of the solutions formulated and their implementation methods.

By assembling these multi-disciplinary teams, GS1 Hong Kong is better positioned to foster an optimal environment to fully support the growth and business expansion of local enterprises, while helping the different industry sectors enhance their competitive advantages.

## ECR Hong Kong

Efficient Consumer Response (ECR) Hong Kong is a supply chain management movement to help the Fast-moving Consumer Goods (FMCG) sector sharpen its competitive edge, both domestically and globally, by eliminating irrelevant cost and increasing its responsiveness to ever-changing consumer demands with the adoption of ECR techniques. Under the support of the FMCG sector, the board's membership has expanded 10% over the past year, compared to 2012 - 2013.

ECR Hong Kong also offers advice to the local business community on efficient trading practices, which are critical for the development of an intra-industry trade infrastructure. In addition, it undertakes concerted efforts at promoting the adoption of supply-chain management (SCM) best practices and technologies and helping enterprises to establish closer connections with SCM and ECR bodies regionally and internationally.

In 2013-2014, the board of ECR Hong Kong proposed the 4 'E' Strategies - including Efficient Replenishment (ensuring on-shelf availability), Efficient Promotion (engaging digital marketing trends), Efficient Product Introduction (ensuring effective data communications) and Efficient Product Assortment (ensuring category management) - to enable the retail sector gain greater customer satisfaction through close cooperation among retailers, wholesalers, and manufacturers.

Subsequently, four workshops were organized to promote each of these strategies, with local retailers, distributors, traders, manufacturers and other stakeholders among the participants.

香港貨品編碼協會成立了多個諮詢委員會，就協會推行的各項新計劃和現有計劃提供策略性建議，以提升本港各行各業的核心能力和競爭力。

以下四個委員會均由業界代表以及相關領域的專家所組成，務求所擬定的方案均切實可行。

這些跨界別團隊有助香港貨品編碼協會為本地企業營造理想的環境，支援它們擴展業務，再創高峰，並協助各行各業加強競爭優勢。

## ECR 香港

ECR 香港致力為快速流轉消費品(FMCG)行業創優增值。ECR 香港協助它們善用高效消費者響應(ECR)技術，減省供應鏈帶來的非必要成本，並迅速回應消費者日新月異、層出不窮的需求，從而提升行業在本地以至國際市場的競爭力。在FMCG行業的支持下，委員會成員數目較上一年度增加10%。

與此同時，ECR 香港銳意與本地商界共享恆之有效的貿易實務知識，對發展業內的貿易基建大有幫助。此外，ECR香港還積極倡導本地企業採納供應鏈管理的最佳實務和科技，協助它們與區內及全球的供應鏈管理和ECR機構保持聯繫，攜手並進。

ECR香港委員會推動「四E策略」，四大重點包括「高效補貨」(確保架上貨物充足)、「高效推廣」(掌握數碼推廣趨勢)、「高效引入產品」(確保數據溝通有效)及「高效產品分類」(妥善管理產品種類)。目標是透過零售商、批發商和生產商三方緊密合作，提升零售界別的顧客滿意度。

委員會籌辦了四個工作坊，分別推廣以上四大策略，參加者包括本地零售商、批發商、貿易商、生產商和其他相關持分者。

## Highlights of 4 'E' workshops

### 1. Efficient Replenishment

Set up in 2010, the On-Shelf-Availability (OSA) Workgroup identified the root causes of OSA problems, provided a means of availability analysis for diagnosing one's inventory status and put forward replenishment suggestions for maintaining an optimal inventory level. Workshop participants were exposed to the Synchronized Supply Chain Replenishment (SSCR) methodology, a proven demand-driven tool designed to help retailers conduct inventory health checks to achieve inventory accuracy through timely replenishments in order to attain customer fulfillment. Another workshop was organized to follow up on the OSA theme, discussing how supply chain processes could be further streamlined to support efficient replenishment.

### 2. Efficient Promotion

At the Mobile Retail Workgroup, participants learned various ways to forge closer connections with customers, riding on the back of digital retail trends, including online promotional exposure and the heightening of brand awareness through mobile applications. Through a mobile marketing platform developed by GS1 Hong Kong, retailers can implement integrated marketing campaigns both on and offline, while facilitating consumer access to product promotional offers such as digital coupons, along with comprehensive product information, complete with authentication details, and multimedia content that can be viewed anytime and anywhere. In 2013-14, a variety of digital programs has been conducted under the Mobile Retail Workshop Series.

### 3. Efficient Product Introduction

The concept and methods of efficient product introduction were highlighted at the Efficient Promotion Workshops, in conjunction with the mobile retail sessions held to introduce the use of digital media.

### 4. Efficient Product Assortment

In 2013-2014, the industrial requirements analysis has been completed under the Category Management (CM) Workgroup. A best practice has been developed and distributed. A continuity workgroup is spin for 2014 focus which is product sustainability, an industrial guidebook is expected to be produced.

## Electronic Commerce Users' Committee (ECUC)

The Electronic Commerce Users' Committee (ECUC) aims to promote service enhancements and the use of electronic commerce in Hong Kong, through the ezTRADE platform, a standard-based B2B e-commerce initiative to facilitate paperless trading for greater efficiency.

Composed of ezTRADE members, the committee is dedicated to monitoring and improving the service quality of ezTRADE as well as providing timely and

## 四E工作坊重點

### 1. 高效補貨

上架貨品流通管理工作小組於2010年成立，它致力識別上架貨品流通管理問題的病根，並透過完善的貨架使用率分析來評估存貨狀況，繼而提出補貨建議，以達致理想的存貨水平。參與者在工作坊掌握到「同步化供應鏈補貨」的方法，那是一套已證明行之有效的需求主導工具，有助零售商進行存貨檢查，提醒它們及時補貨來提升存貨準確度，滿足顧客需求。另一個後續工作坊同樣圍繞上架貨品流通管理，討論如何進一步精簡供應鏈流程，以達到快速補貨。

### 2. 高效推廣

在流動零售工作小組裡，參與者學到與顧客建立更緊密關係的各種方法，以捕捉數碼零售趨勢帶來的新機遇，包括網上推廣以及藉著手機應用程式來增加品牌知名度。通過香港貨品編碼協會研發的流動營銷平台，零售商能於線上和線下推行全方位的營銷活動，讓消費者可以隨時隨地存取產品推廣優惠、數碼優惠券、更詳盡的產品資訊(例如產品鑑別詳情)及多媒體內容。2013至2014年間，工作小組先後推行了多項不同的數碼計劃。

### 3. 高效引入產品

高效推廣工作坊展示了高效引入產品的各種概念和方法，它還包括一個介紹數碼媒體運用的流動零售環節。

### 4. 高效產品分類

2013至2014年間，產品分類管理工作小組完成了業界要求分析，整理並推廣各項最佳實務。2014的後續工作坊將聚焦於產品的可持續性，並預期會推出一冊業界指南。



## 電子商貿用戶委員會

電子商貿用戶委員會成立於1999年，旨在透過「通商易」平台於香港推廣電子商貿並提升有關服務質素。「通商易」是以標準為基礎的企業對企業電子商貿平台，能促成無紙交易，提升貿易效率。

委員會由「通商易」用戶組成，承諾監督並改善「通商易」的服務質素，並不時就香港貨品編碼協會的電子商貿項目提供適切的意見。



relevant feedback on the electronic commerce initiatives introduced by GS1 Hong Kong from time to time.

In 2014, China Resources Vanguard (CRV), a leading China supermarket chain in Hong Kong and a member of GS1 Hong Kong's ezTRADE programme, has been included in the advisory board. Leveraging on its supply network, CRV has actively helped broadened the scope of EDI (Electronic Data Interchange) implementation for numerous suppliers in Hong Kong. Furthermore, CRV has helped increase ezTRADE membership via its promotion of the program to its trading partners. In the coming years, ECUC will extend its membership invitations to a more diverse spectrum of industry sectors, such as food and catering services enterprises, to elicit more feedback from these business communities and enrich the membership composition and developments of the ezTRADE program.

Starting from 31 August this year, ECUC has renewed its service contract with its platform vendor - GXS (currently named as "Opentext") - for another five years. Under the governance from ECUC, Opentext will provide an enhanced service platform with higher service level offered to ezTRADE members in 2014 onwards.

## Internet of Things Industry Advisory Council

Established in July 2013, the Hong Kong Internet of Things Industry Advisory Council has been formed by likeminded companies under the auspices of GS1 Hong Kong, to promote IoT innovations and broaden their adoption to uplift the competitiveness of local enterprises. With its membership drawn from various industry and technology sectors, the Council is well positioned to foster an IoT ecosystem, in support of the continuous growth and implementation of this game-changing technology in Hong Kong. To date, it has more than 50 board members, with the first council meeting convened on 11 July 2013 to officially elect the following members for appointments on a two-year office tenure:

- I. President - Mr. Robert Burton, Executive Vice President, Vendor Support Services, Li & Fung Trading
- II. Vice President (Technology) - Ms. Barbara Chiu, Managing Director (Hong Kong & Macau), Cisco Systems (HK) Ltd.
- III. Vice President (Business) - Mr. Rainer Duespohl, Chief Information Officer, Asia, Global Business Technology, VF Asia Ltd.

### Role of the Council

The Council aims at providing strategic directions for GS1 Hong Kong on key IoT related initiatives including the Hong Kong RFID/IoT Awards, Hong Kong Internet of Things Centre of Excellence and Hong Kong IoT Maturity Model. Serving as industry ambassadors, the board members work closely with their respective professional and business sectors to jointly promote the adoption of IoT as well as related programmes and

2014年，於本港設有業務的內地大型連鎖超市之一兼本會「通商易」成員「華潤萬家」加入了諮詢委員會，憑藉其商界人脈，成功協助多個本港供應商啟用電子數據聯通服務，擴闊了服務的覆蓋範圍。華潤亦積極向貿易夥伴推薦「通商易」平台，平台用戶因此越來越多。未來，電子商貿用戶委員會將邀請更多機構加入，務求涵蓋更多行業，例如餐飲服務業，以獲取相關企業的意見，使委員會的組成更多元化，從而推動「通商易」平台的發展。

自今年8月31日起，委員會與現有平台營運商GXS(現已改名為「Opentext」)續約五年。在委員會的指導下，Opentext承諾於2014年開始為各「通商易」用戶帶來一個比以往更為優秀的服務平台。

## 香港物聯網產業諮詢委員會

香港物聯網產業諮詢委員會成立於2013年7月。在香港貨品編碼協會的支持下，多家志同道合的企業積極推廣與物聯網相關的創新意念，希望更多本港企業可藉物聯網提升自身競爭力。委員會成員來自多個行業和科技範疇，有利委員會在香港建立物聯網生態體系，使這項革命性科技得以在本地茁壯成長，獲各界廣泛應用。委員會現有超過50名成員，並於2013年7月11日召開首次會議，正式選出以下任期兩年的執委：

- I. 主席：利豐貿易執行副總裁Robert Burton先生
- II. 副主席(科技)：思科系統(香港)有限公司董事總經理(香港及澳門)紹卓敏小姐
- III. 副主席(商業)：威富(亞洲區)有限公司全球商業技術亞洲區首席資訊總監Rainer Duespohl先生

### 委員會的功能

委員會旨在就重要的物聯網相關計劃為香港貨品編碼協會提供策略性指引，這些計劃包括「香港無線射頻識別/物聯網大獎」、「香港物聯網科技應用中心」及「香港物聯網成熟水平參考模型」等。委員會成員亦擔任行業大使的角色，與其所屬的專業或商業界別緊密合作，共同推廣物聯網及相關計劃；同時集思廣益，為特區政府提供策略性意見，推動本港物聯網發展，並與內地及國際物聯網組織建立聯繫，以便進行技術交流。

initiatives. Collectively, they provide strategic advice to the HKSAR government on the direction of IoT developments in the city, build linkages with mainland and international IoT bodies and organizations for technology exchanges.

In late November 2013, the Council submitted its views and opinions on the D21 Strategy Paper, promulgated by the HKSAR government with the aim of enhancing and promoting Hong Kong's information infrastructure and services. The Council's feedback was channeled to the authorities following a briefing from the Office of the Government Chief Information Officer (OGCIO).

Based on the four major technology areas designated for exploitation, including cloud computing, big data analytics, Internet of Things as well as wireless and multi-platform, the Council has contributed its insights and suggestions calculated to propel Hong Kong into the next lap of ICT development. To foster knowledge exchange and collaborations among ICT industry players, the Council also provided advice on the discussion theme and invitation of professional delegates for the Hong Kong Internet of Things Conference, held on 11<sup>th</sup> April 2014.

Over the past year, three Executive Council meetings were held to discuss and explore the way forward, in three key areas including the development of an IoT Maturity Model, the Hong Kong IoT Awards and IoT-related trends likely to emerge in the foreseeable future.

## SMEs Advisory Board

In 1999, the SMEs Advisory Board aims to help enhance the competitiveness and efficiency of SMEs by driving their adoption of best practices in supply chain management and e-commerce. Besides endeavoring to raise the community's awareness of the diversified and distinct needs of this sector, it is also the board's aim to help SMEs to make rapid and sustainable improvements in supply chain performance so as to sustain their operations and competitiveness in a volatile economy. Since 2010, the board has offered strong backing to GS1 Hong Kong's role as a business advisor to the Support and Consultation Centre for SMEs (SUCCESS) established under the Hong Kong Trade and Industry Department.

Drawing on the board's professional support, GS1 Hong Kong has been providing consultancy services to SMEs in applying for a Branding, Upgrading and Domestic Sales (Bud) dedicated fund, established by the HKSAR government in 2012 to finance successful applicants to explore and enter the mainland China market through brand development, operational upgrade and restructuring as well as domestic sales promotion. GS1 Hong Kong has since successfully assisted its various SME members to secure Bud funding to upgrade their warehouse operations as well as offered them consultancy on project design and implementation to achieve upgrades in supply chain and logistics operations.

香港特區政府早前公布「數碼21」資訊科技策略諮詢文件，希望提升及推廣香港的資訊基建和服務；委員會已於2013年11月下旬就諮詢文件遞交意見。在政府資訊科技總監辦公室舉辦簡介會後，委員會的意見已送交有關政府部門。

諮詢文件指出香港應發展四大科技範疇，包括雲端運算、「大數據」分析、物聯網以及無線及跨平台技術，委員會亦就這些議題提供建議，以求推動本港新一輪的資訊及通訊科技發展。為促進資訊及通訊科技界各企業之間的知識交流和合作，委員會又為2014年4月11日舉辦的香港物聯網會議進言，就會議的討論主題和可邀請的專業代表發表意見。

過去一年，委員會舉行了三次董事會議以討論委員會的未來方向，三個主要議題包括物聯網成熟水平參考模型的發展、物聯網大獎的目標，以及即將冒起的物聯網熱潮。

## 中小企業諮詢委員會

中小企業諮詢委員會在1999年成立，藉著推廣供應鏈管理和電子商貿的最佳實務，協助中小企提升競爭力及營運效率。與此同時，委員會致力加深社會各界認識中小企的廣泛訴求和獨特需要，並協助中小企在瞬息萬變的經濟環境中迅速並持續地作出改進，以維持競爭力和營運能力。自2010年起，香港貨品編碼協會一直擔任香港工業貿易署旗下中小企業支援與諮詢中心的業界顧問，期間本委員會為此提供了強力的支援。

香港貨品編碼協會亦發揮了委員會的專業知識，協助中小企申請香港特區政府於2012年成立的「發展品牌、升級轉型及拓展內銷市場專項基金」。成功的申請者將獲資助開發和進入中國內地市場，資助項目包括品牌開展、營運升級轉型以及內銷推廣。自基金成立以來，香港貨品編碼協會協助多家中小企成功申請是項基金來進行貨倉升級，並就供應鏈及物流運作項目的設計及實施，為它們提供顧問服務。



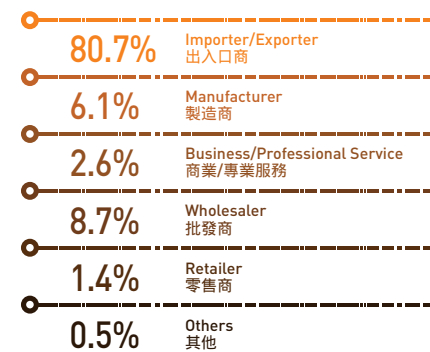
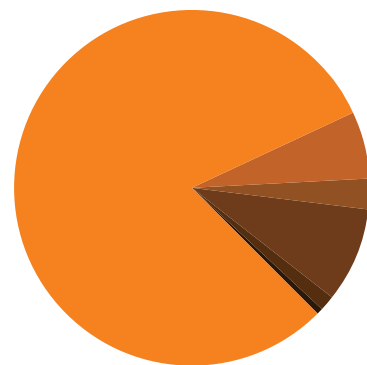
# Membership Profile

## 會員概覽

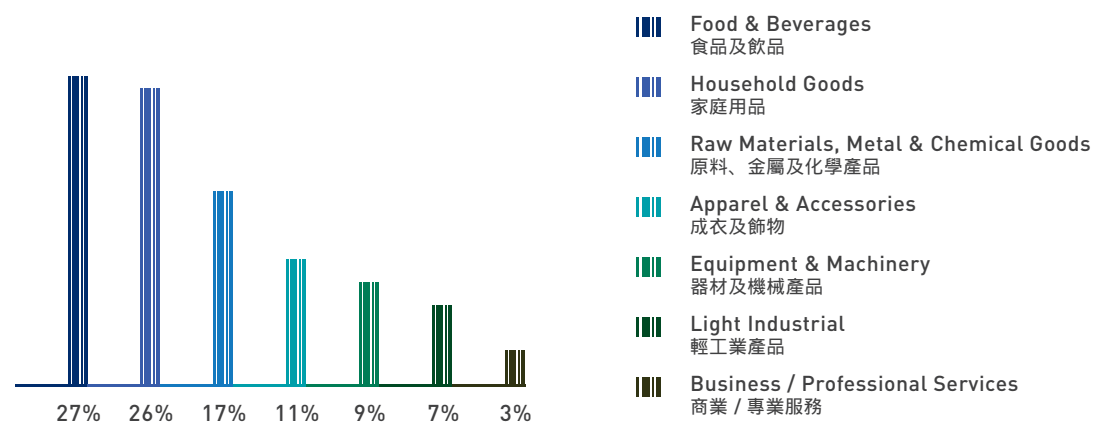
GS1 Hong Kong continues to facilitate the application of GS1 systems of standards in multiple sectors and industries in Hong Kong. During the year in review, we strived to enhance our services and strengthen communication with our members through a wide range of various activities. These initiatives included forming user groups, organizing our annual member gathering, a series of informative seminars and industry-related workshops. Our dedicated efforts have resulted in 8.5% increment for GCP (Global Company Prefix) Barcode membership in 2013/2014.

香港貨品編碼協會一直努力不懈，於本港不同界別及行業推動應用GS1標準。在過去一年，我們特別著力擴展服務範圍及加強會員之間的溝通，並且透過各種活動拉近會員與協會之間的距離。這些活動包括組織用戶小組、舉辦會員年會，還有一系列與業界需要有關、內容豐富的研討會和工作坊。經過不斷努力，在2013/2014年度的GCP(全球公司前置碼)條碼會員數目上升了8.5%。

GCP Barcode Membership Distribution by Business Classification (as of August 31, 2014)  
GCP條碼會員分佈 (以業務類型劃分) (截至2014年8月31日止)



GCP Barcode Membership Distribution by Product Classification (as of August 31, 2014)  
GCP條碼會員分佈 (以產品類型劃分) (截至2014年8月31日止)



Milestones  
創造時代標記



# Era 1 - The Rise of Unique Product ID - Barcode 時代之一 - 條碼標籤崛起，貨品擁有專屬識別碼

## Milestones 重要里程碑

1989



GS1 Hong Kong was founded by the Hong Kong General Chamber of Commerce  
香港總商會成立香港貨品編碼協會  
Chewy International Foods Limited became the first member of GS1 Hong Kong  
超力國際食品有限公司成為協會首位成員

1991



Code of Practice for barcode scanning in retail stores was introduced to protect consumers against pricing ambiguity  
推出《零售商引進電子銷售系統操作守則》，以防消費者因產品價格不詳而招致損失

Early retail adopters included 7-11, Circle K, Mannings, ParknShop, Watson's The Chemist, Wellcome, Wing On Department Store and Chinese Resources Purchasing  
首批零售用戶包括7-11、OK便利店、萬寧、百佳、屈臣氏、惠康、永安百貨及華潤採購

1993



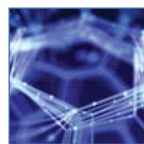
General Merchandising Barcoding Committee was formed to promote the use of source marking on general merchandise  
成立零售百貨業條碼推廣委員會，鼓勵一般商品使用原印條碼

2004

Acquired its own premises for a new office at OTB Building in Wanchai  
於灣仔自設辦公室



2005



Officially renamed GS1 Hong Kong  
正式命名為GS1 Hong Kong

2011



GS1 and Open Mobile Alliance (OMA) collaboratively enabled barcode scanning features to be built directly into mobile devices to allow users scan and access trusted content  
與開放移動聯盟(OMA)合作，為手提裝置加設掃描條碼功能，用户可以掃描並讀取可靠的資訊

2013

The "GTIN on the web" project was announced by GS1 global with the aims to promote the use of structured data including standard product identifiers and attributes in web applications  
環球GS1宣佈展開「GTIN on the web」項目，推廣結構性數據於網絡的使用



Mr. Brigadier Ian Christie CEO, HKGCC (1988 - 1997)  
祈仕德先生 香港總商會總裁 (1988 - 1997)

" The retail sector has always been a catalyst for boosting economic growth in every community. During the past 25 years bar-coding has made a very positive impact on the retail sector. Its principal benefits have been to revolutionize the whole retail check-out process and to vastly improve the shopping experience for consumers. It is not too much of an exaggeration to claim that bar-coding is one of the greatest innovations in the facilitation of commerce around the World.

不論在任何社區，零售業都是刺激經濟增長的重要一員。過去25年，條碼系統為零售業帶來了十分正面的影響，其主要好處包括改革整個收銀過程，同時顯著優化消費者的購物體驗。說條碼系統是世上促進商業發展的最偉大發明之一，並非誇大之辭。"

The cash register was invented in the 1870s for retail stores to keep track of their cash transactions. Despite the invention, the retail checkout process was still beset with a number of limitations. Retail staff had to affix a pricing label on each merchandize item and enter the prices manually. The routine was both labor-intensive and non-scalable.

收銀機於1870年代誕生，零售商鋪從此可以記錄每一筆現金交易，但收銀過程仍然面對不少限制。店鋪職員不但要為每件商品貼上價錢牌，還要以人手把各種貨品的價錢輸入收銀機，那既需大量人力，也無法達到規模效益，零售商甚至必須大費周章方能改動商品售價。收銀機發明之後，收銀過程經歷了近一個世紀原地踏步的時光。

A major breakthrough came in 1974 when GS1 introduced barcodes to increase the efficiency, accuracy and ease of the checkout process. Culminating from the continuous innovative efforts of industry experts, the barcode enables faster data capturing, accuracy and automatic identification which retail outlets can increase their operational efficiency. Consumers have also benefited, as they can now shop more and spend more, but with less time spent on queuing at the cashiers.

直至1974年，GS1終於掀起重大革新，利用條碼標籤使收銀過程變得高效、準確和便利。商品條碼凝聚了業界專家鍥而不捨的鑽研成果，以掃描器讀取後便可顯示該貨品的重要資訊。條碼系統確保每種貨品都有專屬的國際識別碼，只要掃描條碼便可快速、準確地讀取數據並自動識別貨品，有助零售商鋪提升營運效率。這項發明拉近了供應商和零售商之間的距離，亦同時惠及消費者——他們可以較短的排隊付帳時間購買更多產品。

GS1 Hong Kong (formerly named Hong Kong Article Numbering Association, HKANA) was founded by the Hong Kong General Chamber of Commerce in 1989 to introduce the revolutionary benefits of barcodes to local retail enterprises. Since then, barcodes have played an instrumental role in enhancing retail efficiency, productivity and overall customer experience across numerous business sectors, from retail to logistics, healthcare, food and apparel.

香港貨品編碼協會於1989年由香港總商會成立，讓本地零售企業亦能享用條碼標籤所帶來的效益。自此，條碼標籤對於本港的零售效率、生產力及整體顧客體驗起著極為重要的作用，獲零售、物流、醫療護理、飲食及成衣業等多門產業重用。

Over the years, GS1 Hong Kong has been dedicated to offering optimal standards and solutions including the barcode, customized to the need of various industries. With the boom of e-commerce and increasing importance of omni-channel retailing, these tiny data strips continue to pave the way for the next retail revolution.

本會多年來一直致力提供最優化的GS1標準和解決方案，迎合各行各業的需要。隨著電子商貿及全方位零售的重要性與日俱增，看似微不足道的條碼其實正為新一輪零售革命鋪路。

Presently, retailers and e-commerce professionals are aggressively creating ever-more efficient algorithms to better utilize "big data" and translate it into greater business growth. One latest example is the Internet giant Goggle's bid to file a patent for using the barcode (GTIN) in its algorithm developments. Major e-commerce players such as Amazon, Alibaba and TMall.com are working collaboratively to develop GTIN webpages to optimize search-engine use and link the physical shopping experience with online stores for their customers, enabling them to simply scan a barcode with a mobile device to access the latest product information.

傳統零售商和電子商戶都在致力研發更具效率的運算法則，以求善用「大數據」，藉此帶動業務增長，例如互聯網巨擘Google最近便將全球貿易貨品編碼(GTIN)納入其運算法則中並申請有關專利。Amazon、阿里巴巴及天貓等電子商貿大戶亦正合作研發在網頁中加入以GTIN作搜尋，以爭取最佳的搜尋引擎排名，同時把實體及網上購物體驗合而為一，讓顧客只需以手提裝置掃描條碼，便能讀取最新版本的產品資訊。

GTINs will continue to be a significant force in driving future transformations of the retail landscape. In light of this, GS1 Hong Kong will remain committed, as always, to help the retail industry leverage on the infinite possibilities and benefits that the simple barcode may bring.

放眼未來，GTIN仍是改寫零售業面貌一股不容忽視的力量。香港貨品編碼協會將一如既往，全力協助零售業界把握條碼標籤所蘊藏的無窮商機。



Mr. George Elledge  
Chairmanship 主席任期:  
1989 - 1992

" I came to Hong Kong in 1979 with a brief to computerize the Wellcome Supermarket chain. At the time, less than 20% of the products on the supermarket's shelves were barcoded which posed problems in terms of building systems needed to automate the retail and warehousing processes. In order to rectify this situation, Hong Kong needed an Article Numbering Association and, with the strong support from the Hong Kong General Chamber of Commerce and Brigadier Ian Christie, the then Director, the HKANA (now known as GS1 Hong Kong) was born. The HKANA went from strength to strength and retailers were soon in a position to introduce checkout automation which, aside from enhancing their customer's shopping experience, made the work of checkout staff much easier, and enabled the companies to automate their internal processes leading to greater efficiency.

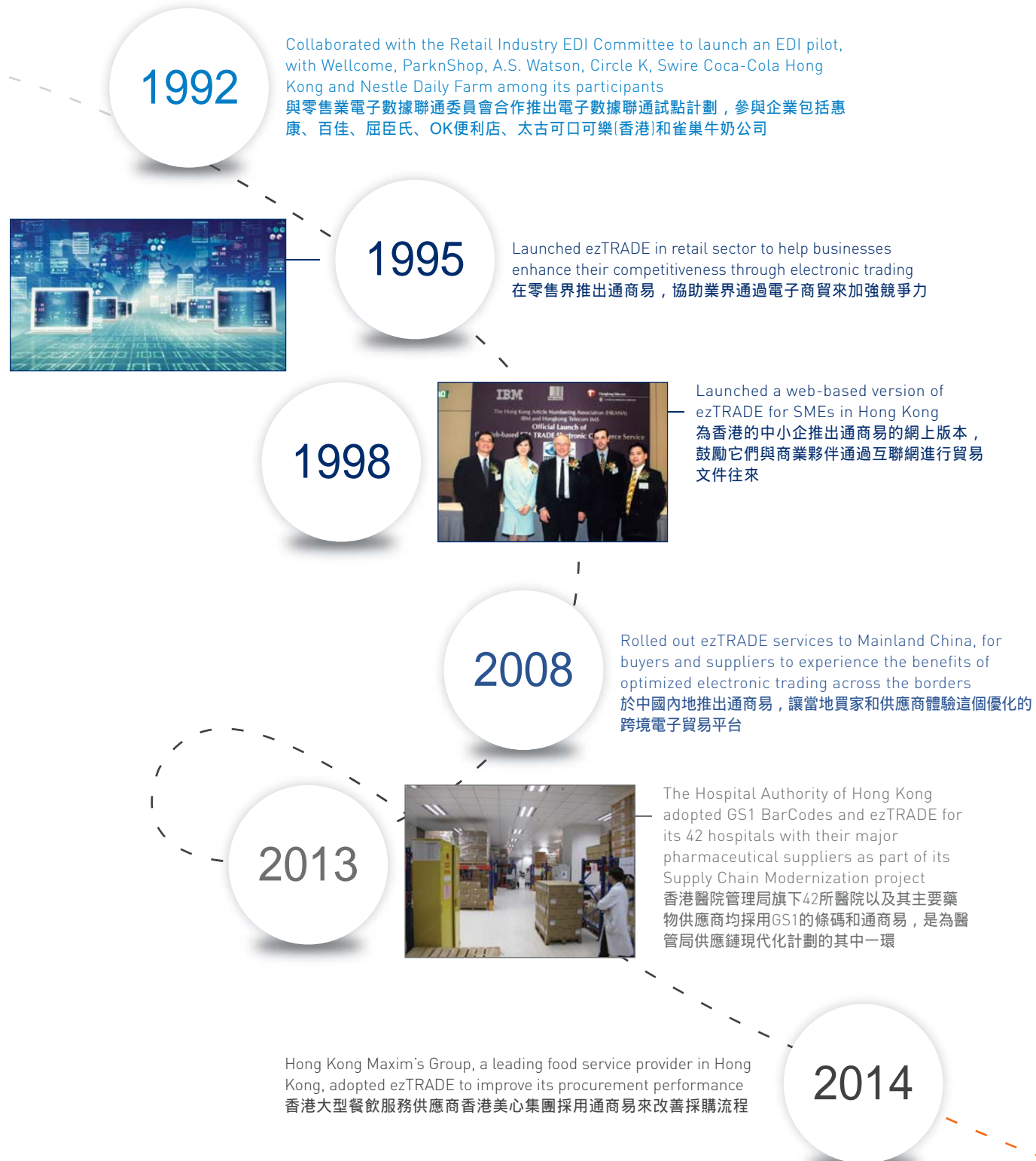
我在1979年來到香港，接到的任務是把惠康超級市場的運作電腦化。當時，惠康貼有條碼的上架貨品不到20%，要建立把零售和倉存程序自動化的系統可謂十分困難。為了改善這個問題，香港必須成立一個貨品編碼協會。於是，在香港總商會及其時任主席祈仕德先生的大力支持下，香港貨品編碼協會誕生了。隨著協會的運作日趨完善，零售商不久後已完成收銀過程自動化，不但成功優化消費者的購物體驗，還減輕了收銀員的工作負擔，企業也可以把其內部運作流程自動化，從而提升營運效率。"



# Era 2 - Revolutionized Data Exchange

## 時代之二 - 邁向數據交換革命

### Milestones 重要里程碑



Mr. William Grimsey  
Chairmanship 主席任期：  
1992 - 1994

" Manual replenishment process involves huge amount of paper documents and invoices between suppliers and retailers, and is a major chock point in driving efficiency. I am so delighted to see that the pilot driven by EDI Committee so successful and well recognized by the market, and had revolutionized the operation model of retail industry in Hong Kong. Numerous companies in different sectors were benefited by replacing paper-based processes with electronic document and have revolutionized the operation model of retail industry in Hong Kong.

人手補貨牽涉供應商與零售商之間大量的紙本文件及發票往來，是妨礙效率的一大障礙。看到電子數據聯通督導委員會推動的試點計劃成績驕人，獲市場廣泛認可，令香港零售業的營運模式煥然一新，我深受鼓舞。多個行業都有不少企業以電子文件取代紙本文件，不但企業本身受惠，也革新了本港零售業的營運模式。"

To cope with the exponential growth in retail business, Electronic Data Interchange (EDI), an electronic communication system that provides standards for exchanging data via electronic means, has become a proven solution. By adopting the same standard, two different companies, even from different countries, can electronically exchange documents such as purchase orders, invoices, shipping notices and many others, with speed, accuracy and cost efficiency.

為配合零售業務的爆炸性增長，零售業需要一套電子通訊系統，來為電子世界的數據交換提供劃一標準，當中電子數據聯通(EDI)已證明行之有效。只要採納同一標準，兩家公司即使來自不同國家，也能快捷、準確並符合成本效益地交換各種電子文件，例如訂單、發票、貨運通知等等。

In 1992, GS1 Hong Kong collaborated with the Retail Industry EDI Committee to pioneer an EDI pilot scheme, calculated to enhance business-to-business transactions in the local retail industry. Implemented three years after the pilot launch, an industry EDI Platform – officially named ezTrade – has gained popularity as a B-to-B platform using standard-based interface for automatic identification and communication.

1992年，香港貨品編碼協會與零售界電子數據聯通委員會啟動了電子數據聯通的試點計劃，旨在促進本地零售界的商業對商業交易。試點計劃推行三年後，業界的電子數據聯通平台正式成立，稱為「通商易」。它是一個商業對商業的平台，提供了一個以標準為基礎的介面，提供自動辨識和通訊功能。

In 1998, ezTRADE extended its service with a web-based version to meet the needs of small-and-medium enterprises for low-cost access to procurement systems at any time and from any place. With closer business ties growing between Hong Kong and mainland China, ezTRADE rolled out its services across the border in 2008, to facilitate paperless business transactions for buyers and their suppliers there.

1998年，通商易擴展其服務領域，推出網上版本，以迎合中小企的需要，它們可隨時隨地採用這套低成本的採購系統。隨著香港和內地的商業交往更為緊密，通商易亦在2008年於內地面世，鼓勵內地買家和供應商進行無紙的商業交易。

However, such services are not limited to the retail FMCG industry. Other business domains with the need for cost-effective, time-critical ordering and delivery can leverage on the ezTRADE platform too. In 2013, GS1 Hong Kong successfully extended ezTRADE to the healthcare sector. One prominent user is the Hospital Authority (HA) – a statutory body responsible for managing all public hospitals in Hong Kong – which has continuously sought to enhance patient safety through enhanced operational efficiency, data security and traceability using the EDI initiative. The number of businesses and organizations participating in ezTRADE is continually on the rise. Presently, around 2,000 companies in Hong Kong and China have subscribed to ezTRADE, with more than 30 million EDI transactions being processed through the platform annually.

然而，這項服務的對象並不限於暢銷消費品的零售界別。其他注重訂貨和送貨效率並希望節省成本的商業領域均可善用通商易平台。2013年，香港貨品編碼協會成功把通商易拓展至醫療護理界。其中一位重要用家為醫院管理局(醫管局)——管理香港所有公立醫院的法定機構。它一直致力通過採用電子數據聯通，來改進營運效率、數據安全以及可追溯性，從而保障病人健康。採用通商易的企業和機構數目節節上升。目前有約2,000家中港企業申請了通商易的服務，每年處理的電子數據聯通交易宗數高達3,000萬宗。

Capitalizing on the rising popularity of mobile devices and apps in omni-channel retail and marketing, the development of a mobile app for ezTRADE is underway and scheduled for launch in early 2015.

有見全方位零售和市場推廣開始積極採用流動裝置和應用程式，通商易正開發手機應用程式，預期在2015年上半年推出。



Mr. Philippe Giard  
簡力宏先生  
Chairmanship 主席任期：  
2006 - 2008

" I was encouraged to see the pilot driven by EDI Committee being so successful and well received by the market. They showed the way how the Hong Kong retail industry could improve its operational model for greater success. Given the promising results of the pilot overseen by the committee, I offered my fullest support to the initiatives, in the belief that the benefits of EDI could be further-deepened and extended across the retail sector.

電子數據聯通督導委員會推動的試點計劃十分成功，市場反應亦相當良好，實在令人振奮。委員會帶領香港零售業精益求精，以更優秀的營運模式取得更佳業績。由於試點計劃的成績讓人鼓舞，我決定全力支持電子數據聯通的推廣工作，相信有關科技可以為更多零售商帶來更多益處。"



# Era 3 - Fueling Supply Chain Growth

## 時代之三 - 促進供應鏈健康發展

### Milestones 重要里程



Mr. Russell Stucki  
Chairmanship 主席任期:  
1995 - 1998

" Companies can now serve their customers better, faster and at less cost by working collaboratively with their trading partners. The Supply Chain Advisory Board, which later evolved into the ECR Hong Kong, had served as an industry platform for knowledge exchange and collaboration between supply chain players. I am delighted to see the industry benefiting from such initiatives and that these platforms had evolved into GS1's annual largest anchor event - GS1 Supply Chain Management Summit.

若企業能與貿易夥伴緊密合作, 便能以較低成本為消費者提供更佳、更快的服務。供應鏈諮詢委員會(現為ECR香港)正可為供應鏈持份者提供知識交流及互相合作的平台。看到平台使業界有所獲益, 甚至進而舉辦香港貨品編碼協會最大型的重要年度活動——GS1供應鏈管理高峰會, 我實在倍感欣慰。"

The Efficient Consumer Response (ECR), a global initiative by the Fast Moving Consumer Goods (FMCG) industry, emerged in the 1990s to promote the removal of unnecessary costs from the supply chain and find ways to eliminate inefficient practices of little or no added value to consumers. ECR Hong Kong, formerly known as SCM Advisory Board, was established in 1996 under the auspices of GS1 Hong Kong, to represent retailers, manufacturers and distributors. It strives to assist the local FMCG sector to enhance its competitiveness by removing extraneous cost from the supply chain and increasing responsiveness to changing consumer demands through ECR practices.

Two crucial roadmaps for SCM in Hong Kong were developed in 1996 and 1997, jointly by ECR Hong Kong with Coopers & Lybrand and KSA respectively, to outline a clear direction and define the future outlook for different industries, in both the domestic and exports supply chains.

**Initiatives to promote sustainable growth of supply chains**  
ECR Hong Kong launched the ECR Scorecard in 1999 in Hong Kong, to facilitate corporate benchmarking locally and globally and enable companies worldwide using the same standard to evaluate their capabilities. The Scorecard is a Capability Assessment Tool designed to give companies a detailed understanding of their ECR capability and to highlight specific improvement opportunities. The Scorecard was adopted by ECR Asia Pacific Council and became globally recognized.

In 2007, the Supply Chain Maturity Reference Model, which defined a roadmap for SMEs to achieve SCM best practices, was developed. The Shelf-life Cycle Study was conducted in 2008 to establish a common industry standard for shelf-life management in the FMCG supply chain, with a set of industry guideline developed in the subsequent year.

**Active knowledge transfer for constant SCM improvements**  
GS1 Hong Kong has been investing significant resources to actively facilitate knowledge transfer across industries, aimed at promoting supply chain strategies, technologies and best practices among local businesses.

In 2005, ECR Hong Kong held the 8th ECR Asia Conference in 2005, the second time it hosted the occasion in Hong Kong, to showcase ECR best practices, drawing an overwhelming response, including a record number of 600 participants. GS1 Hong Kong is honored to host this distinguished event again in 2015.

In 2012, the Synchronized Supply Chain Replenishment Program (SSCR) was introduced to improve inventory management by optimizing on-shelf-availability rate. With the acquisition of Supply Chain Council-Greater China Chapter by the American Production & Inventory Control Society (APICS), SSCR is now merged and recognized by APICS.

於快速流轉消費品行業裡, 「高效消費者響應」(ECR) 是重要的供應鏈管理概念。成立於1996年的ECR香港(前身為供應鏈諮詢委員會)是香港貨品編碼協會轄下的組織, 成員包括零售商、生產商及批發商代表, 宗旨是提升快速流轉消費品行業的競爭力, 方法包括消除供應鏈的不必要營運成本, 並透過落實 ECR, 使企業能夠更迅速地回應消費者不斷轉變的需求。

ECR香港於1996及1997年分別與Coopers & Lybrand及KSA兩家顧問公司合作, 制定兩套極為重要的供應鏈管理概念路線圖, 為參與本地及出口供應鏈的各行各業清晰地勾勒出未來發展方向。

**促進並推廣供應鏈可持續發展**  
ECR香港於1999年在本港引入國際供應鏈管理評分表, 作用是為全球包括本地企業提供統一評分標準, 使各地企業能以同一標準評價自身表現。其後, 評分表交由ECR亞太區協會進行推廣, 現已獲得全球認可。

2007年, 供應鏈完善程度參考模型正式面世, 為中小型企業訂立實踐供應鏈管理最佳實務的路線圖。2008年的「貨架壽命週期研究」為快速流轉消費品供應鏈制定貨架壽命管理的業界標準, ECR香港亦於2009年推出有關業界指引。

**繼續積極普及供應鏈知識**  
香港貨品編碼協會從不吝對教育的投資, 積極向本地社群推廣供應鏈管理策略、科技及最佳實務的有關知識。

2005年, ECR香港舉辦第八屆亞洲「高效消費者響應」會議, 這是本會議二度於香港舉行, 宗旨是展示有關ECR的最佳實務。業界反應非常熱烈, 報名人數超過600人, 破盡歷屆紀錄。香港貨品編碼協會有幸於2015年再次舉辦此項別有意義的活動。

2012年, 本會展開同步供應鏈補貨計劃, 旨在改善上架貨品的流通性, 提升倉存管理水平。供應鏈管理委員會(大中華總會)由美國生產與庫存控制學會(APICS)收購後, SSCR已合併並獲APICS認可。



# Era 4 - RFID and IoT Technology to Connect the World

## 時代之四 - 無線射頻識別及物聯網科技連接全球

Milestones 重要里程碑



Mr. Glenn Smith  
Chairmanship 主席任期：  
2002 - 2006

" The multi-pilot research projects, namely ' Electronic Product Code (EPC) Awareness & Knowledge Transfer Program ' and ' Establishing an EPC Network Infrastructure to Enable End-to-End Supply Chain Visibility ' attested to the value of EPCglobal standard technology and its applications across a wide spectrum of industries. These projects have served as a stepping stone for the EPC vision to be realized, paving the way for ezTRACK's launch. More than ever, traceability and visibility are of paramount importance to many businesses, particularly those where error-proof cold chain management and product authentication are called for. I am delighted to learn that ezTRACK is being broadly employed, heralding value-added services for stakeholders from the logistics business and other industries.

「EPC認知及知識傳授」及「建立產品電子代碼網絡基建，體現點對點供應鏈透明化」計劃驗證了產品電子代碼標準這套科技，示範了它在各行各業的應用，為實現產品電子代碼願景邁出了重要一步，亦為日後推出「縱橫網」服務鋪路。時至今日，可追溯性及可視化已是很多企業營商的不二法門，尤其在食品安全和產品認證等範疇。很高興縱橫網獲廣泛應用，還為一眾持份者帶來產品認證和冷凍鏈管理等增值服務。

A research project undertaken by the Auto-ID Centre at the Massachusetts Institute of Technology (MIT) in 1999 to develop a technology solution to automatically identify, track and manage objects. Through this project, the Electronic Product Code (EPC) standard was successfully developed. EPC Information Services (EPCIS), an EPCglobal standard designed to enable EPC-related data sharing, was also formulated with the Internet as a backbone. It allows broad interoperability between different enterprises worldwide and visibility data on servers to be shared.

EPCglobal Inc. was officially established in 2003, under the auspices of GS1 working together with the MIT and five other leading R & D centres in Australia, China, Japan, Switzerland and the UK. From this initiative, the Auto-ID Lab has been established to undertake continuous RFID and IoT-related technology research and development.

To promote local adoption of EPC/RFID standards, GS1 Hong Kong introduced the "Electronic Product Code (EPC) Awareness & Knowledge Transfer Program", drawing support from global and regional expertise under the support of the Innovation & Technology Commission of the HKSAR Government in 2004. In the following year, GS1 Hong Kong undertook a major project funded by the Commission, entitled "Establishing an EPC Network Infrastructure to Enable End-to-End Supply Chain Visibility". Under this project, an EPCIS network infrastructure has been built.

The success of the EPCIS network project led to the development of ezTRACK in 2008. With this globalized track and trace platform in place, greater connectivity has been fostered between Hong Kong and other countries including China, Taiwan, Malaysia, Italy, Germany, Australia and New Zealand.

Since then, the usage of EPC standard has been extended to the apparel industry. In order to fulfill the increasing demands of omni-channel retailing, many world-renowned retailers are leveraging on EPC-enabled RFID Item Level Tagging (ILT) to help them monitor and manage their inventory more closely to achieve the inventory accuracy of 95%.

1999年，美國麻省理工學院的自動識別中心進行一項研究，發展出能夠自動識別、追蹤及管理物品的科技，結果成功發展出產品電子代碼(EPC)標準。EPC以產品電子代碼訊息服務(EPCIS，一個供應鏈數據交換網絡)為基礎，並透過互聯網運作，方便企業交換和了解彼此提供的數據，提升供應鏈透明度。

在GS1的大力支持下，麻省理工學院以及五所分佈於澳洲、中國、日本、瑞士、英國的頂尖科研中心組成自動識別實驗室，共同於2003年正式成立EPCglobal Inc.，持續推動無線射頻識別和物聯網的研發工作。

為鼓勵更多本地企業採用EPC/RFID標準，香港貨品編碼協會在創新科技署的支持下，於2004年匯聚國際及地區專家，推出「EPC認知及知識傳授」計劃，務求加深本港各界對EPC/RFID的認知。翌年，協會獲創新科技署資助，舉辦「建立產品電子代碼網絡基建，體現點對點供應鏈透明化」計劃，為泛珠三角地區建立EPCIS網絡。

EPCIS網絡取得成功，並於2008年進行商業化，成為一項新的服務「縱橫網」，方便貿易夥伴實現高度透明的訊息互通。這個全球性的追蹤和追溯平台，讓香港與多個國家的連繫可謂日趨緊密，包括中國、台灣、馬來西亞、意大利、德國、澳洲及新西蘭。

與此同時，成衣業亦開始採用EPC標準。由於市場對全方位零售服務的需求日漸提高，不少國際知名零售品牌都開始使用以EPC驅動的RFID單品標籤，以便密切監察及管理其存貨，以達至95%的倉庫準確度。



# Era 5 - Omni-channel Convergence

## 時代之五 - 全方位零售匯流

Milestones 重要里程

2013



Launched the first consumer smart phone app "Consumer Connect", which allows consumers to access trusted source of product information 推出首個為消費者而設的智能手機程式「物密嘢」，讓消費者透過可靠的渠道獲取產品資訊

2014



Launched GS1 e-Commerce highway program to help members extend their reach to digital e-tailing or e-Commerce platform more effectively 推出「電子商貿高速公路」計劃，協助成員更有效地開拓電子零售領域，善用電子商貿平台



Mr. Joseph Phi  
彭煇權先生  
Chairmanship 主席任期：  
2008 - Current 至今

"With barcodes, GS1 Hong Kong has been creating infinite possibilities for Hong Kong businesses in the past 25 years – from revolutionizing retail checkouts to optimizing the supply chains as well as embracing RFID and IoT technologies. With its globally recognized standards and creative innovations, GS1 Hong Kong can help its members to become more successful and champion excellence in the digital world.

憑著統一的條碼標準，香港貨品編碼協會在過去25年間為香港帶來無數商機，不但改革了零售界的收銀方式，改善了供應鏈運作，還引入了RFID和物聯網等科技。本會所提倡的是獲全球認可的標準，又不斷推陳出新，我相信本會絕對有能力協助成員在電子商貿世界中旗開得勝。”

The Physical-Digital Convergence is transforming the retail experience. With its fast growing connectivity, Hong Kong is experiencing a growth in online purchasing, through e-commerce and m-commerce channels. This newly emerged business model has created new challenges to the conventional retailers. Successful retailers are increasingly pursuing strategies to integrate their brick-and-mortar locations with on-line e-Commerce opportunities.

### The convergence point

However, in a small compact city like Hong Kong, physical store shopping is and will remain a key consumption behavior with an increasing mix of on-line off-line activities. An effective omni-channel strategy, representing those retailers who embrace both the online and offline interactions with consumers to assist them along their buyer decision journey – including search, evaluation, the actual sale and also after-sales support – has become critical to the successes for next-generation omni-channel retailing.

In the recent study "Are You Ready? How to Create an Always-On, Always-Open Shopping Experience," jointly conducted by Capgemini Consulting and GS1<sup>1</sup>, it is concluded that omni-channel enablement is a priority for all of the retailers and the four critical components required to help drive a successful omni-channel strategy are: web-ready products, big data analytics, inventory accuracy and logistics fulfillment.

Industries need to respond to the strong demand for omni-channel capabilities and adopt common standards to drive the seamless integration of these key components. In the past two decades, GS1 Hong Kong has launched different services, like product information repository BarcodePlus, visibility and traceability solution ezTrack and Inventory Management Consultancy Services to assist its member companies to fulfill critical technology requirements.

To embrace this huge opportunity ahead, GS1 Hong Kong has initiated the "e-Commerce Highway" program with the objective to help its members tap the e-Commerce opportunities. This program consists of training, seminars and business matching engagements. It connects GS1 Hong Kong members, e-Commerce providers and technology vendors to further collaborate and master omni-channel expertise.

The physical world is coming online, as smart objects, devices and machines increase insights into, and control over, the physical world. For consumers, this provides new levels of empowerment. GS1 Hong Kong will seize future opportunities with continuous innovations and constantly cultivate expertise exchanges with industry leaders, with One Code.

實體及電子世界交匯，電子商貿和流動商貿均發展迅速，香港的網絡銷售總額亦節節上升。這種新生的商貿模式，為傳統零售商帶來新的競爭平台。成功的零售商開始整合實體商舖之餘，亦主動開拓電子商機。

### 實體與網上世界的匯流點

根據凱捷管理顧問公司和香港貨品編碼協會最近進行的「你準備好了嗎？創造時刻上線和開放的購物體驗」調查<sup>1</sup>，所有零售商都十分重視全方位零售的發展，而制訂成功的全方位零售策略的四大條件分別是：網上產品資訊、大數據分析、倉存準確性及送貨安排。

為滿足消費者對全方位零售的強勁需求，業界必須採用統一標準，方能順利整合以上各項重要元素。過去二十年裡，香港貨品編碼協會推出多項服務，包括產品資訊存取平台BarcodePlus、供應鏈可視化及可追溯性方案縱橫網，以及倉存管理顧問服務等，協助企業成員應付這些重要的科技挑戰。

為了協助成員把握電子商貿的巨大商機，香港貨品編碼協會特別推出「電子商貿高速公路」計劃，內容包括電子商貿培訓、研討會及商貿配對服務，促進了本會成員、電子商貿供應商和科技供應商之間的合作，共同在全方位零售的浪潮中乘風破浪，揚帆前行。

隨著各種智能物品、裝置和機器的出現，我們對實體世界有了新的創見和掌控能力，實體和網上世界的界線已漸趨模糊，消費者亦因此得到更高的自主能力。香港貨品編碼協會將繼續推陳出新，把握未來機遇，並持續與業界翹楚交流，發揮條碼的無限潛能。

<sup>1</sup> [http://www.capgemini-consulting.com/resource-file-access/resource/pdf/are\\_you\\_ready\\_final\\_web\\_1.pdf](http://www.capgemini-consulting.com/resource-file-access/resource/pdf/are_you_ready_final_web_1.pdf)



## 25<sup>th</sup> Anniversary Special Series 25週年特別系列

# From Barcodes to Innovative Digitalization 創新數碼化 打從一個條碼開始



Barcodes, which are widely used in our daily life, originated from the United States during the 1940s. The world's first barcoded product was a 10-pack Wrigley's Juicy Fruit gum. Nowadays, consumers around the world can all hear the familiar beep of the GS1 barcodes. Every day, barcodes are scanned more than 6 billion times. In fact, each of these beeps marks a historic milestone, which includes the introduction of the first tracking and traceability solution based on the GS1 system of standards.

### Barcodes usage through the eras

Barcodes have become popular in Hong Kong since 1980s, and with the growing trend of barcode application, retail activities have been driven towards automation. In the 90s, the rise of the Internet technology and smart devices started changing the mode of business activities which are no longer limited to a physical location. Instead, consumers can conduct online shopping or product information search anywhere and anytime, through product barcode scanning with the support of smart devices. Such innovations have brought forth a more interactive and autonomous buying experience for consumers.

Now in the 21<sup>st</sup> century, the rapid developments of information technology, which have seen the launch of mobile applications as well as enhanced sensor technology, will be a dominating force in future electronic business models. Consumers, for example, can make use of Google Glass, a smart device, to command operations like "reading" product barcodes via voice control or the blink of an eye. Such a development will enable more consumers to instantly browse product information or conduct online shopping giving them a more personalized and interesting purchasing experience.

條碼，一個廣泛應用於日常生活的「標誌」，在40年前起源於美國，全球首個印有GS1條碼的商品，就是價值67仙美元的Wrigley黃箭10片裝香口膠。時至今天，全球的消費者都會聽到掃瞄GS1條碼的熟悉聲音，而現時每天掃瞄條碼的次數更超過60億次。其實，每一次掃瞄都代表著一個歷史性的時刻，這就是GS1國際標準系統中第一個追蹤及追溯的方案。



### 貫穿不同年代 條碼功不可沒

在香港，條碼於80年代普及化，零售活動隨著條碼的應用而轉趨自動化。90年代藉著網絡科技、智能裝置的興起，商業活動不再局限於實體店舖內發生，消費者可隨時隨地透過產品上的條碼及配合智能裝備，在線上購物或在網絡世界搜尋產品資訊，消費過程的互動及自主性大大提高。

到了21世紀，科技推陳出新，現時流動裝置、傳感技術的成熟發展，主宰著未來電子商貿的模式。例如消費者現已可以使用Google Glass智能眼鏡，以聲控或眨眼等操作指令「閱讀」產品條碼，即時瀏覽產品資訊或進行網上購物，令消費者的購買過程更添趣味、更個人化。

創新科技推動各行各業走向自動化的同時，亦衍生千變萬化的營運模式，使接觸客戶的途徑更廣更闊，將商業活動與顧客緊密連繫，令互相的關係更密切。但無論時代、科技如何轉變，始終源於一個條碼。條碼貫穿不同時期，均擔當舉足輕重的角色。



As innovative technology further drives automation in different industries, it also facilitates changing business models to help companies extend their reach to clients and the market. Through such technology innovations, businesses will be able to build a closer relationship with their clients, through an integration of business activities with the customers' agenda and interests. Regardless of the changing times and technologies, barcodes will remain a mainstay to help individuals and organizations to navigate around the changes and continue to play a vital role in commerce across different eras.

#### Global standards with a common voice

GS1, an international organization, has been formulating international standards and implementing solutions since 40 years ago. Adopting a unified international standard management model, it has developed an integrated system of global, open and multi-sectoral standards which allow companies to speak with "one language". Such a system provides accurate identification and communication of information on products, assets, services and locations along the entire supply chain.

GS1 Hong Kong was established in 1989, dedicated to promoting global supply chain management standards, application technology and best practices among local enterprises. GS1 Hong Kong is also the only organization authorized to issue and administer GS1 identification numbers in Hong Kong. In the early years of its inauguration, the organization had provided identification keys and barcodes as a global commercial language, incorporating the supply chain standards of different industries. Companies can make use of GS1 Global Trade Item numbers to identify any trade items, assets and locations in their business contexts. Such information can be transmitted electronically, helping supply-chain stakeholders to reduce inventory holdings, eliminate out-of-stock situations and speed up delivery time significantly, thus enabling companies to save costs while enjoying higher productivity.

Since the rise of the global information network in the 1990s, the Internet has seen its popularity soaring. This globalization trend of globalization has prompted companies to reflect on and adopt more efficient ways to conduct business transactions, along with automated communication to expand their global business reach. In light of these developments, GS1 Hong Kong has introduced ezTRADE, an electronic data interchange platform, and Global Network for Data Synchronization, both of which are designed to help achieve a more efficient and accurate exchange of commercial data to achieve a



#### 統一標準 共同語言

國際組織GS1早於40年前開始訂定國際標準和推動解決方案的應用，以統一的國際標準管理模式，發展成全球通用、開放及跨業界的綜合標準，讓企業能共通「語言」，更準確地識別並清晰地傳遞供應鏈上各項貨品、資源、服務及位置的資料。

GS1 Hong Kong(下稱協會)於1989年成立，一直致力提供全球通用的供應鏈管理標準、應用技術及實務守則。協會亦是香港唯一獲認可簽發及管理GS1國際貿易貨品條碼的機構。早年，協會已提供識別碼及條碼作為全球性商業語言，並涵蓋不同行業的供應鏈標準。企業可透過GS1 國際貿易貨品條碼去識別不同貨品、資產和位置，並以電子方式傳送有關訊息，大大減少庫存、舒緩缺貨情況和縮短送貨時間，令企業節省成本的同時，亦能提高生產力。

自90年代初全球資訊網的興起，互聯網的應用迅速發展，全球化趨勢促使企業思考如何更有效率地進行商業交易和推動自動化通訊，以擴展其國際業務。協會便引入了「通商易」電子交易訊息交換平台及「全球數據同步網絡」，以進行更快、更具準確性的商業數據交換，確保企業在進行“B2B”貿易時，能制訂完善的商業交易框架和規則。

與此同時，全球營商環境瞬息萬變，掌握實時而高透明度的供應鏈資訊成為現今企業成功不可或缺的元素。因此協會於2008年開發「縱橫網」的資訊平台，讓企業可以由源頭至最終目的地，有效地作出點對點的貨品資料追蹤和追溯。「縱橫網」兼容不同的技術，透過結合多個實時追蹤解決方案，讓企業能即時獲取關鍵性的數據及資料，以作更好的產品規劃和品質管理，迅速回應市場的需求及提升顧客滿意度。

comprehensive and effective commercial transaction framework as well as best practices for companies to conduct B2B transactions.

In the ever-changing global business environment, increasingly more companies have realized that real-time, highly visible supply chain information is critical to business success. In view of this, GS1 Hong Kong developed an ezTRACK information platform in 2008, which allows enterprises to track and trace the information flow of goods from manufacturer to destination. Furthermore, ezTRACK is compatible with different technologies. By combining a number of real time traceability solutions, this platform enables enterprises to retrieve critical data and information instantly and helps them improve product planning and quality management, in quick response to market demands to elicit higher customer satisfaction.

#### New milestones in digitalization

Over the recent years, with the rising popularity of online social platform and mobile applications, GS1 Hong Kong has continued to develop new innovations, including a novel mobile application called "Consumer Connect" to bring barcode technology to local SMEs and even make it personalized. This application is leading the way for consumers to move from packaging barcodes to a much larger electronic world where they can download up-to-date, accurate product information from suppliers, for better quality assurance.

In the foreseeable future, people, items, logistics and data will be more closely interconnected with the Internet. The Internet of Things (IoT), as this integration technology is called, will be creatively combined with cloud technology and big data analytics to foster a closer network of interconnected objects and add value to different aspects of business and life. The value that IoT promises to bring to individuals, communities, enterprises and cities everywhere will yield even more innovative initiatives and unrivaled economic opportunities to be tapped.



#### 創新數碼化新里程

近年，網上社交平台 and 流動應用程式愈來愈普及，協會亦不斷創新，推出嶄新的流動應用程式「物密啲」，銳意將條碼科技帶進本地中、小企業甚至將之個人化，帶領消費者從印刷於包裝上的條碼進入數碼世界，可以主動取得由供應商所上載的產品資訊，確保消費者可獲取最新、最可靠的資訊。

在不久的將來，無論是人、物件、流程和數據等都將會受到互聯網的緊密連繫。加上物聯網、雲端科技和大數據這些單位的結合，這將使網絡連接變得更有關連、更有價值，也將為個人、社群、企業和城市帶來更創新的動力和前所未有的經濟發展機遇。





# Internet of Things Steering Towards Smarter Living 物聯網 引領未來智慧生活

Over the recent years, Internet usage has diversified with the latest developments in mobile computing, cloud technology, big data and other mobile applications. Another new innovation to capitalize on the web is the Internet of Things (IoT), which has become a hot topic, given the immense benefits and possibilities it will bring. In short, IoT is a network of physical objects being connected through the Internet. This network can also identify, position, trace, monitor and manage smart objects. Through sensing technologies and devices, such as Radio Frequency Identification (RFID), infra-red sensor, Bluetooth and Global Positioning System, it is now possible to turn things into smart objects. According to a forecast by Forrester, a U.S. research institute, the global revenues from IoT will be 30 times higher than the Internet. IoT will also create a high-tech market of a much larger scale than now. Against this backdrop, every country and industry sector has come to consider IoT as a fundamental technology network which will drastically affect global supply chain and commercial trade in the next 10 years.

## IoT protocols developed from industry-academia partnership

Back in 1999, the Auto-ID Centre at the Massachusetts Institute of Technology (MIT) of the United States commenced a research project on integrating the Internet with RFID technology such that it can automatically identify any object along the supply chain. The study finally resulted in a set of solutions based on a coding system, low cost passive RFID tags and a network of exchangeable supply chain data. In 2003, the research outcome was submitted to GS1 organization, which later formed EPCglobal Inc. to develop and drive the adoption of Electronic Product Code (EPC) standards towards global application. Using these standards, enterprises can make use of EPCglobal network to share information and data including the location of a product and its status. Subsequently, six other renowned universities joined in the research and collectively formed the Auto-ID Lab.

近年，互聯網的應用隨著移動計算、雲端科技、大數據和手機應用程式的成熟發展而變得更多元化，而「物聯網」亦成為了新一代互聯網發展的熱話。物聯網是指物件與物件之間相連的互聯網，亦是識別、定位、追蹤、監控和管理物件的一種網絡。通過無線射頻識別 (RFID)、紅外線感應器、藍芽、全球定位系統等訊息傳感設備和技術，我們可以將身邊的物件智能化，使它們能自動進行通訊。根據美國研究機構 Forrester 預測，物聯網所帶動的產值將會比互聯網大30倍，並衍生更大規模的高科技市場。因此，各個國家、各行業均一致視物聯網為影響未來10年全球供應鏈及商貿往來的主要科技網絡。

## 業界學界共同創造物聯網雛型

其實早於1999年，美國麻省理工學院自動識別技術中心(Auto-ID Centre)開始研究將互聯網及RFID技術結合，使裝置可以自動識別供應鏈上的物件。該研究項目最終得出一套解決方案，當中主要由一個編碼體系、低成本的被動式RFID標籤及交換供應鏈數據的網絡組成。直至2003年，該研究成果交予GS1組織，隨後GS1亦成立了EPCglobal Inc.，以發展及推動業界採納全球適用的產品電子代碼標準，使企業能夠透過EPCglobal網絡，分享產品的位置及狀態等資訊及數據。其後，6所國際知名大學也陸續加入該研究行列，並共同建立自動識別技術實驗室。

於2007年，EPCglobal網絡中的產品電子代碼訊息服務標準正式發佈。該標準是以互聯網為骨幹及開放的介面，支援資訊分享，讓數據系統能夠互連互通，令企業間可以接收

In 2007, the standards of the EPC Information Services (EPCIS), developed on the basis of the EPCglobal network, were formally released. These standards, with the Internet as the backbone and an open interface, support information sharing and allow the interoperability and integration of different data systems. Enterprises are therefore enabled to receive and transmit data in relation to the location and status of their products. As the interface format of EPCIS is built on the standards of the Internet, enterprises can save substantial cost on developing the network infrastructure. Adoption of EPCIS standards also facilitates a more efficient internal capture and sharing of data, while enabling enterprises to share information on the movement of goods under a secured environment. EPCIS is currently the only set of globally visible supply chain standards which allows traceability of the product flow, production and transport logistics monitoring as well as warehouse and assets management.

Hong Kong is a pioneer in driving the adoption of EPCIS standards to trace and track products. The EPCIS network infrastructure provided by GS1 Hong Kong supports application of different IoTs and the EPCIS network in Hong Kong is capable of connection and extension to other regions and countries, including China, Taiwan, Japan, Malaysia, Italy, Germany, the United States, Australia and New Zealand. Utilizing this network, GS1 Hong Kong aims to drive and realize global product traceability.

IoT can be applied in three primary areas to generate enormous value for businesses and the community:

**1. Traceability** – Traceability is one of IoT's key functions, enabling manufacturers and retailers to fully monitor the supply chain, trace product flows from manufacturing to point of sales, while making it possible for the various stakeholders to retrieve relevant information through the course of a transaction. By increasing visibility throughout the supply chain, IoT application is not only conducive to helping businesses achieve a higher operational efficiency, but also promoting trade and the quality of consumer products further, including perishable food and temperature-sensitive pharmaceutical items, the quality of which must be consistently maintained through the supply-chain flow to ensure their consumption safety. All these benefits from IoT add up to an enhanced shopping experience for consumers. Locally, one of the large-scale applications of EPC standards is the baggage management system at the Hong Kong International Airport. The Airport Authority currently adopts EPC RFID tags (EPC UHF

及傳送與產品相關的位置及狀態等數據。由於EPCIS的介面規格是建基於互聯網標準，因此企業可以大幅減省網絡基建成本。採用EPCIS標準也能令內部更有效率地擷取和分享數據，並確保企業能在安全情況下與外界分享產品流向資訊。而EPCIS是現今唯一的全球性供應鏈透明度標準，有助追溯物件流向、監控生產及運輸流程、管理庫存和資產等。

香港是推動採納EPCIS標準進行追蹤追溯的先驅。香港貨品編碼協會(下稱協會)所提供的EPCIS網絡基建正支援不同的物聯網應用，而香港的EPCIS網絡亦連接及延伸至其他的經濟體系，包括中國、台灣、日本、馬來西亞、意大利、德國、美國、澳洲及新西蘭，以推動並實現全球性的產品追溯。

物聯網的應用主要分為3個範疇，為社會帶來龐大的商業價值，包括：

**(一) 追溯性：**物件追蹤是物聯網科技的其中一個功能。透過物聯網，生產及零售商可以作全面的供應鏈監控、追蹤產品從生產點到銷售點的流程，並擷取貿易過程中的相關資訊。提升供應鏈透明度除了可以提升營運效率、促進貿易，同時亦能有效地確保所有消費品，尤其食品及藥物等的質量，讓品牌商為顧客帶來稱心滿意的消費體驗。而其中一個大規模的EPC標準應用就是香港機場的行李管理系統。現時，香港機場管理局正採用EPC RFID標籤(EPC UHF Gen2)，每天處理數以萬計的旅客行李運輸。

**(二) 流動性：**流動應用產業的發展迅速，市面上出現愈來愈多的智能設備、傳感器、控制器等，大眾因而對應用程式的需求大增，以操控及追蹤這些設備。智能設備不但將物件與互聯網連接，更連繫每一位消費者。當有了這些物聯網的流動裝置，品牌商和零售商便可輕易地與顧客直接聯繫。而生活中最常見的應用，就是消費者只要透過隨手可得智能裝置掃描產品上的條碼，便可取得在包裝以外的產品功能和各項具創意的資訊，甚至可以即時進行產品保養登記、享有促銷優惠、或透過獲取其銷售狀態及是否授權在當地市場銷售等訊息驗證貨品的真偽。種種的資訊能夠提升品牌信譽之外，亦可讓消費者安心購物。





Gen2) to handle millions of travellers' luggage items passing through the airport each day.

**2. Mobility** – Mobile applications have developed so rapidly that the general public, particularly businesses and consumers, are expecting smart devices and sensors to be capable of controlling and tracing all kinds of other devices and equipment. This is because smart devices, as many people realize, are not only able to connect objects via the Internet but also connect to each consumer. When consumers are equipped with mobile devices and applications, they can be easily connected with brand-owners and retailers using IoT technology. A common example of such application is product barcode scanning with smartphones carried out by consumers all over the world daily, to call up additional information of products not indicated on packaging labels. More than this, they can use the same means for product warranty registration, to take advantage of discounts and other promotional offers as well as verify the validity of products to find out their sales status and whether they are authorized for retail in a particular market. If made readily accessible to consumers, all such information can further consolidate the brand's reputation and offer customers the quality assurance they need to buy a products with peace of mind.

**3. Big data** – Due to IoT's ability to facilitate the traceability of product or assets in transit, it can be used to harvest massive data, of which a significant proportion will be unique product barcodes called Global Trade Item Number (GTIN). Electronic network retailers can analyze the data collected to effectively formulate more targeted and value-added business and sales strategies.

#### Uplifting efficiencies in diversified areas with industry collaboration

GS1 Hong Kong plays an active role in pushing for the wider adoption of IoT and developing IoT-related applications. Every year, the organization hosts and promotes large scale campaigns for the above-mentioned purposes. These include hosting the Hong Kong IoT conference, with more than 450 guests in attendance recently. This conference aims to foster interaction among local and overseas practitioners as well as to encourage sharing of IoT development and application experience. GS1 Hong Kong also organizes the "Hong Kong Internet of Things Awards," an annual event dating back to 2008, to recognize the achievements and creativity of industry and academia, behind the business and non-commercial applications of IoT technology locally. This year, more than 100 entries have been received from various participating organizations and students. In 2013, GS1 Hong Kong was granted funding by the Hong Kong SAR Government to develop and manage the Hong Kong Internet of Things

Centre of Excellence at the Hong Kong Science Park. This Centre provides the industry and the general public with the opportunities to experience.

For the past 25 years, GS1 Hong Kong has been providing professional consultancy and advice to local enterprises on supply-chain technology application, including IoT expertise, culminating in numerous business and operational breakthroughs. The organization will maintain the leadership position of Hong Kong in IoT development and realize the community's vision to become a smart city.



**(三) 大數據：物聯網的追溯能力可衍生龐大的數據。在一個大數據池當中佔最大部份的必定是獨特的產品條碼(國際貨品編碼, GTIN)。電子網絡零售商可將所收集的銷售數據加以分析，從而有效地訂立更有價值的商業及銷售策略。**

#### 全民協作 開創多元效益

協會在推動物聯網科技的普及和發展亦不遺餘力，協會每年均積極推動有關物聯網的大型活動，如舉辦吸引超過450名與會者的「香港物聯網會議」，促進本地和海外業內人士的交流及探討相關科技的發展及應用經驗。此外，協會自2008年起舉辦「香港物聯網大獎」，藉以彰顯業界和學界在物聯網科技上的成就和創作精神，為未來本土科技發展出一分力，而今年共收到超過100個來自不同機構及學生的參賽項目。協會亦於2013年獲香港特別行政區政府撥款資助，成立及管理位於香港科學園的「香港物聯網科技應用中心」，讓業界及公眾人士親身體驗物聯網如何體現智能商貿、智慧生活。

隨著物聯網科技日趨普及，物聯網的應用在不同行業和市民的生活中隨處可見，從物流到智能商貿、家居和交通等等，為整個社會帶來龐大的價值。在過去25年，協會也為眾多本地企業提供物聯網技術應用的專業意見，締造無數成就與經濟效益。我們將繼往開來，與業界共同鞏固香港於物聯網發展的領導地位，實現智慧香港的願景！

## Supply Chain Transparency Opens Up Global Business Opportunities 供應鏈透明度 打開環球商貿新契機

Supply chain visibility refers to the complete mastery of information, such as the transmission of product orders, transportation conditions and logistics activities, by the various stakeholders in a supply chain. The operations of a supply chain and its responsiveness to change and contingency are closely related to market supply and demand conditions. Along with a drastic increase in logistics transactions and trading partners around the world, better coordination of product, information and capital flows is necessary to support the needs and demands within the supply chain.

#### Real-time product tracking for uplifting chain visibility

Electronic Product Code Information Services (EPCIS) is a leading management standard for global supply chains, capable of identifying, retrieving, storing and distributing all logistics data. It is also a critical link in GS1 international supply chain standards. Leveraging on EPCIS, GS1 Hong Kong has created an ezTRACK platform, where businesses can monitor the entire supply-chain flow in real time, obtain updated information about cargo movements and increase supply-chain transparency. Through these functions, companies can uplift their administration and planning efficiencies, improve operational flows and achieve savings in operational cost. This accounts for the increasingly prevalent adoption of this platform across various industries, including food, retail, medical care and logistics.

Manufacturers, wholesalers and retailers can use the international barcode system and cloud technologies to obtain supply chain data instantly to enhance efficiency and respond to the changing market needs accordingly. The data can be used to support implementation of production schedules, stock procurement and products receiving, picking and delivery with greater cost efficiency. Similarly, it can be used to improve inventory and stocktaking procedures and retail operations. Such a system can also provide accurate sales data for businesses to understand customer needs better and avoid out-of-stock situations.

供應鏈透明度是指供應鏈內相關人士針對資訊內的完整掌控，包括訂貨單的傳送、運輸狀況、物流活動的資訊等，而供應鏈的運作及反應能力與市場的供應需求有密切的關係。隨著全球各地區的物流和貿易夥伴數目大幅增加，產品、資訊及資金的流向必須有良好的協調，以支援供應鏈內的需求。



#### 條碼實時追蹤貨品 全面提升供應鏈透明度

產品電子代碼訊息服務是領先的全球供應鏈管理標準，可自動識別、擷取、儲存及發佈所有物流數據，是GS1國際供應鏈標準的重要一環。香港貨品編碼協會(下稱協會)利用EPCIS，建立供應鏈管理方案「縱橫網」，透過這個節省成本的雲端平台，企業能實時監督整個物流過程、掌握貨物流向資訊及增加供應鏈的透明度，從而提升行政和規劃效率、改善營運流程和節省成本開支。故此，現時已廣泛應用於各行各業，包括食品、零售、醫護及物流業等。

不論製造商、批發商，以至零售商，均可運用國際標準的條碼系統配合雲端技術，即時獲取供應鏈數據，提升效率及回應市場需要。對製造商而言，可即時取得生產進度及銷售數據，以制訂生產日程；批發商則能透過條碼系統，迅速而準確地進行採購、收貨、選貨及發貨，改善倉存及盤點流程；而在零售商層面，系統能提供準確的銷售數據，幫助了解消費者需求，減低缺貨機會，對整體營運有莫大幫助。



### Tracing the origins of wine products

Given the extensive public concerns over food quality and safety, the application of globalized standards will be useful in helping businesses and customers to easily track food origins and gather other key information. GS1 Hong Kong has collaborated with DCH Logistics Company Limited to facilitate better management of wine quality, from warehouse to dining table. Under this initiative, customers can also use applications they can download on their smartphones to scan the barcode on wine bottles for access to real-time information of the wine products.

In order to extend this service to the global wine market, GS1 Hong Kong and GS1 Italy worked together in 2011 to promote a traceability project for wine products. The project has since successfully improved the real-time visibility of wine products in transit around the world. Because of this, communication between businesses and overseas suppliers has been strengthened, to ensure timely product delivery with information sharing along the supply chain greatly facilitated.

### Real-time temperature monitoring to ensure consumption safety of food and pharmaceuticals

Perishable food and temperature-sensitive pharmaceuticals are easily affected by their storage conditions. Shipping these products require a quality cold-chain process to monitor critical information, such as humidity and temperature levels and location. Contingencies or errors in temperature records occurring along the way will not only affect product quality, but also endanger the health of consumers and damage the brand reputations of the products.

GS1 has provided a simple and accurate real-time temperature monitoring system to uplift cold-chain management efficiency, strengthen consumer trust, reduce wastage and prevent loss of business opportunities due to stock shortage.

### New standard for apparel industry facilitates interactions with consumers

The traceability system of the supply chain is widely employed by the apparel industry. Currently, some major retailers require suppliers to adopt RFID tags to support comprehensive product quality supervision by manufacturers and logistics providers using ezTRACK. Garment retailers can also conduct stocktaking in their shops, hence saving substantial resources and increasing operational efficiency.

### 品味香醇葡萄酒 追蹤追溯真源頭

鑒於普羅大眾愈來愈注重食品質素及安全，國際化標準的應用可讓企業以至顧客輕易追查食品來源及關鍵資料。協會曾與大昌行物流有限公司協作，管理葡萄酒從倉庫至餐桌的品質。顧客可透過智慧手機應用程式，簡單掃描酒樽上的條碼，即時了解該葡萄酒的詳細資料，提升產品可信性及加強顧客信心。

為了將該服務延伸至全球葡萄酒貿易，協會與GS1意大利分會於2011年合作推動酒類產品追溯計劃，透過協會的「縱橫網」，意大利葡萄園及釀酒廠成功地提升全球性實時產品付運狀況的透明度，藉此改善了企業與海外採購商的連繫，確保貨物準時付運，大大提升供應鏈資訊的流通性。

### 實時溫度數據追查 食品及藥物至安心

食品或藥物容易受儲存環境的影響而變質，付運這些貨物必須有良好的冷凍鏈監控流程，偵察其濕度、溫度及位置等資料，以確保產品質素及安全性。假若冷凍鏈上發生事故，或溫度紀錄出錯，不但會對產品質素造成影響，更會損害消費者的健康及破壞品牌的信譽。

透過一個簡單、準確及具成本效益的實時溫度監控系統，GS1為物流業提供超卓的供應鏈透明度。不管是供應商、製造商或物流服務供應商，有效地管理冷凍鏈對提升消費者忠誠度及減少浪費資源攸關重要，同時避免導致缺貨或錯失商機。

### 成衣製造新標準 消費者互動更貼心

供應鏈的追溯系統亦獲成衣業廣泛採用，現時，一些主要的零售商已要求供應商於所有成衣產品，標上無線射頻識別標籤，製造商及物流供應商可透過「縱橫網」，作出全面的產品監控。成衣零售商則可於店內盤點時節省大量資源，提升營運效率。

V-MODA, a US company specializing in audio products, has attached unique tracking labels on their product packages and use the Cloud platform to gather information such as product locations, times and users, to achieve a higher supply chain visibility. Consumers can also use mobile applications for online warranty registrations and obtain the latest product retail information. By increasing the visibility of their sales and distribution channels, retailers are better placed to combat counterfeiting effectively.

### GS1 standards provide better global delivery solutions

GS1 Hong Kong has actively implemented regional and global delivery solutions to enhance cross-border supply chain visibility and the efficiency of global delivery. To overcome obstacles in cross-border supply chain visibility, the organization collaborated with the Asia Pacific Economic Cooperation (APEC) in 2012 on a project to review industry demands from Hong Kong, mainland China and Asia and carry out feasibility studies on supply chain visibility in the region. Through the EPCIS network, a study was undertaken to look into the implementation of a cross-border supply chain visibility platform, with the aim of achieving transparency in information about product flows across different territories.

At global implementation level, the EPCIS infrastructure has become the application standard for the Common Assessment and Analysis of Risk in Global Supply Chains (CASSANDRA) formed by the European Commission. Online data collection and sharing information has been greatly facilitated by this open, flexible and standardized platform. The system can also filter the tracked data of business and cargo container automatically captured, for trading partners and governments to review their supply chain operations and security risks, thereby resolving the past problems of different trading partners being offered access to limited data along the supply chain. The application of EPCIS in this project has elevated the operational performance of supply chains and the safety of data exchanges.

### Traceability opens a new era in supply chain management

For many years, GS1 Hong Kong has dedicated itself to providing different industries and enterprises with solutions for tracking product origins and improving product quality assurance. In the modern world where efficiency, safety and consumer trust rank as the top priorities, the organization will continue to cater to different business needs and develop more diversified solutions for various industries, so as to establish a higher level of supply chain transparency.

美國音響用品零售商V-MODA將獨特的追蹤標籤貼於產品包裝盒上，並利用供應鏈透明度的雲端平台擷取產品資訊，以收集產品的位置、時間及擁有者等資料。消費者可使用手機應用程式進行保養登記，並取得產品的最新資訊。透過提高銷售市場及各分銷渠道的透明度，零售商有效打擊偽造產品。

### GS1標準為全球貨運方案

協會亦積極參與制訂地區以至環球的貨運解決方案研究，以協助提升跨境供應鏈透明度及全球貨運效率。協會於2012年與亞太經合組織開展供應鏈透明化項目，就香港、內地及亞洲在供應鏈透明化的行業要求及可行性進行研究，以解決跨境供應鏈透明化的障礙。項目透過GS1的產品電子代碼訊息服務(EPCIS)網絡，研究推行高效跨境供應鏈透明化平台，令地區之間的貨品流向資訊透明化。

至於環球的應用，EPCIS亦成為歐盟「全球供應鏈風險評估與分析計劃」的應用標準。產品電子代碼訊息服務架構在虛擬資訊管道協助參與方擷取資料，令數據可在開放、具彈性及標準化的格式中互相傳遞並分享，系統亦會自動篩選出追蹤業務與貨櫃箱的數據，方便貿易夥伴及各地政府評估供應鏈運作及保安風險，以解決以往不同貿易夥伴只能掌握整條供應鏈部分資料的弊病，從而提升運作表現及訊息交換的安全。

### 追蹤追溯 開創供應鏈新紀元

一直以來，協會為滿足不同企業或機構在追溯貨源、保障品質方面提供貼身解決方案。在講求效率、安全和顧客信任的現代商業社會中，協會將繼續配合不同企業的需要，提供完善追蹤及追溯貨品方案，開拓更多元化的行業應用，創建高透明度的供應鏈。

Transparent Supply Chain



# Omni-channel Retailing Unlocks Business Success In the Digital Age

## 新世代營銷 全渠道零售成為致勝關鍵

As technology advances, consumers have increasingly turned to computers, smart phones or mobile tablets to browse product information on the internet or do online shopping, at any time and place. The emergence of more marketing channels, both online and off, has created greater business potential for the retail market. With omni-channel retailing fast emerging as the latest trend, the focus is on providing a seamless approach to unify customer experience through all available platforms, from physical stores to virtual malls.

### Integrating online and offline shopping

Omni-channel retailing entails the integration of the various sales channels, including all customer touchpoints such as physical stores, online shops, mobile applications and other mediums like websites, social networking sites and instant messengers. By unifying product information and data, customers will be able to enjoy a retail experience that seamlessly combine shopping, browsing, leisure and social networking, to their satisfaction.

In addition, modern consumers tend to browse product information or compare prices on the Internet before making purchase decisions. With the implementation of omni-channel retailing, customers can enjoy a unified shopping experience, be they at a physical store or an online shop, which in turn brings a vastly improved sales performance for retailers. On the contrary, if the shopping experience through different channels cannot be centralised, unpleasant situations are likely to occur, such as pricing discrepancies of products sold on different platforms or confusion over the return of products. As a result, consumer sentiments might be dampened and brand reputations represented by the products in question could be undermined.

According to a report released by Capgemini Consulting and GS1 US in May 2014, the four critical components required to help drive a successful omni-channel strategy are inventory visibility, web-ready products, predictive customer analytics and fulfillment strategy.

隨著科技進步，愈來愈多消費者透過電腦、智能手機或平板電腦等裝置，隨時隨地瀏覽產品資訊或進行網上購物，零售市場在種種不同營銷渠道的相輔相成下，發展空間更遼闊。若要從以往的實體店延伸到不同的平台進行銷售，零售商必須準備充足，在各平台上統一顧客的購物體驗，因此全方位零售成了近年營銷的新趨勢。

### 整合線上線下消費者

全方位零售是指零售商為眾多銷售渠道進行整合，包括實體商店、網上商店、手機應用程式，以至訊息媒介，如網站、社交網站及通訊程式等每一個與消費者的接觸點，統一所有的產品資料及數據，以滿足消費者在購物、搜尋、消閑，以至社交等各方面的綜合體驗。

現時消費者在購物前，都傾向先於網上了解產品或比較價格，若零售商能通過全方位零售模式呈現產品，通過實體店和網站給予客戶相同的購物體驗，對營銷表現有莫大幫助；反之，若不同渠道的購物體驗不能統一，如價錢在不同平台上不一樣、庫存不能在不同銷售渠道上即時協調，或退貨回應混亂等，均會影響消費意慾，甚至影響品牌信譽。凱捷管理顧問公司與GS1美國於今年五月發佈一份有關全方位零售策略的研究報告，總結四大致勝元素，當中包括產品上線、消費者大數據分析、配送管理及庫存透明度。

Integrating  
Online and Offline



### 1) Expanding e-commerce market with more web-ready products

The growing trend of omni-channel retailing has prompted an increasing consumer demand for information of products and services. Customers are looking for complete, reliable, real time and high quality information or images. According to market research, over 70 per cent of consumers pay greater attention to the credibility of such information provided. Apart from product price and country of origin, they also want to learn more about the products they consider buying through information such as nutrient content, expiry date, product authenticity, brand, background of manufacturer, discount offers and so on.

For instance, consumers can use a mobile application developed by GS1 Hong Kong to scan the barcode to read product information uploaded by suppliers. With more ample and accurate information provided, consumers' needs for product knowledge are likely to be satisfied, thus making it easier for purchase transactions to be concluded. Furthermore, the entire sales process can be conducted more effectively as consumers are offered peace of mind when purchasing products because their countries of origin can now be tracked, authenticity can be verified and maintenance can be registered on the mobile app.

### 2) Consumption data analytics to drive sales strategies

Just by using a barcode (Global Trade Item Number, GTIN), retailers can collect and utilize consumption data to analyze consumers' past shopping habits in order to predict their future needs. As both online and offline sales channels become more diversified, so have data mined for analytic purposes become more varied and complex too. Presently, enterprises are investing resources to collect consumption data. Data mining can be automatically carried out as each of their products is registered with a unique barcode, a GTIN that helps monitor the sales performance and other details, such as customers' spending patterns. Internet giant Google has filed a number of patent applications to use GTIN as a tool to provide instant product search online and collect consumption data for analysis. Other e-business platforms such as Amazon, Alibaba and Tmall.com are also using GTIN as a primary search standard for online products.

### 3) Achieving a higher sales performance with distribution management revamp

Consumers' needs will be satisfied when their experiences of shopping, payment and product access are seamlessly integrated and smoothly executed. To achieve this, online retailers need to have a cost-effective route plan and real tracking system to monitor the

### 1) 產品上線 開拓電子商貿市場

消費者對產品資訊在全方位零售的趨勢下，消費者對產品及服務資訊的需求亦大大提高，他們要求取得完整、可靠、實時和高質素的資料或圖片。有市場調查顯示，超過七成消費者重視產品資訊的可信性，除了產品售價及來源地等主要資訊外，亦希望了解產品的營養成分、過期日、正貨認證、公司品牌和生產商背景，以及折扣優惠等額外資料。

舉例來說，消費者可利用由香港貨品編碼協會開發的手機應用程式，透過掃描產品上的條碼，便可取得由供應商上載的產品資訊，令產品資訊更豐富準確，滿足消費者的需要，促使交易達成，令整個銷售過程更高效，甚至可追溯產品來源、鑑定真偽和登記維修保養等，令他們選購產品時更安心。

### 2) 分析消費大數據 訂定銷售策略

透過獨特的產品條碼（即國際貨品編碼，GTIN），零售商可以收集及利用所取得的消費數據，分析顧客過去的購物習慣，以預測他們的未來需要。由於線上線下的銷售渠道變得多元化，分析數據比以前更為重要，但亦比以前更為複雜。現時，不少企業均投放更多的資源於擷取有用的消費數據上，並將每件產品配上獨特條碼 GTIN，以監察產品的銷售情況。互聯網巨頭Google已提交一系列的專利申請，希望採用GTIN作為消費分析工具。電商平台如亞馬遜、阿里巴巴及天貓等亦相繼採用GTIN為網上產品搜尋標準。

### 3) 完善配送管理 助高效營銷

得到一致的購物、付款及產品配送體驗，才能夠滿足消費者的需求。要做到這點，網商必須計劃最具成本效益的配送路線，並實時追蹤產品的交付狀態。著名寢室用品品牌雅芳婷就是一個成功的例子，以往一直以傳統的供應鏈





entire sales process including delivery status, for instance. One recent example in this regard is the adoption of GS1's global tracking system by the renowned bedding expert A-Fontane to modernise its supply chain and enhance its inventory management. In fact, A-Fontane's entire supply chain has been revamped to improve the distribution flow of its products, from procurement to final delivery stage. Apart from helping the Group to save operation cost, the initiative has also laid a solid foundation for expansion into omni-channel retailing.

#### 4) Real time transparency for better inventory management

Accuracy of inventory management can contribute to a unified shopping experience for consumers in omni-channel retailing. By adopting EPC-enabled RFID technology, retailers can monitor their inventory status and movements and track the location of products to improve inventory management. In order to sell the right products on different platforms and make correct inventory evaluations, many retailers have started using barcodes to manage all their product information and data collected from all the sales channels. Subsequently, sales data generated by the barcodes will be analysed and based on the outcomes, stock inventories can be assessed and managed more quickly. Moreover, this will satisfy consumers' need for product knowledge as they can now obtain reliable product information in real time.

Inventory tracking systems have been put to good use in the apparel industry, where a lot of retailers has adopted Item-Level Tagging (ILT) solutions to further consolidate the efficiency and success of their omni-channel retailing efforts. By using both EPC and RFID techniques, manufacturers and retailers can accurately identify each piece of garment and enhance its traceability to achieve a high level of efficiency in inventory management and stocktaking. Famous fashion brands in the west, such as M&S, Zara, C&A and the U.S. department chain store Macy's have been using the ILT RFID labeling technology of GS1 to monitor the sales of their fashion products, right down to size and style, to avoid excess inventory or out-of-stock situations.

#### GS1 standards are fundamental to omni-channel retailing success

The retail sector is confronted by great changes and hence, challenges due to the advent new technologies impacting conventional sales channels and selling methods. If online retailers are able to collect and manage supply chain and sales data, based on globally accepted standards, to integrate the shopping experience for consumers across online and offline stores, they will then gain a substantial competitive edge over others in the face of changing market needs.

模式營運，但該公司適時引入GS1的全球可追溯性標準及應用技術，強化庫存管理，令整個供應鏈由生產到零售實現現代化模式，以達到完善的配送流程。除了節省營運成本外，亦為擴展全方位零售建立良好的基礎。

#### 4) 實時透明度 提升庫存管理

若零售商要為消費者提供統一的全方位零售購物體驗，庫存管理的準確度是關鍵之一。透過採納以產品電子代碼(EPC)為標準的RFID技術，零售商可監察庫存及追蹤產品的位置，以作妥善的倉存管理。為達到在不同銷售平台出售合適的商品，並拿捏準確存貨量，不少零售商已透過應用GS1國際標準條碼，管理所有銷售渠道的產品資訊及數據，除有助迅速分析銷售數據及協調庫存外，亦可讓消費者在不同的銷售渠道上獲得即時、一致及準確無誤的產品資料，滿足消費者的需要。

就成衣業為例，為求進一步協助零售商成功實行全方位零售，不少零售商透過單件貨品標籤(ILT)方案，利用電子產品代碼(EPC)配合無線射頻識別(RFID)技術，準確識別每一件成衣產品，並增加產品的可追溯性，以提高庫存管理及盤點的效率在歐美等地區眾多的時裝企業，時裝零售商如M&S、Zara和C&A及美國連鎖百貨公司Macy's等，亦採用GS1的單品RFID標籤技術，監控不同尺碼及款式的服裝的銷售情況，杜絕過量庫存或缺貨的情況。

#### GS1標準是全方位零售的關鍵

新科技正影響著產品的銷售渠道和銷售方式，令零售業面對巨大的轉變。從傳統到數碼零售，全方位零售亦為整個行業創造新的挑戰。若果網售商能夠採納國際標準收集及管理大數據，結合實體店及網店的購物體驗，定必可在千變萬化的市場中取得強大的競爭優勢！



## Product Barcodes Have Ushered in Era of Big Data Analytics in Consumer Spending 產品條碼 啟動消費大數據分析年代

Competition in the retail market is growing in intensity. As such, retailers are looking for ways to get ahead of their competitors. If a perfect solution exists, it would be one that enables them to understand customers' expectations better and address these needs in advance. Ideally, it should also help generate additional sales while helping retailers reduce their supply chain and inventory cost. Gaining popularity as a business tool in the recent years, big data analytics have enabled retailers to gain early market insights through the collection of vast, rapidly changing data to generate strategic information. Such data can help businesses to improve their overall operations in alignment with market needs. Therefore, big data analytics have become instrumental to business success and GS1 barcodes, which can be used to mine data from the entire supply-chain and sales process, have become an equally vital tool to tap market opportunities.

#### Helping companies to improve businesses performance in various ways

Big data analytics refers to the practice of gathering market and consumption data through different channels, then using the information for quick analysis and forecasting purpose, with the aid of technology. The objective is to find information, market trends and opportunities of strategic value and help businesses acquire early insights into market needs so they could respond to them swiftly. Presently, big data application is undertaken in the retail sector for business and operational improvements in the following areas:

##### 1) Optimizing Market Strategy

Through real-time monitoring, retailers can obtain information at each point of sales to deepen their insights into the sales generated for each product type and the spending patterns of customers. This can enable the retailers to grasp market conditions and predict future needs with greater accuracy, so as to avoid out-of-stock and excess inventory situations.

零售業的競爭愈來愈大，所有零售商都在尋找能突圍而出的方法，若有辦法解讀顧客的需要，在他們尋找產品或服務之前，洞悉先機，提供所需，既可令銷售額增加，又可減低供應鏈及庫存成本。近年炙手可熱的大數據分析，便是透過收集及解讀大量、多變而高速的數據，從中發掘有用的資訊，令企業可早著先機，以配合市場或改善整體營運。因此，大數據對企業來說，絕對是通往成功的大門，而可用於採集整個供應及銷售流程數據的GS1條碼，便成為企業開啟此大門之匙。

#### 多方面協助改善企業表現

所謂大數據分析，是指從不同渠道中收集市場及消費數據，通過技術進行快速分析及預測，尋找出有價值的資訊、市場趨勢及商機，令企業可及早洞悉顧客需要，更快回應市場。現時大數據於零售市場的應用，可以改善以下多個層面的管理及運作：

##### 1) 優化市場策略

透過實時監測銷售情況，零售商可取得每個銷售點的數據，得知每件產品的銷售量及顧客的消費模式，以了解市場狀況和預測未來需求，從而避免缺貨或貨存過剩的情況。

##### 2) 鎖定目標顧客群

大數據可以細分不同的顧客群，讓企業可因應不同顧客群精確制訂獨特的營銷方式、產品或服務，從而提升營運效率。亦可根據顧客群，從不同角度分析及了解顧客，以達至增加新顧客、提高顧客忠誠度、降低流失率、提高消費額等。





## 2) Identifying targeted customer groups

Big data can be broken down by different customer groups. This allows retailers to formulate unique sales methods, products or services customised to each group and uplift operational efficiencies. Based on the data of various consumer groups, retailers can conduct market analytics from multiple perspectives and understand their customers better. The insights gained can also help retailers attract new customers, increase customer loyalty, reduce the rates of customer attrition and boost consumer spending.

## 3) Analyzing the effectiveness of promotional activities

Through data analytics, it has become possible for companies to find out when and where their product promotional campaigns should be conducted to obtain maximum results. Based on such knowledge, they can also improve their pricing adjustments for a positive impact on sales and calculate the best employee-customer ratio by time slot and venue, to achieve greater cost savings.

## 4) Predicting product trends

Through the collection of market information and customer feedback, big data can be generated to facilitate product improvements and predictive analytics for emerging products. As a result, more effective production and market strategies can be formulated as early as possible.

## GTIN – The core origin of big data

While big data has emerged only in the recent years, its usage will be strategically important for future retailers. According to a research study conducted last year, only 0.5% data generated globally is being used for analysis<sup>1</sup>. In order to maintain a market stronghold in the future, businesses will need to equip themselves with the indispensable expertise for mastering and using big data flexibly.

Retail businesses looking to gain big data mastery must firstly grasp the core origin of big data – GS1 international standard product barcode or GTIN (popularly known as barcode). Barcodes provide an international benchmark for the identification of unique products in transit, through which all their sales and supply-chain data can be integrated. GTINs not only help businesses of different operational scales to identify, retrieve and share information from the global value chain, but also constitute a core foundation for big-data mining.

## 3) 推廣活動成效分析

透過數據分析，企業可找出產品推廣活動在何時何地能得到最佳成效，亦可改善價格對銷量的影響；另外亦可計算出不同時間或地點的最佳員工與顧客比例，節省成本。

## 4) 預測產品潮流

透過收集市場訊息及顧客反饋，大數據可協助改良產品及預測新興產品，從而令企業預早制訂生產及市場策略。

## GTIN - 大數據核心來源

雖然大數據在近年才出現，但已成為未來零售企業必須掌握的策略之一。去年一項研究調查指出，全球只有 0.5% 數據被用作分析<sup>1</sup>。若企業要在未來的市場立足，掌握並靈活運用大數據的技術絕對不可或缺。

零售企業要掌握大數據，便要先掌握數據的核心來源 – GS1標準國際貨品條碼GTIN (俗稱條碼)。條碼是一套全球性標準，用來識別獨一無二的流通產品，串連所有銷售及供應鏈上的數據。不單有效協助不同規模的企業識別、擷取和分享全球價值鏈上的資料，更是構成大數據的最重要基礎。



## Barcodes enable the collection of more comprehensive data

As the Internet and mobile applications gain increasing popularity, general consumption is no longer confined to physical stores and the sources of big data have also become more prevalent. Barcodes enable businesses to gather and retrieve data from different sources on a real-time basis, including consumption behaviour at physical outlets and online stores, then subject the information to evaluation and analytics. With the resultant data, businesses can instantly obtain a better knowledge of the market, formulate judicious business decisions and sales methods as well as improve supply chain management.

Google, the world's largest search engine, has submitted patent applications for the use of barcodes as a search-engine benchmark, making it more convenient and faster for its online users to instantly find the products they want to purchase. Currently, search engines in mainland China are capable of identifying barcodes to accelerate the search for products bearing them.

## Helping businesses to provide quality retail services

Whether it is physical stores or online shops, barcodes are able to help them share their product information with consumers through ecommerce platforms or on the Internet. Customers can scan the barcodes affixed on products anytime with a mobile device to access detailed information about these products, which help strengthen consumer confidence.

For instance, the various major online shopping platforms, such as Amazon, eBay and Tmall.com, require all products to be equipped with GS1 international-standard barcodes, to ensure that the products sold online can be traced to sources of accurate, comprehensive product information. This also provides consumers with a trusted means to access and obtain the necessary information for product authentication.

By and large, the competition facing future retailers will not only be limited to product quality and price comparisons, but also whether they will be capable of making good use of technologies to collect quality big data, undertake market analytics and forecasting and improve their supply chains, so as to offer higher-quality products and services to their customers.

<sup>1</sup> "Big Data, Bigger Digital Shadows, and Biggest Growth in the Far East", a report published by the market research company IDC in 2013

## 條碼有助擷取更全面數據

隨著互聯網及流動裝置的普及，消費模式已不再局限於實體店，因此數據來源比以往更廣泛。產品條碼可協助企業即時採集不同來源的數據，包括消費者於實體店或網店的消費行為等，然後作評估及分析，幫助企業即時了解市場，訂下正確的即時決策、營銷方案及改善供應鏈管理。

全球最大的搜尋引擎Google已提交一系列的專利，申請使用條碼作為搜尋標準，讓網民於搜尋產品時更方便快捷，即時找到想購買的產品。而現時，內地的搜尋引擎已可辨識條碼，搜索屬於該條碼的產品。

## 幫助提供優質零售服務

無論是實體零售或網售商，條碼都有助透過電子商務平台和網絡向消費者分享產品資訊。顧客可隨時利用流動裝置掃描產品上的條碼，從可靠來源了解產品的詳細資料，建立更大的消費信心。

舉例來說，現時互聯網上各大型購物平台，如Amazon、eBay及天貓等，均要求所有產品須具備GS1標準國際貨品條碼，以確保在網上出售的產品能夠連結準確及完整的產品資訊。而對消費者而言，他們則能夠以可靠的方法，擷取資訊並作產品認證。

總結而言，未來零售商的競爭將不再限於單純的產品質量及價錢比較，而同時需要善用收集高質素數據的技術，分析及預測市場，優化供應鏈，為顧客帶來更優質的產品及服務。

<sup>1</sup> IDC市場調查公司於2013年發佈的“Big Data, Bigger Digital Shadows, and Biggest Growth in the Far East”報告



## 25 Success Cases 25個成功個案

### C&A

#### Apparel inventory accuracy powered by tagging at source 源頭標籤提升成衣倉存準確性

More and more companies from the global apparel industry have turned to RFID Item Level Tagging (ILT), based on Electronic Product Code (EPC) standards, to increase the visibility of their products. But in Hong Kong and other parts of Asia, many apparel suppliers are still new to the emerging industry standard and technology. In light of this, C&A has to familiarize about 600 manufacturers with this new development. This calls for standardized, impartial RFID training to be provided to them.

GS1 Hong Kong was appointed as Program Manager in Asia Pacific Region to support the training for C & A's suppliers in the Asian region. A total of three supplier training sessions were conducted on behalf of the client in Hong Kong, Bangladesh and Shanghai. The training benefited about 80 representatives of C&A and its suppliers, equipping them with the fundamental knowledge about EPC, RFID and specific tagging requirements. Starting from 2012, C&A has implemented an ILT pilot program to facilitate item-level tagging of its products. In 2014, this program has been extended to 100 stores in Germany, with about 23 million pieces of garment items tagged at source.

越來越多跨國成衣公司開始採用以產品電子代碼(EPC)標準為基礎的單品無線射頻識別標籤(ILT)，以增加產品透明度。然而亞洲區包括香港的大部分成衣供應商仍對此項新興的業界標準及相關科技十分陌生。為此，C&A須為600家生產商提供培訓，因而十分講求一套統一而且不偏不倚的RFID培訓方案。

香港貨品協碼協會獲C&A委託為亞太區的项目經理，為其遠東供應商的培訓活動提供支援。本會為C&A及其供應商派出的共80名代表在香港、孟加拉及上海舉行了三場供應商培訓，讓參加者了解有關EPC、RFID(無線射頻識別)、最佳實務及C&A標籤特殊要求等基本知識。C&A自2012年起實行單品無線射頻識別標籤化的試點計劃，推動單品標籤化。2014年該計劃已擴展至德國100間C&A分店，近2,300萬件時裝均附有供應商的源頭標籤。

“ The trainings have been well received by our suppliers. We are glad to partner with GS1 Hong Kong and the program has provided an ideal platform to spread knowledge of RFID and global standards to those manufacturers who have never been in touch with GS1 standards.

供應商對培訓的反應甚佳，很高興能與香港貨品編碼協會攜手合作，本培訓項目為從未接觸GS1標準的生產商提供了認識RFID及全球標準的理想平台。 ”

Joachim Wilkens, Head of Supply Chain Development, C&A Buying GmbH & Co. KG



C&A Europe is one of the leading fashion retail companies in Europe with more than 1,575 stores in 21 European countries. Its wide variety of collections is represented by 10 different labels covering the whole cycle of life. C&A procures its apparel items from about 900 suppliers from 40 countries.

C&A歐洲是歐洲大型時裝零售企業之一，在21個歐洲國家共開設超過1,575間分店，旗下共設10個不同品牌，滿足人生的不同階段。C&A從40個國家約900個供應商採購成衣貨品。



## Li & Fung Trading 利豐貿易

Uplifting apparel supply chains to a new level of product visibility  
進一步提升成衣供應鏈的產品透明度

Since 2011, an increasing number of US and European retailers and apparel brands have announced their implementation plans for EPC-enabled RFID Item Level Tagging (ILT). Staying attuned to the RFID ILT trend, Li & Fung Trading has been committed to helping its suppliers to enhance their capabilities in complying with the EPC standard and attaining a higher level of supply chain visibility.

Partnering with GS1 Hong Kong, the organization introduced a Vendor RFID Training Program in 2013, which comprised of a basic EPC & ILT training session for suppliers on serialization management and tag verification, combined with the provision of certified pool of vendors for their reference implementation. **The relevant trainings were provided to more than 80 suppliers and merchandisers across 12 Asian countries, including China, India, Bangladesh and Vietnam in 2013.**

“As a very important strategic partner of Li & Fung Trading, GS1 Hong Kong has provided a very professional educational program in educating our vendors on how to properly implementing RFID ILT at source that bring great values.

香港貨品編碼協會是利豐貿易的重要策略夥伴，它所提供的培訓課程十分專業，本公司的供應商從中學會正確使用RFID ILT源頭標籤的方法，帶來巨大效益。”

Mr. Robert Burton, Executive Vice President, Vendor Support Services  
Robert Burton 利豐貿易供應商支援服務執行副總裁



Li & Fung Trading operates as a global multi-channel sourcing platform to meet customers' specific requirements. The company provides a wide array of consumer goods across a wide range of product categories, including designer apparel to home decor and furnishings, children's clothing, handbags and accessories, toys, sporting goods and footwear as well as healthcare and beauty products.

利豐貿易以全球多渠道採購平台為企業定位，滿足客戶各種特定要求。利豐提供多種消費品，包括時尚服裝、家居飾品及家具、童裝、手袋及飾物、玩具、運動用品、鞋履與保健美容產品。

自2011年起，越來越多歐美零售商及成衣品牌宣佈，將採用產品電子代碼(EPC)科技的單品無線射頻識別標籤(RFID ILT)。迎接這種趨勢，利豐希望協助其供應商更完善地配合EPC標準，同時增加供應鏈的透明度。

利豐與香港貨品編碼協會合作，於2013年推出供應商RFID培訓計劃，為供應商提供基本的EPC及ILT培訓，並講解序列化管理及標籤驗證，以及為他們提供已認證的方案供應商名單，以供參考。**2013年的培訓對象包括來自12個亞洲國家(包含中國、印度、孟加拉及越南等)的逾80位供應商和商家。**

## Azienda Agricola Le Macchiole Le Macchiole酒莊園

Solving supply chain complexity with visibility  
以高透明度解構複雜的供應鏈

As an Italian winery and a global wine distributor, Le Macchiole needs to keep pace with market demand and competition. When dealing with the many different overseas buyers and wine retailers, the company is challenged to ensure visibility across its global supply chain and effectively manage its stock, in order to obtain a full picture of the demand, supply and inventory situation.

Recognizing the importance of supply-chain visibility, Le Macchiole took part in a wine traceability project jointly undertaken by GS1 Italy and GS1 Hong Kong, which aimed to provide a cross-border solution to track and trace wine shipments across a transnational delivery route. By connecting GS1 Italy's EPCIS network and GS1 Hong Kong's ezTRACK™, the project was to monitor wine quality throughout the supply chain via collecting temperature information at different checkpoints. At the Le Macchiole winery, an EPC-enabled RFID tag was attached to every bottle targeted for overseas exports. Product information of wine products, together with data related to stock-out, ship-out, ship-in, and stock-in details across the supply chain, could be captured by the EPC/RFID tags and uploaded to EPCIS networks. Real-time captures of the information and data and ready accessibility to them allow wine retailers around the world to achieve **full visibility of the entire movements of wine products from vineyard to their storage destination.** Under this project, Italian wineries including Le Macchiole have been able to strengthen their relationship with foreign buyers by **facilitating global real-time product shipment visibility and meet customers' satisfaction with the assurance of on-time delivery.**

作為一家意大利釀酒廠和環球葡萄酒分銷商，Le Macchiole須積極回應市場需求，與時俱進。Le Macchiole的合作夥伴包括海外眾多不同的買家及葡萄酒零售商，它必須確保環球供應鏈的透明度並有效管理貨品，才能掌握供應、需求以及倉存的全貌。

有見供應鏈透明度十分重要，Le Macchiole參與了GS1意大利分會和香港貨品編碼協會攜手合辦的葡萄酒可追溯性項目，以便為跨國付運路線上的酒類產品進行跨境追蹤及追溯。該項目連接GS1意大利分會的產品電子代碼訊息服務網絡以及香港貨品編碼協會的「縱橫網」，在不同的邊境檢查站收集溫度資訊，以便監察整個供應鏈上的葡萄酒質量。Le Macchiole釀酒廠會在每瓶出口海外的葡萄酒上貼上附有產品電子代碼的無線射頻識別標籤，從此在供應鏈上，有關產品出貨、運出、收貨與入貨等產品資訊均可從產品電子代碼/無線射頻識別標籤擷取，並上載到相關的產品電子代碼訊息服務網絡上。透過隨時隨地擷取實時的資訊和數據，世界各地的葡萄酒零售商便可確保葡萄酒產品從葡萄園至貯存庫的整個付運流程均保持高度透明。這項計劃亦讓意大利釀酒廠如Le Macchiole改善環球實時產品付運狀況的透明度，達到準時送貨，滿足顧客需求，從而加強了公司與海外採購商的關係。



Initiated by GS1 Hong Kong and GS1 Italy, a series of wine traceability projects was launched in the second quarter of 2011. One of these projects was aimed at tracking wine products in transit from vineyards and wine suppliers from Italy, including Azienda Agricola Le Macchiole (Le Macchiole), to their wine cellar destination in Hong Kong.

由香港貨品編碼協會及GS1意大利分會推動一系列的葡萄酒產品追溯計劃，於2011年第二季正式啟動。該計劃的目標是追蹤由意大利著名葡萄園及釀酒廠如Le Macchiole酒莊園(Le Macchiole)運送至香港知名酒窖的葡萄酒產品。



## Centre for Food Safety 食物安全中心

Enabling optimal response to food safety emergencies  
極速回應食物安全事故

Responding to growing community concerns over food safety, the Centre for Food Safety (CFS) in Hong Kong introduced the Rapid Alert System (RAS) in 2008. This system enables the centre to send a RAS Form during a food incident, detailing the names and brands of contaminated products, to alert key enterprises and organizations from the food sector so they can take preventive action at retail level immediately. However, the challenge was compounded by the multiple origins of food products worldwide and the lack of common identifiers for them. Furthermore, there was a possibility that consumers might already have purchased the unsafe products or selected them from the stores, prior to the dissemination of food alerts.

GS1 Hong Kong initiated the Unsafe Product Prevention Program (UPPP) in 2011, with the support of CFS, Hong Kong Food Council and major supermarket chains. Under this initiative, a Global Trade Item Number (GTIN) is appended in the RAS form for unsafe product identification. This solution helps retailers respond faster to an alert and activate block-of-sale at GTIN level immediately. By adopting global standards, the government can deliver accurate and clear recall information to the food sector. Similarly, they also help speed up industry response to alerts issued by the authorities and undertake emergency protection of consumers in these circumstances.

公眾對食品安全愈來愈重視，為回應這方面的需求，食物安全中心(食安中心)於2008年在香港推出快速警報系統(RAS)。每當發生食物事故，食安中心便可通過這個系統，發出RAS表格，詳列受污染產品的名稱和品牌，以提醒食品界的各大企業和機構即時在零售層面採取適當的預防措施。然而，食安中心亦面臨一些挑戰。各式食品均來自世界各國不同的生產地，市場卻缺乏一套統一的产品識別系統；另一方面，消費者亦可能早在發出警報之前，已從商店買入或選購不安全的產品。

香港貨品編碼協會於2011年推出「防預不安全產品項目」，並獲食物安全中心、香港食品委員會及各大超級市場支持。在本項目裡，RAS表格將附上全球貿易貨品編碼(GTIN)，以識別不安全的產品。是項方案協助零售商加快回應警報，並即時在GTIN層面阻截銷售。採用全球標準後，政府能向食品界傳遞更準確清晰的資訊。同時亦能加快業界回應政府的警報，讓他們及時啟動保障消費者的緊急措施。



Established in May 2006 under the Food and Environmental Hygiene Department, the Centre for Food Safety (CFS) is responsible for controlling and regulating food safety in Hong Kong. Its mission is to ensure that only safe food products fit for consumption are sold to the public. THE CFS also monitors food incidents, both local and overseas on a daily basis and evaluate them with respect to their impact on public health locally.

食物安全中心於2006年5月由食物環境衛生署成立，負責管控和監管香港的食品安全，使命為確保所有在香港出售的食品均安全和適合食用。食物安全中心亦會每天密切關注本地及環球的食物安全事故，並評估有關事故對香港所造成的影響。

## GS1 New Zealand with ANZCO Foods and Rezare Systems GS1新西蘭分會、ANZCO食品公司及Rezare Systems

Livestock traceability from farm to table  
從農場到餐桌的牲畜追溯

Manufacturers, processors, logistics providers and retailers are facing a multitude of new challenges including higher consumer expectations for food quality and safety and more stringent regulatory demands on **responsiveness to food safety issues**. Hence, the ability to track and trace products has become essential to efficient supply chain management in the food industry. A livestock traceability project has been initiated by GS1 New Zealand on a pilot basis, where UHF RFID Gen 2 tags with unique EPC identifiers were attached to the ears of cattle reared at a farm in Ashburton, New Zealand. These tags were read at nine separate stages along the supply chain, from farm to meat retailer.

This project has demonstrated the potential benefits of using UHF EPC/RFID tags, in tandem with an EPCIS-based track-and-trace platform, to increase supply chain visibility and traceability of livestock and processed meat. The need for traceability in the food industry is gaining momentum and web-based track-and-trace solutions, like ezTRACK™, can provide end-to-end supply chain visibility in order to facilitate more efficient logistics management and faster response to market needs.

製造商、加工廠、物流供應商及零售商現時均面對一連串新挑戰，首先，消費者愈來愈重視食物的質量及安全度，同時，監管機構亦要求業界**加快回應食物安全事故**。故此，食品界要建立有效的供應鏈管理系統，就必須更注重產品追蹤及追溯能力。為此，GS1新西蘭分會推出了牲畜追溯試點項目，採用了超高頻無線射頻識別第二代(UHF RFID Gen2)標籤，當中附有獨一無二的產品電子識別代碼。這些標籤貼於新西蘭Ashburton一個農場的牛隻耳朵之上，並於供應鏈從農場至零售點間九個不同位置被讀取。

本項目成功展示使用UHF EPC/RFID標籤及以EPCIS為基礎的追蹤及追溯平台的潛在效益，能有效提升供應鏈透明度，同時增加追溯供應鏈上牲畜與加工肉類的能力。產品追溯能力對食品工業愈來愈重要，像蹤橫網™一樣以互聯網為基礎之產品追蹤及追溯解決方案，能透過提升點對點的供應鏈透明度來促進有效的物流管理，並加快回應市場需求。



GS1 New Zealand established an identification and traceability project in 2010 to track livestock from feedlot to meat wholesaler, using EPC/RFID-based solutions and the EPCIS network. The project was implemented in collaboration with the New Zealand meat procurement and processing company ANZCO Foods, whose meat products are sold in Europe, North American and Asia.

GS1新西蘭分會於2010年推出了一個產品追溯及識別項目，冀透過以產品電子代碼/無線射頻識別(EPC/RFID)技術為基礎的解決方案及EPCIS網絡，追蹤由飼養場運送至牛肉批發商的牛隻。該項目與新西蘭牛肉採購及加工商ANZCO食品合作，其肉類產品外銷全歐洲、北美洲和亞洲市場。

\* Extracted from Business Casebook 2010  
\* 摘錄自《個案研究叢集2010》



## Hong Kong Maxim's Group 香港美心集團

Digitalized food catering supply chain  
數碼化的餐飲供應鏈

Hong Kong Maxim's Group has been operating a complex supply chain end to end, marked by the diversity and large numbers of restaurants, eateries, retail outlets, products, brands, culinary types it manages on a daily basis. To reduce delays, together with the administrative and operational costs caused by the tedious tasks of information re-entry, correction of errors and slow modes of communication, the Group has adopted ezTRADE to streamline ordering and invoicing process as well as to facilitate communications with its suppliers in a cost-efficient way.

The ezTRADE platform has enabled the Group to automate a number of key supply-chain functions, whereby 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.

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，其點對點供應鏈比較複雜。為減少延誤，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，香港美心集團採用了「通商易」，以低成本方案簡化訂購及發票程序，並促進與所有供應商之間的溝通。

通商易平台讓集團把供應鏈的多個關鍵步驟自動化，貿易夥伴亦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。



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 services.

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。集團的餐飲業務範疇廣泛，包括中菜、亞洲和歐洲菜、快餐、西餅、咖啡店及機構食堂等。

\*"Maxim's" and any name, logo, or trademark of any restaurants and any intellectual property right therein used or referenced in this publication belong to Maxim's Caterers Limited, a company operating in Hong Kong, and/or its affiliates.  
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## Hospital Authority 醫院管理局

Supply chain modernization aimed at improving medication safety  
供應鏈現代化保障藥物安全

Even in the early 1990s, the Hospital Authority (HA) had foreseen the growing importance of medication safety, supply chain efficiency and traceability in its routine operations. To prepare itself for these challenges, HA started using GS1 Hong Kong's ezTRADE, a standard-based e-commerce platform that facilitates paperless trading with its vendors for enhanced efficiency, in 1996. Under this platform, the organization has been able to transmit pharmaceutical orders to its suppliers through a standardized purchase order (PO) form online. This is part of HA's Supply Chain Modernization (SCM) project, which was further rolled out in 2010 to facilitate automation of the pharmaceutical procurement process and provide accurate tracking of pharmaceutical products from one location to another along the organization's supply chain.

The entire implementation, which encompasses seven clusters of 42 public hospitals and clinics under HA, has been completed in 2014. With 88% of its pharmaceutical orders automated, HA has experienced higher efficiency and consistency in its supply-chain operations, from product orders to physical receipt of the items procured. HA's financial settlements with its trading partners have also seen significant improvements. The project has also bolstered the track and trace capability of HA stores on the movements of pharmaceutical supplies, leading to better inventory planning and stock allocation.

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對其日常運作的重要性。面對這些挑戰，醫管局自1996年起採用香港藥品編碼協會的通商易服務，它是一個以標準為基礎的電子商貿平台，能促進與供應商之間的無紙交易，提升營運效率。通過這個平台，醫管局可在網上向藥物供應商送出標準化的訂單，此為醫管局於2010年展開的供應鏈現代化計劃的一部分。該計劃能準確追蹤藥物在醫管局供應鏈裡的點到點運送過程。

整項計劃於2014年在七大聯網的42家醫院全面落實。88%的訂單已經自動化，從落訂到接收實物藥品的整個供應鏈均更有效率和劃一，貿易夥伴間的財務結算效率也大有改進。是項供應鏈計劃亦讓醫管局更有能力追蹤與追溯倉庫間的藥物調送，繼而改善存貨規劃和藥品分配工作。



"The Hospital Authority has successfully implemented a modernized supply chain model over the recent years through adopting the GS1 standards, introducing barcode technology applications and establishing its own Electronic Data Interchange network. These initiatives have not only improved its operational efficiency and product traceability from its pharmaceutical supplies, but have also reduced service risks and enhanced patient safety in the public hospitals.

醫管局近年採用GS1標準，成功落實現代化的供應鏈模型，並應用條碼科技和建立了電子數據聯通網絡。那不僅改善了藥品供應的追溯能力和營運效率，還減少了服務風險，從而加強保障公立醫院的病人安全。"

Dr. W L CHEUNG, Director (Cluster Services) of the Hospital Authority  
張偉麟醫生 醫院管理局聯網服務總監

The Hospital Authority (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 in seven clusters.

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所專科門診診所及73所普通科門診診所。



## China Certification and Inspection Group Food Safety Traceability Centre

### 中國檢驗認證集團食品安全溯源中心

Origin-destination traceability for added food safety  
追溯運送過程始末 加強食品安全

In 2013, the China Certification and Inspection Group Food Safety Traceability Centre (CCIC Food Safety Traceability Centre) was established. It is the only trans-national and independent certification and inspection institution that aims to provide inspection, identification, certification and traceability information query services. After a year of operation and equipment test, the quarantine process of wine importing has been accelerated.

Looking into ways to accelerate the wine import clearance process, the CCIC Food Safety Traceability Centre, Shenzhen Enter-Exit Inspection and Quarantine Bureau (SZCIQ), Shenzhen Shizun Logistics and GS1 Hong Kong have combined forces to carry out a wine import clearance project.

For a smooth roll-out of the project, GS1 Hong Kong developed "ccic315.com" based on an EPCIS-based platform - ezTRACK, in order to provide testing application and product track-and-trace services. After testing, a secured label with a serialized number encoded in QR code will be tagged on each product under the monitoring of CCIC. Moreover, the logistics and product information will be uploaded to "ccic315.com", and it can be viewed by the related stakeholders and all consumers.

"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. Based on the outcome, the Shenzhen customs authorities now target to shorten the customs clearance duration from 15-20 working days to 2 days.

China Certification & Inspection Group (CCIC) 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.

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"為主業的獨立協力廠商檢驗認證機構。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。

中國檢驗認證集團食品安全溯源中心(簡稱CCIC 食品安全溯源中心)於2013年成立,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。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。

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、深圳世尊物流攜手與香港貨品編碼協會,開展溯源葡萄酒清關試驗計劃。

為順利推行計劃,協會開發的"ccic315.com"採用以EPCIS為標準的「縱橫網」平台,以供測試申請和貨品追蹤追溯。實地檢驗完成後,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,檢驗報告和葡萄酒資訊亦會上載至"ccic315.com",讓相關持份者檢視物流訊息及產品資訊。

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。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。



## Common Assessment and Analysis of Risk in Global Supply Chains (CASSANDRA)

### 全球供應鏈風險評估與分析計劃

Uplifting cross-border supply chain risk assessment  
提升地區性供應鏈風險評估

With increasing flows of containerized traffic and a growing emphasis on (national) security, businesses and government are struggling to find efficient and effective means to ensure full supply chain control and security. A "Common Assessment and Analysis of Risk in Global Supply Chains" (CASSANDRA) project has been undertaken by industry players from the European Union. CASSANDRA aims to improve efficiency and compliance in international trade by integrating logistics information flows and to form a virtual data pipeline, so that secure and reliable data can be shared across the supply chain.

With more visibility, parties can evaluate transaction costs, supply chain risks, partner performance, work jointly on quality improvement and shippers can work on improving inventory management by reducing safety stocks and working capital. In one of the trade lanes of the project, GS1 demonstrated the use of the EPCIS standard for tracking events and monitoring performance along the supply chain.

CASSANDRA will improve efficiency and effectiveness for government agencies by developing a new approach to risk assessment. The new Risk-Based auditing approach will help customs authorities to effectively assess business processes and procedures and ensure a secured supply chain. CASSANDRA will also facilitate EU and global trade while the data-sharing concept will improve product and societal safety.

隨著貨櫃運輸越趨頻繁,(國家)安全又越來越受重視,商界和各國政府都在努力摸索更具效率和效益的方法,以全面掌控供應鏈運作並保障其安全。為更快、更完善地評估貨櫃保安風險,歐盟展開了「全球供應鏈風險評估與分析計劃(CASSANDRA)」,旨在發展數據交流概念,擴闊風險評估範圍,從而回應商界和各國政府對提升國際貨櫃運輸透明度的需求。透過建立虛擬數據管道,CASSANDRA可以結合所有來自貨品原產地的商業訊息,適時為商界及政府提供準確、完備的數據;這不但有助企業更有效率地滿足有關貿易的法例要求,還能加強邊境管制和監控措施的效能。

GS1在參與過程示範了如何使用產品電子代碼訊息服務(EPCIS)標準去追蹤供應鏈的活動。業界用戶可建立商業訊息儀表版,讀取「縱橫網」(一個以EPCIS標準為基礎的平台)所集合的資訊,以便追蹤整個供應鏈系統的物流動向。「縱橫網」是各持份者分享供應鏈重要訊息的平台,它證明了採用全球供應鏈標準有利企業進行貿易和風險評估。

CASSANDRA為各國政府機關提供了一個風險評估的全新方案,改善辦事效率和效益。海關部門透過以風險為本的審核方案,能更有效地評估商業流程和程序,並保證供應鏈的安全。CASSANDRA亦促進了歐盟與全球貿易的發展,而數據分享理念則有助保障產品及社會的安全。



As part of the European Commission's Seventh Framework program for security, the CASSANDRA project was launched in line with the initiatives of businesses and government organizations to develop supply-chain security frameworks and improve the development of security standards and procedures.

CASSANDRA是歐盟第七期科研架構計劃的一部分,主要涵蓋保安範疇。它配合商界及政府機構的計劃,旨在開發供應鏈保安架構,用以提升保安標準和流程。

\* Extracted from Business Casebook 2012  
\* 摘錄自《個案研究叢集2012》



## Cross-border Supply Chain Visibility Project 跨境供應鏈可視化項目

Intra-Asia cross-border study unveils a realm of opportunities  
泛亞洲跨境研究發掘新機遇

Hong Kong has long been an entrepot and a regional logistics hub with geographical advantage and close ties to Mainland China. Trading and logistics account for over 25% of the city's GDP. With Mainland China being Hong Kong's largest trading partner, most cargo passes through Hong Kong as transshipments.

As mainland China has entered into free trade agreements (FTA) with Association of Southeast Asian Nations (ASEAN) countries, the trading landscape has evolved significantly. Free trade induced the need for transparent information and connectivity across borders. The key to Hong Kong retaining its position as an Asian logistics hub lies in improving cross-border Supply Chain Visibility (SCV).

APEC has long advocated the improvement of supply chain performance and pledged to eliminate the eight choke points of transparency, infrastructure, logistics, clearance, documentation, multi-modal connectivity, transit, standards and regulations under the Supply Chain Connectivity Framework and reduce transactions cost by 10% across the APEC region by 2015.

GS1 Hong Kong's ezTRACK service – integrating EPCIS standards – has been adopted for the pilot implementation, to enhance real-time visibility of cargo and information flow and hence, increase cross-border supply chain visibility for global businesses.

Based on the cross-border pilot cases amongst Mainland China, Hong Kong and Chinese Taipei, the project team found that the two core values of SCV which are the abilities to provide advance cargo information and monitor cargo movement status and security.

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/transshipment 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.

The "Feasibility Study on Cross Border Supply Chain Visibility Across Guangdong, Hong Kong and Asia" conducted by GS1 Hong Kong, in collaboration with the Asian Institute of Supply Chains & Logistics of the Chinese University of Hong Kong and sponsored by The Hong Kong Logistics Development Council (LOGSCOUNCIL).

「廣東、香港及亞洲間跨境供應鏈可視化之可行性研究」由香港物流發展局贊助，並由香港貨品編碼協會與香港中文大學亞洲供應鏈及物流研究所共同進行。

香港作為國際轉口貿易中心，一直以來受惠於其優越的地理位置，及與中國內地緊密的貿易聯繫。其中，貿易和物流貢獻了香港25%以上的國內生產總值(GDP)。中國內地作為香港最大的貿易夥伴，大部分貨物都是以轉運方式經由香港進出中國內地。

隨著中國內地與東南亞國家聯盟(東盟)國家達成自由貿易協議，亞洲區的貿易形勢大變。自由貿易觸發市場對跨境透明資訊聯通的需求。香港要在這種瞬息萬變的商業形勢下保持競爭力，就得優先推行供應鏈透明化，否則將會落後於人。

亞太經合組織良久前已主張改善供應鏈的運作效率，並致力在二零一五年如期按供應鏈聯通框架行動計劃消除透明度、基建、物流、通關、文件、多式聯通、中轉安排、標準和條例等八大瓶頸，並同時在亞太經合組織成員國之間減少10%的交易成本。

試點計劃採用了香港貨品編碼協會的「縱橫網」服務，它結合了產品電子代碼訊息服務標準，能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。根據中港臺實踐案例的結果，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視化平台，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。



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

Adding customer values with traceability  
可追溯性為服務增值

Over the years, increasing number food safety incidents alert the importance of efficient food product recall and global food traceability at origin to ensure consumer safety. Therefore, DCH Logistics adopts GS1 Global Traceability Standard (GTS) and RFID-based Cold Chain Management Solutions 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. GTS is firstly deployed in the frozen fish category to identify the critical product processes points. On supplier side, unique GS1 codes like GTIN and SSCC 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. DCH Logistics, as a logistics provider, can enjoy accurate traceability information from the platform and speed up the order processing upon product arrival.

To add more values to clients, DCH Logistics also adapts 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.

By implementing global standards and its enabling technologies, DCH Logistics is 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.

過去一年，全球食品安全事故或危機事件出現上升趨勢，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。有見及此，大昌行物流決定應用GS1全球食品可追溯性標準(GTS)以及無線射頻識別(RFID)為本的冷凍鏈管理方案，以提升全球食品供應鏈的可追溯性及透明度。

大昌行物流把可追溯性措施擴展至它的上游供應商，以確保整個供應鏈的食品安全。它採用了GTS，藉此識別大昌行物流各重大的追蹤及追溯點——從法國的魚類供應商到香港的消費者。每件包裝產品均獲編配全球貿易貨品編碼(GTIN)，而每個物流單位均以貨運容器序號(SSCC)識別。所有這些出境資訊，包括GTIN、SSCC和貨物數據均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「縱橫網」。大昌行物流作為物流供應商，可從EPCIS平台取得準確資訊，以加快產品抵達目的地後的流程。

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「縱橫網」持續檢視和管理。

採用全球標準和相關應用技術後，大昌行物流加強了上游和下游貿易夥伴對供應鏈的信心。那確保了運送往香港以至外地的食品均屬安全和可追溯，進一步鞏固了大昌行作為物流服務供應先驅的地位。



DCH Logistics Company Limited 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, repackaging, Value added services (VAS) freight forwarding, goods consolidation and distribution.

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、重新包裝、增值服務、貨運代理、貨品加固及批發等。



## Hong Kong International Airport 香港國際機場

Travelling at ease with the world's leading baggage handling solution  
全球頂尖行李處理方案 讓旅途暢通無阻

Airport Authority Hong Kong has a mandate to continually improve the service quality, safety, security and efficiency at Hong Kong International Airport to meet passenger expectations. To this end, the Authority began working on a Baggage Reconciliation and Management System in 2003, resorting to the use of EPC UHF Gen2 RFID tags with their full implementation in 2008. The airport now has more than 500 RFID read points and 200 EPC/RFID readers installed at its baggage handling areas. There are also more than 600 EPC UHF Gen2 RFID integrated bag tag printers at all check-in counters at the airport and at the Airport Express stations in Kowloon and Hong Kong Island.

Since switching to the integrated RFID system, the Hong Kong International Airport has seen its baggage handling operation speeding up, and with greater accuracy. The system's processing capacity and overall efficiency have also improved. Enabled by RFID technology, the baggage read rate at the airport has increased to over 97% currently, while managing over 80,000 travellers' baggages every day.

香港機場管理局的使命，是不斷提升香港國際機場的服務質素、安全、保安和運作效率，滿足乘客要求。為履行此使命，機管局於2003年著手研究以產品電子代碼(EPC)超高頻(UHF)第二代RFID標籤支援行李確認及管理系統，並於2008年全面實施。機場的行李處理區現安裝了超過500個RFID讀取站和200個EPC及RFID讀取器，機場以及機場快線九龍站和香港站的所有旅客登記櫃檯亦設置了超過600部行李標籤印刷機，所印刷的標籤均已內置EDC UHF 第二代RFID條碼。

改用內置RFID的系統後，香港國際機場的行李處理工作變得更快、更精準，大大增加了行李處理系統的承載力及效率。RFID科技令機場的行李讀取成功率提升至現時的97%，系統每天能夠處理旅客行李逾80,000件。



Airport Authority Hong Kong is responsible for the management, operation and maintenance of Hong Kong International Airport, one of the world's leading regional and international aviation hubs. In 2013, about 60 million passengers and 4 million tonnes of cargo passed through the airport\*, making it one of the world's busiest international passenger and cargo airports. Since its opening in 1998, the airport has also been consistently ranked among the world's best by respected international industry surveys.

香港機場管理局負責香港國際機場的管理、運作和維護工作。香港國際機場是世界首屈一指的地區及國際航空樞紐，2013年的客貨量和貨運量分別約6,000萬人次和400萬噸\*，是世上最繁忙的客貨及貨運機場之一。自1998年啟用以來，香港國際機場一直在多項權威國際航空調查中榜上有名。

\* HKIA Website  
\* 香港國際機場網站

## 3M Hong Kong Limited 3M香港有限公司

Pursuing service excellence with consumer care  
關愛消費者為本 達至卓越服務

3M Hong Kong's supply chain has been made complicated by the sheer variety of product types passing through it and the fast pace of their movement, from the point of manufacturing overseas to the consumers. Dedicated to maintaining a high level of customer service, 3M Hong Kong accords priority to building a relationship of trust with its customers to retain their loyalty to the products it supplies and the brand it represents.

GS1 Hong Kong has recognized 3M as the "Consumer Caring Company" for four years in a row to honor its consumer care commitments. Under the "Consumer Caring" Scheme, the company has been positively evaluated against such core consumer caring values as consumer care, sincerity, commitment, product quality and safety assurance, service quality, understanding of consumer behaviours, and caring for employees. The judging process includes company visit, performance evaluation and consumer survey. The results were then measured according to the Efficient Consumer Response (ECR), a recognized business best practice aims at achieving customer satisfaction through collaboration between businesses and trading partners.

3M香港的供應鏈結構極為複雜，原因是產品種類繁多，於供應鏈中移動的速度又非常快，轉眼間就要從海外的生產地點送到本地消費者手上。3M香港矢志維持高質素的顧客服務水平，因此十分重視與顧客建立互信關係，以保持顧客對3M產品及品牌的忠誠度。

3M連續四年獲香港貨品編碼協會頒發的「貼心企業」殊榮，其關顧消費者的熱誠備受表揚。「貼心企業」嘉許計劃的核心價值為關愛消費者、心繫消費者、實踐承諾、監控品質與安全、專注服務質素、理解消費者行為及關懷員工，而3M在各個方面都獲得良好的評價。嘉許計劃的評核程序包括實地考察企業運作、表現評估和消費者意見調查，評核結果則會按「高效消費者響應」(ECR)原則進行考量。ECR是一套廣受認可的業界最佳實務準則，宗旨是透過企業和貿易夥伴之間的合作，提升顧客滿意度。



3M Hong Kong Limited, a wholly owned subsidiary of 3M Company, was founded in 1961, serving primarily as a sales and marketing operation for a variety of products distributed across the Hong Kong and Macau markets. Supplied through its parent company, an American multinational conglomerate based in Minnesota of the United States, the products that 3M Hong Kong presently deals with are of four categories: Consumer; Health Care; Safety & Graphics and Industrial, Electronics and Energy.

3M香港有限公司為美國3M公司全資擁有之附屬公司，成立於1961年，主要負責在香港及澳門市場銷售和推廣各種各樣的產品。3M香港的產品由其母公司，即美國3M公司(位於美國明尼蘇達州的跨國企業)提供，目前主要涵蓋四大類別：消費產品、醫療產品、安全及標識產品，以及工業、電子及能源產品。



## A-Fontane 雅芳婷

Supply chain modernization to support business expansion  
供應鏈現代化支援業務拓展

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 is challenged to modernize its supply chain operation to cope with its expanding product variety and business volume. A-Fontane 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, A-Fontane plans to start an e-commerce business worldwide, as such supply chain efficiency such as inventory accuracy and effective logistics support are the primary keys to its e-commerce success.

GS1 Hong Kong supply-chain consultancy service based on a **Supply-Chain Operations Reference Model (SCOR)** was provided to A-Fontane to standardize their supply chain management processes in order to improve the effectiveness for company's business growth. 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 upgrading of supply chain process and RFID application, A-Fontane is well equipped for its **business expansion worldwide and development on multi-channel business**. **Supply-chain savings of at least 10%**, corresponding to inventory accuracy enhancement, are expected as a result.



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. 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、存倉、發貨、批發、零售到物流等各項重要工序。雅芳婷的工廠佔地約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。

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，雅芳婷必須進行供應鏈現代化，才能管理更龐大的產品線和銷售額。雅芳婷決定採用點對點運作模型管理床褥產品，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。

本會的供應鏈顧問服務向雅芳婷提供**供應鏈運作參考(SCOR)模型**，透過統一供應鏈管理程序，以提升管理效率，並支援擴展業務的需要。此外，雅芳婷的床褥產品亦開始應用EPC/RFID科技，**產品電子代碼(EPC)及無線射頻識別(RFID)科技**，以達到提升效率、數據準確度及單品可追溯性的目標。雅芳婷提升供應鏈流程並應用無線射頻識別後，將可憑藉這些全球標準來開拓環球市場，發展多渠道業務。預計本項目可為雅芳婷提升倉存準確性，從而節省起碼10%的**供應鏈運作成本**。

## ANGEL Cosmetics International Limited 天使化粧品國際有限公司

Mobile platform adopted to strengthen consumer engagement  
流動平台增強顧客連繫

Mobile marketing has become increasingly important due to the proliferation of new consumer trends and purchase patterns driven by mobile technology. To address increasing consumer demand for product information prior to purchase, Angel Cosmetics has compiled a full inventory list of its popular products, combined with their respective GS1 BarCodes and product images, for uploading on GS1 Hong Kong's cloud-based product information portal BarcodePlus.

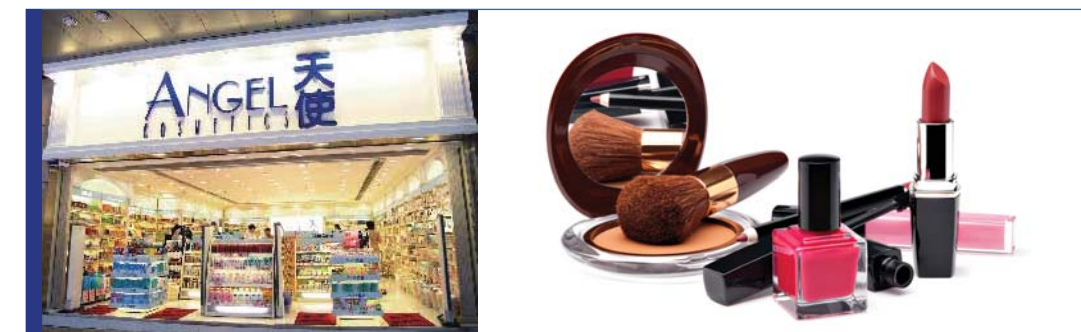
The company has also chosen Consumer Connect, a mobile application that helps retailers deliver their products and brand values via a barcode scan, to drive its mobile marketing. With a simple scan of the GS1 BarCodes on the cosmetics and beauty products using the app, consumers are able to retrieve extended product information on their mobile devices, including smartphones and electronic tablets. Extending its marketing reach further, Angel Cosmetics implemented a marketing campaign in 2013 across all its 12 retail shops in Hong Kong, based on Consumer Connect. Consumers who downloaded the app on their mobile devices would be offered a mobile digital coupon after scanning the designated products they were interested in.

Consumer Connect has served as a low-cost mobile marketing platform to help ANGEL Cosmetics to engage and interact with its consumers directly and cost efficiently. Without having to incur a huge investment on mobile development, the company is now capable of building and reinforcing customer loyalty to the brands it retails, by way of marketing campaign tactics.

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。今時今日顧客均希望在購物前了解更多資訊，為此天使化粧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。

天使化粧品亦選擇了「物密啲」流動應用程式，讓消費者只需掃描條碼，便可獲知產品資訊和各種品牌價值。消費者只需使用流動裝置如智能手機或平板電腦，通過「物密啲」掃描美容化粧品產品上的GS1條碼，便可找到詳盡的產品資訊。為進一步擴闊市場，天使化粧品利用BarcodePlus和「物密啲」裡簡單的內容管理系統，於旗下十二間的零售店進行市場推廣活動。顧客只要於推廣期內下載「物密啲」應用程式並從指定產品中掃描感興趣的一款，便可獲得電子優惠券一張。

「物密啲」是一個低成本的流動市場推廣平台，可協助天使化粧品以符合成本效益的方式與消費者直接溝通和進行互動。天使化粧品無須為發展流動平台投放大筆資金，便可透過市場推廣策略，建立並鞏固顧客對品牌的忠誠度。



Angel Cosmetics International Limited has grown into a large-scale beauty chain group in Hong Kong since the opening of its first store in 1979. Presently, the group operates over 30 retail outlets and beauty centers in Hong Kong and Macau, offering a wide range of beauty related products and services.

天使集團成立於1979年，今天已經成為大型美容連鎖集團之一。天使集團於香港及澳門開設超過30間零售及美容中心，提供廣泛的美容產品及服務。



## A.S. Watson Group 屈臣氏集團

Paperless order-to-cash retail pioneer  
訂單到現金無紙化的零售先驅

Retail success is highly reliant on supply chain efficiency and the operator's ability to respond quickly and effectively to consumer demands. In 1992, PARKnSHOP - the FMCG retail arm of the A.S. Watson Group in Hong Kong - started its paperless procurement and invoicing process with various suppliers to accelerate its "order-to-cash" transactions.

After several trials, PARKnSHOP began to implement ezTRADE, a B2B EDI platform, in 1997 to communicate with suppliers. The risks of paper-based transactions, such as intensive paper handling, invoice reconciliation and data inaccuracy for stock replenishment - have been greatly minimized as a result. Moreover, the implementation of ezTRADE has provided PARKnSHOP further support to drive its just-in-time replenishment strategy. All these have enabled PARKnSHOP to achieve considerable sales increase without having to expand its warehousing space. In addition, inventory excess has been largely minimized and the out-of-stock situation reduced by 50%. Overall, the supermarket chain has achieved its vision of providing a quicker and more accurate response to consumer needs. Encouraged by the success, the A.S. Watson Group made the strategic decision in 2003 to extend the EDI facilities to Watsons Hong Kong, and then to PARKnSHOP China and Watsons China in 2008.

Currently, the Group processes 97% of its purchase orders electronically. With over 95% of its suppliers carry out daily transactions electronically on ezTRADE.

零售業的成敗端乎供應鏈效率以及營運商能否快捷有效地回應消費者的需求。於1992年，屈臣氏集團旗下的快速流轉消費品零售網絡百佳超級市場與不同供應商開展了無紙化的採購和發票流程，以加快「訂單到現金」的交易過程。

經過數次試驗，百佳開始採用商業對商業的電子數據聯通(EDI)平台「通商易」。過往紙本交易的各式風險，例如需要處理大量紙張、確認大量發票以及補貨數據不準確等，均已大幅降低。此外，「通商易」亦能支援百佳進一步實現及時補貨策略。凡此種種均讓百佳在大幅增加銷售之餘卻無須擴展倉庫空間。存貨水平亦告大幅減少，缺貨率降低50%。整體來說，百佳達成了它的願景，能更快速準確地回應消費者需要。有見成效不俗，屈臣氏集團於2003年作出策略性決定，於香港推動採用電子數據聯通，並於2008年擴展至中國內地的百佳及屈臣氏。



目前，集團97%的訂單已電子化，而超過95%的供應商每天透過「通商易」進行電子交易。



A.S. Watson operates over 11,000 retail stores worldwide, running the gamut from health & beauty to luxury perfumeries & cosmetics, food, electronics and fine wine. As an established player in the beverage industry, the Group also manufactures and distributes a wide range of refreshing beverages from bottled water and fruit juices, to soft drinks and tea products.

屈臣氏集團在全球擁有超過11,000間分店，提供保健美容產品、名貴香水及化妝品、食品、電子產品以至名酒。集團的飲品業務亦歷史悠久，生產並分銷一系列清新飲料包括瓶裝水、果汁、汽水及茶類產品。

## Dairy Farm Group 牛奶公司集團

Streamlining invoicing procedures via an EDI system  
引入電子數據聯通，精簡發票系統

With the increasing expansion of Dairy Farm Group, it decided to move its Finance department in Guangzhou, mainland China to manage the huge volume on invoices from suppliers. Prior to adopting an Electronic Data Interchange (EDI) system for invoicing, Dairy Farm used to receive paper invoices from suppliers at its stores. This process could cause delays in settlement due to human error and loss of the paper documents in transit from its Hong Kong stores to its Finance department in Guangzhou. Besides, the manual data inputting process it undertook was also prone to errors. Ultimately, these potential pitfalls and discrepancies would require the company to commit extra resources and manpower to resolve.

To improve the efficiency of its invoicing handling procedures, the Group developed an automated invoice processing system through ezTRADE in 2009. This allows Dairy Farm's suppliers to send EDI invoice files to the ezTRADE messaging platform, where the invoicing data are automatically and electronically integrated into their back office systems. It is currently being rolled out across three of its largest retail chains, namely Wellcome, Mannings and 7-11, in a progressive manner, and will also encompass their direct-to-store and warehouse suppliers.

隨著牛奶公司的業務不斷發展，集團已將管理大量供應商的發票交於位處中國廣州的財務部。引入電子數據聯通(EDI)系統處理發票前，牛奶公司旗下商店一向接收供應商的紙本發票。紙本發票從商店運送到廣州時有遺失風險，人手處理過程亦可能出錯，這些問題會為付款過程造成延誤。各種潛在問題和數額出錯，往往需要額外的人力物力方能補救。



為改善其發票處理程序，牛奶公司於2009年決定研發以「通商易」為基礎的自動發票處理系統。透過新系統，牛奶公司的供應商可將EDI發票檔案傳送至「通商易」訊息平台，由平台自動以電子化模式把發票資料輸入到牛奶公司的後台系統。目前它旗下的三大連鎖店惠康、萬寧和7-11已陸續採用新系統，並將推廣至其直接貨物配送及倉庫供應商。



Dairy Farm is a leading pan-Asian retailer, which operates supermarkets, hypermarkets, convenience stores, health and beauty stores and home furnishings stores under well-known brands. At of 30 June 2014, the Group and its associates and joint ventures operated over 5,800 outlets across Asia.

牛奶公司是名列前茅的泛亞洲零售商，旗下業務包括一般及超大型超級市場、便利店、保健及美容產品店及家具店。截止2014年6月30日，集團及其關連或合資企業在亞洲共擁有5,800多間分店。



## Eu Yan Sang (Hong Kong) Limited 余仁生(香港)有限公司

Optimizing business opportunities with global standards  
以全球標準擴大市場商機

Eu Yan Sang is a long-established healthcare business with a need to constantly rejuvenate its brand and find new opportunities, so as to retain its competitive edge in the market. Operationally, the organization has found it necessary to facilitate a faster information flow, a higher accuracy of transactions with its trading partners, swifter stock replenishment at retail level and expansion of its customer base.

As a full member of GS1 Hong Kong since 1992, Eu Yan Sang has been adopting product barcode to identify its products. Along with the growing popularity of paperless trading, Eu Yan Sang has also gone a step further to become an ezTRADE member in 2000, enabling it to carry out reliable and automated electronic business information exchange. This reduces the rate of manual errors and operation hours in these exchanges and builds stronger collaborative ties with its retail partners, including Watsons, Mannings and Wellcome, on an Electronic Data Interchange (EDI) format.

For four consecutive years from 2011 to 2014, 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.

余仁生是百年藥店，需要時刻保持品牌活力，持續開創全新商機，才能保持市場競爭力。在營運層面，余仁生發現有需要加快與貿易夥伴間的資訊流通及商貿交易的準確性，以及改善零售店的補貨速率和擴大顧客群。

余仁生於1992年成為香港貨品編碼協會全面會員，並沿用產品條碼識別產品。隨著無紙貿易的普及，余仁生進一步成為協會的「通商易」會員，以電子數據聯通格式與屈臣氏、萬寧及惠康等零售夥伴實現電子化商業資訊交流，過程可靠而自動化，減少了人手出錯及行政工時，並建立更緊密的合作關係。

余仁生(香港)有限公司於2011-2014連續四年獲得香港貨品編碼協會「貼心企業」嘉許計劃認證，表揚其多年來通過科技應用以及實踐提升消費者價值的相關策略，最終全面提升其產品及服務水平。



Established in 1879, Eu Yan Sang is one of Asia's largest healthcare and wellness corporations with a strong foundation in Traditional Chinese Medicine and has grown into a supplier of over 1,000 herbal products and 300 brand-name items. The Group currently operates over 300 retail stores in Hong Kong, Macau, Mainland China, Malaysia, Australia and Singapore. Its products are also sold in pharmacies, Chinese medicinal stores and supermarkets around the world.

創立於1879年，余仁生以其傳統中醫藥優勢，發展成為亞洲最大的保健企業之一，提供超過1,000項草藥產品和300個品牌商品。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，產品遍佈世界各地的藥房、中藥店和超級市場。

RETAIL零售

## Greendotdot.com Limited 点点綠有限公司

Extended packaging information for higher transparency  
藉詳盡包裝資訊提高透明度

Health-conscious consumers these days are increasingly willing to pay a premium for health food and organic food products. But in many cases, product information on the packaging is often insufficient and inconsistent. With counterfeiting being another critical issue in the marketplace, trusted sources of information for health food and organic food products is hardly available. Greendotdot realized the needs to address consumer demand for product information and quality assurance, so as to drive its future business growth.

In light of the challenges, Greendotdot adopted GS1 Standards including Global Trade Item Number (GTIN), and utilized GS1 Hong Kong's cloud-based portal BarcodePlus. As such, Greendotdot could disseminate comprehensive information of its products in a cost-effective manner. On the other hand, consumers could make better-informed purchasing decisions and learn more about products with greater ease, upon making a purchase.

愈來愈多消費者意識到健康的重要，並願意支付更多金錢購買健康和有機產品。然而產品包裝往往未能提供足夠的資訊，該等資訊亦不時出現偏差。加上市面存在偽冒產品，消費者非常渴求一個可靠的渠道去獲取可信的健康及有機產品資訊。点点綠須解決產品資訊及產品質量保證的問題，以維持業務增長。

為迎合這些挑戰，点点綠採用了GS1標準及香港貨品編碼協會的BarcodePlus雲端平台，利用具成本效益的方案，讓企業向消費者分享全面的產品資訊。消費者無須再從不同的網站搜尋產品資訊，便可在購物前輕易地了解產品，作出更明智的購物抉擇。



Greendotdot.com Ltd (Greendotdot) is a subsidiary of Kampery Group engaged in the wholesale and retail of health food and organic food in Hong Kong, under the Greendotdot label and a number of overseas brands. It is also a founding member of The Association of Green, Organic at Living (GO@L), a trade association formed by local health food SME operators and traders in 2008 for closer collaboration on food-related regulatory issues and public education on organic products.

点点綠有限公司(点点綠)是「金百加集團」的子公司，該公司在香港從事点点綠品牌及其他海外健康及有機產品的批發和零售。点点綠亦是「綠機會」的創始成員。綠機會於2008年由本地健康食品界的中小型營運商和貿易商成立，就與食品有關的法規事務及有機食品的公眾教育相互協作。

RETAIL零售



## Max Choice Corporation Limited 大棧有限公司

Elevating the shopping experience with product authentication  
通過產品認證增進購物體驗

As a retailer of health food and wines sourced from local and international suppliers, Max Choice understands the concerns of consumers about the authenticity, origins and other details of the ingredients from these products. To address this challenge, the company has been in search of a solution allowing consumers to retrieve product information beyond the packaging labels and to verify the authentication of products before making purchase decisions. This would help consumers develop a stronger confidence towards the products and enhance their loyalty to the brands concerned.

To fulfill this commitment to its customers, Max Choice decided to adapt Genuine Product Authentication Solution on the high value products. To enable consumer to track the product details, an item level serial number is assigned using the GS1 Serialized Global Trade Item Number (SGTIN). 2-Dimension (2-D) barcode format is also used to store the SGTIN which will direct the consumers to access the extended product information in a real-time basis. A two layers secured label is designed where the serial number is printed and it will be affixed on the product package to allow easy differentiation of fake and authentic products.

Such an initiative enabled consumers to access and discover additional information such as product features, origin and other details just by scanning the barcode label, using a smart phone. They can also register the unique verification code online via BarcodePlus for product authentication purpose.

By applying GS1 global supply chain standard on its products, Max Choice enhanced their product branding and consumer trust by enabling the track-and-trace information to the consumers.

作為從本地及海外採購健康食品與葡萄酒的零售商，大棧深明消費者關注這些產品的真偽、來源地和成分詳情。為此，大棧一直尋求方案，希望能讓消費者擷取產品招紙以外的資訊，並在購物前驗證產品真偽。那將能提高消費者對有關產品的信心以及品牌忠誠度。

為履行顧客服務承諾，大棧決定為高級產品採納「正貨」驗證方案。為了讓消費者追蹤產品詳情，大棧為每件產品編配一個GS1國際貨品編碼序號，並以二維條碼儲存該編碼，消費者通過條碼可實時擷取產品的延伸資訊。此外，大棧亦特製了兩層的保安標籤，當中印上序號並貼於產品包裝之上，消費者將可輕易分辨產品真偽。

這些措施能讓消費者使用智能手機掃描條碼，獲取和了解更多產品資訊，例如產品特色、來源地等其他詳細資料。他們亦可在BarcodePlus網頁上輸入獨一無二的驗證碼，以驗證產品真偽。

自產品採用GS1環球供應鏈標準，消費者能追蹤及追溯資訊，大棧亦因此提升了品牌形象和消費者信心。



Max Choice Corporation Limited (Max Choice), a new retailer with three outlets opened in Causeway Bay, Tsuen Wan and Tuen Mun during September 2011, offers a lineup of wine and health food products including edible bird's nest, cordyceps, ginseng, dried abalone and frozen seafood.

大棧有限公司[大棧]是新創立的零售商，於2011年9月開業，三家分店設於銅鑼灣、荃灣及屯門，提供一系列葡萄酒和健康食品，當中包括食用燕窩、冬蟲夏草、人參、乾鮑及急凍海鮮。

## Original Taste Workshop 原味家作

Embracing proactive solutions for marketing outreach  
積極尋求方案拓展市場

To stand out from the highly competitive retail market, Original Taste Workshop (OTW) has to work smarter, utilizing technologies and reputable branding scheme, to 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, and the urgent need to inculcate its sales personnel with a customer-first mentality and improve their service quality.

OTW has been able to solve standardization issues related to the supply chain for its products by adopting GS1's Global Trade Identification Number barcode on their products to facilitate market outreach and expansion efforts, both in Hong Kong and overseas. Leveraging on ezTRADE, OTW has been provided with an industry platform to exchange of business messages and transmission of commercial documents with trading partners along the supply chain. By joining the Consumer Caring Scheme (CCS), OTW is able to increase its brand image and equity for greater public awareness. The company enjoys greater operational excellence and performs better practices in marketing, promotion, branding strategies and customer relationship management.

為了在競爭激烈的市場脫穎而出，原味家作需要更精明地運用科技和啟動信譽良好的品牌計劃，來維持競爭優勢。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分者的商業對商業交流，並為銷售團隊培養以客為先的服務態度，同時改善服務質素。

原味家作在產品上採用全球貿易貨品編碼(GTIN)條碼，解決了產品供應鏈標準化的相關議題，這對集團在香港和海外拓展市場大有幫助。集團亦善用了「通商易」，自此與貿易夥伴交換業務訊息和傳送商業文件均獲這個平台支援。

原味家作亦參加了「貼心企業」嘉許計劃，提升了品牌形象和資產，有助向大眾宣傳。那亦有助集團提升營運表現，在市場推廣、品牌策略和顧客關係管理均實踐了更佳實務。



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 local supermarkets, convenience stores and department stores.

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。



## Penta (China) Manufacturing Company Limited 浚港(中國)皮具制品有限公司

Elevating inventory visibility to overcome operational bottlenecks  
倉存透明度解決營運瓶頸

Despite the manual stocktaking efforts of Penta, the company attained only 90% inventory accuracy and was unable to pinpoint whether the stock losses were due to pilfering or order fulfillment problems. To protect its brand image against unethical practices from the distribution channels, the company needs to tightly monitor all its channel sales, especially those operating online, to ensure retail price standardization is maintained at all time. Before the company could issue clear operational guidelines, it was required, first and foremost, to standardize its operational processes and improve inventory track-and-trace and sales strategy issues.

Penta introduced an EPC/RFID Item-Level Tagging initiative to enhance its logistics efficiency, preceded by projects involving all its supply-chain partners, including its outsourced manufacturers and distributors. The project incorporated a number of GS1 global supply chain standards, including the Global Individual Asset Identifier (GIAI) that helps identify products as part of a fixed asset inventory system, the Global Location Number (GLN) that identifies the locations through which the products have passed moved as well as GS1 EPC Class 1 Gen 2 tags, attached to every piece of garment and accessory, to provide accurate, cost-efficient end-to-end visibility.

The RFID project has resulted in an increase of inventory accuracy from 90% to 99.9%. It has also enabled the company to accurately identify the root causes for the regularly low rate of its order fulfillment and stock shrinkage. Cartons passing through the RFID tunnels can now be 100% read within five seconds, at individual item level, and this has contributed to a ten-fold increase in the speed of product movements and handling through its supply chain.



Penta (China) Manufacturing Group is a local company established in 1988 to engage in the manufacturing, wholesale distribution and retail of leather products. Targeting the Guangdong province as its major market in China, the company requires all of its self-owned and franchised stores to follow a uniform set of operational and logistics guidelines.

浚港(中國)皮具制品有限公司是成立於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。浚港以廣東省作為主要市場，要求所有自營店和特許經營店遵從劃一的營運及物流指引。

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。為免被批發渠道的不良行為影響企業形象，浚港必須嚴格監控所有渠道銷售，尤其是網上銷售市場以確保零售價時刻保持劃一。在發出更清晰的營運指引前，浚港必須先標準化其運作程序，並標準化倉存追蹤和追溯以及銷售策略方面的不足之處。

為提升企業的物流效率，浚港引入EPC/RFID單品標籤，並事先與供應鏈中的所有合作夥伴包括外判生產商和批發商試行運作。本計劃亦引入多項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)則可識別物件曾移動的位置；所有服裝和配飾均貼上GS1 EPC Class 1 Gen 2標籤，以提供準確、具成本效益的點到點透明度。

引入無線射頻識別單品標籤計劃後，浚港的倉存紀錄準確率從90%提升至99.9%，有效協助他們準確識別訂單履行率長期偏低以及存貨減少的原因。現時，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，供應鏈裡產品流向及處理的速度亦提升了十倍。

## Swire Coca-Cola Hong Kong Limited 太古可口可樂香港有限公司

RFID-based Tank Management System for higher efficiency  
以RFID汽缸管理系統提升效率

Swire Coca-Cola Hong Kong (SCCHK) supplies a chemical compound CO2 to roughly 3,000 customers in Hong Kong. With more than 10,000 cylinders of the product in circulation, the company aims to create an efficient inventory tracking and asset management system to enhance its operational efficiency and product traceability. By adopting a RFID (UHF) solution, the company has succeeded in accurately tracking its cylinder tanks – including their numbers, inventory status and locations – and effectively monitoring its customers to find out whether they have applied First-in-first-out (FIFO) procedures in handling the CO2 products.

In designing this tracking system, the company customized the RFID tags to address the possible environmental challenges, such as signal interference from the metallic surfaces of the cylinders, potential damage to the tags due to transportation and how cylinders storage at client premises that could affect the reliability and performance of these tags. Special plastic lamination applied on their surfaces has made it easier to install the tags and make them more durable, with an improved read and write reliability.

Implementing the RFID inventory tracking and asset management system has enabled SCCHK to track and trace the cylinder tanks from production floor, through the warehouses to retail shelves. As a result, the company can expect a 50% reduction in the loss of its cylinder tanks and 30% reduction in stocktaking time. It can also look forward to a significantly reduced timespan, from one hour to less than five minutes, for locating misplaced cylinder tanks and an improvement in inventory accuracy of up to 100%.

太古可口可樂為全港約3,000名客戶提供二氧化碳，須處理過萬汽缸，因此希望建立有效的存貨追蹤及資產管理制度，以改善企業的運作效率和產品的可追溯性。太古可口可樂採用了超高頻無線射頻識別RFID (UHF)方案，能準確追蹤汽缸的數量、狀態及位置，並監察客戶是否已按「先進先出」程序處理其二氧化碳產品。

設計這套追蹤系統時，太古可口可樂亦面對一些環境問題，例如汽缸及汽缸架的金屬表面造成的信號干擾，以及汽缸運送並存放於客戶場所的過程可能對RFID標籤造成的損害(這些損害可能影響標籤的表現和可靠性)。因此太古可口可樂為標籤蓋上膠膜，使其更易貼上汽缸和更耐用，同時亦能提升讀取及寫入數據過程的可靠性。

通過RFID存貨追蹤及資產管理系統，太古可口可樂可以在汽缸從生產部門運送至倉庫及商店途中，追蹤及追溯其動向。故此，太古可口可樂的汽缸遺失率可減少50%，盤點存貨所需時間縮短30%，確認有問題汽缸位置的時間從一小時縮短至少於五分鐘，而存貨壽命記錄的準確性則提升至100%。



Swire Coca-Cola Hong Kong (SCCHK) is a leading soft drink manufacturer with 17 factory lines with an annual production capacity of 60 million cases. The company is also a major supplier of syrups and carbon dioxide (CO2) cylinder tanks for carbonating soft drinks as well as vending machines to restaurant chains in Hong Kong.

太古可口可樂香港有限公司是香港主要的汽水生產商，運作17條生產線，每年生產超過6,000萬箱飲料。太古可口可樂又是製作混合軟性飲料所需的糖漿及二氧化碳汽缸的主要供應商，亦為香港多家連鎖餐廳供應自動販賣機。



## Tsit Wing International Holdings Limited 捷榮國際控股有限公司

360 degrees supply chain enhancement  
全方位改善供應鏈運作

Tsit Wing International Holdings Limited is one of the Hong Kong's leading food and beverages suppliers. From its beginning as a coffee, tea and grocery supplier since 1932 to beverage and food services industry leader, Tsit Wing has expanded its business range to include coffee shops, distributing branded coffee and tea machines, and supplying instant beverage products to supermarkets. As a result, Tsit Wing realized the importance of driving supply chain excellence to support business and regional growth and to further support company vision to become a world-class food and beverages services provider.

With over 80% of market coverage of Food and Beverages network in Hong Kong, the company decided to start a series of re-engineering measures as a starting site to its business and operating systems since 2005. One of the re-engineering measures is to enhance its supply chain systems for the purposes to drive productivity gains and new cost efficiencies. Tsit Wing has accepted GS1 Hong Kong's recommendations on standardizing its product coding by using Global Trade Item Number (GTIN). GS1 Hong Kong further supports Tsit Wing to standardize its entire supply chain processes from procurement, production, warehouse to distribution through Supply Chain Operations Reference model (SCOR).

Upon standardization, Tsit Wing is able to address operation issues and achieve better customer fulfillment, and more important, a 10% operation cost saving can be achieved throughout the 360 degrees supply chain enhancement.



Tsit Wing Group is one of the biggest food and beverage manufacturers and distributors in Hong Kong and Greater China, with its business operations spanning across Asia and North America. With an operational history of over 80 years, the Group is committed to a proactive business attitude, in its vision to become a "world-class integrated food and beverages services provider".

捷榮集團是香港及大中華最大的食品及餐飲製造商及分銷商之一，業務遍佈亞洲及北美。過往80年來，捷榮集團一直採取積極進取的態度，為達成「世界級綜合餐飲服務供應商」的願景不遺餘力。

捷榮國際控股有限公司是香港最具領導地位的食品及餐飲供應商之一。它於1932年以咖啡、茶類和雜貨供應商的身份起家，逐漸發展包括咖啡廳、名牌咖啡和沖茶機分銷以及為超市提供即沖飲料產品等更廣泛業務。為支援業務擴張及地區性發展，捷榮深明優化供應鏈管理的重要性，那才能達成公司成為世界級餐飲服務供應商的願景。

有見公司在香港的餐飲市場覆蓋率逾80%，捷榮決定自2005年起展開一連串重組措施，改良業務和營運系統。其中一項措施是改善供應鏈運作，以提高生產力和成本效益。捷榮採納了香港貨品編碼協會的建議，把產品代碼標準化，統一使用全球貿易貨品編碼(GTIN)。香港貨品編碼協會亦進一步支援捷榮透過供應鏈運作參考(SCOR)模型把所有供應鏈流程標準化，包括採購、生產、存倉以至批發流程。

落實標準化後，捷榮成功解決各種營運議題，並更能滿足客戶的需要。更重要的是，透過全方位改善供應鏈運作，捷榮得以節省10%的營運成本。

## V-MODA

Connecting consumers via a mobile app  
利用流動應用程式連接消費者

Counterfeiting was a serious problem facing V-Moda when it first entered the Asian market. In fact, the company received complaints from distributors and loyal customers over the issue, along with a large number of fake products "returned" to them, imposing a severe strain on its customer service.

To address the challenge proactively, a V-MODA APAC team commenced a project to adopt GS1 Serialized Global Trade Item Number (SGTIN) and Product Authentication Solution for all the company's headphone products earmarked for retail in Asia. A QR code is printed on two labels affixed to each product that serve different purposes. One of the labels is attached to the packaging, on which the QR code is being used to encode the SGTIN. The SGTIN becomes the serial number of that particular product. Using such a code, consumers can access extensive information via the V-MODA website about the product, from the point of its labeling to its packing, pick-up, distribution and delivery to the retail outlet. Just by simply scanning the QR code with a smartphone prior to purchase, customers can download the information from the website, connected to GS1 BarcodePlus.

After the purchase is made, consumers can use their smartphone to scan the QR code found in the user manual where a unique verification code is added for authentication and warranty registration purposes. Once the product is registered, consumers can directly access V-MODA's Warranty Registration System.

Through this Product Authentication Solution, V-MODA has gained not only better control of its product prices and sales channels, but also ways to improve its customer relation management through strengthening consumer loyalty.

The US-based V-MODA is a lifestyle headphone brand that has been providing music lovers worldwide with a high-end audio experience since 2006. In its commitment to maintain a high level of product quality, V-MODA uses only classic materials including steel, aircraft-grade aluminum, zinc and Kevlar to produce military-grade test standard headphones.

V-MODA成立於2006年，是以生活品質為重的耳機品牌，讓音樂愛好者能體驗優質的音樂享受。為履行對顧客的產品質量承諾，V-MODA只採用第一流的原料，如以鋼、鋅、飛機用鋁和既輕且高強度的纖維來生產達軍事級測試標準的耳機。

V-MODA在開展亞洲市場時，發現假貨問題嚴重，招致不少分銷商和忠實顧客投訴，並把大量假貨「退回」公司，客戶服務部飽受壓力。為積極應對上述挑戰，V-MODA亞太區團隊啟動了採用GS1國際貨品編碼序號(SGTIN)和「正貨」驗證方案的項目，應用於公司於亞洲零售的所有耳機產品。

V-MODA於兩款產品標籤印上QR碼，以達到不同的營運目的。其中一款產品追蹤標籤貼於產品包裝盒上，用以記錄SGTIN，SGTIN成為該產品的獨有序號。有了這個序號，消費者可於購買產品前，以智能手機掃描QR碼，通過V-MODA網頁連接往香港貨品編碼協會的BarcodePlus平台，查詢有關產品由標籤、包裝、分銷到銷售店鋪等延伸資訊。



購買產品後，消費者更可掃描於盒內用戶手冊上的QR碼，利用其編配的獨一無二驗證碼辨識產品的真偽和進行保修登記。一經登記，消費者便可直接查閱V-MODA的保修登記系統。

透過這套產品驗證方案，V-MODA不但有效地管理產品的市場價格及銷售渠道，更提升了顧客忠誠度，鞏固了顧客關係。



## Extensive Services to Benefit 7 Industries 服務跨越7大行業

## Key Services and Solutions 服務與解決方案

**BarcodePlus** is a cloud-based product and location information portal allowing users to track and trace products, assets, locations and logistics units throughout the supply chain process, based on unique GS1 keys, such as GTIN, GLN and SSCC, assigned to each of these objects. Facilitating product data and inventory management, it allows businesses to access and share product information with their trading partners.

At the same time, extended product information such as ingredients, usage direction, packaging, images, nutritional details and consumer details, can be obtained by customers using GS1 BarCodes via the Internet, mobile phones and smart kiosks. Simply by scanning the barcodes on the products with a smart device, customers can access comprehensive product information from a trusted data source. This offers them the product assurance they need to accelerate their purchase decisions.

As of June 2014, nearly 3,600,000 GTINs had been registered under the BarcodePlus product registry in the local market and about ten thousand local FMCG items were uploaded to the portal with attractive product images for consumers to download through the GS1 Hong Kong's Consumer Connect mobile application.

**Consumer Connect** By harnessing the power of mobile technology, GS1 Hong Kong officially launched a new B2B2C mobile application, Consumer Connect, in January 2013. This project is sponsored by the Office of the Government Chief Information under the 2011/12 Sector-specific Programme for the wholesale/retail sector.

This new application has gained the tremendous support of GS1 Hong Kong members as it helps them to extend their reach to consumers through mobile marketing and promote their brand images and product values. Members only need to follow simple procedures to upload product information to



**BarcodePlus** 是以雲端技術為基礎的產品及位置資訊門戶網站。由於每件在供應鏈中流通的貨品、資產及物流單位都擁有各自的GS1識別碼，例如GTIN(全球貿易貨品編碼)、GLN(全球位置編碼)和SSCC(貨運容器序號)等，因此BarcodePlus可讓用戶追蹤及追溯這些物品的位置。BarcodePlus有利於產品資訊及倉存管理，企業不但可以透過網站查閱產品資訊，還可與貿易夥伴分享有關訊息。

與此同時，消費者亦可透過互聯網、手提電話及智能資訊站，利用GS1條碼獲取產品的詳細資訊，例如產品材料、使用方法、包裝、圖片、營養資料及消費者須知等。消費者只需使用智能裝置掃描產品上的條碼，便能從可靠的來源獲取全面的產品資訊，這份保障有助消費者加快購物決定。

截至2014年6月，本地市場已有接近360萬個GTIN識別碼經BarcodePlus產品註冊獲得編發；BarcodePlus網站亦上載了約一萬件本地快速流轉消費品的資料，並附上吸引的圖像，消費者可使用香港貨品編碼協會的「物密啲」流動應用程式下載。

### 物密啲



香港貨品編碼協會發揮流動科技的力量，於2013年1月正式推出全新的商業對商業對顧客的流動應用程式「物密啲」。此項目獲政府資訊科技總監辦公室的2011至2012年批發/零售業電子商務推廣計劃贊助。

本應用程式獲香港貨品編碼協會會員大力支持，它讓會員透過流動營銷接觸更多消費者，藉此宣揚品牌形象和產品價值。會員只需執行幾個簡單程序，便可以把資訊上載至以雲端技術為基礎的產品資訊門戶網站，透過多媒體市場推廣活動直接與顧客互動。另一邊廂，消費者只需使用智能裝置掃描GS1條碼，便可通過「物密啲」擷取可靠的產品資訊，同時還



the cloud-based portal, through which they can interact directly with customers in multimedia marketing campaigns. Apart from retrieving trusted product data on Consumer Connect with a simple scan of GS1 Barcodes by their smart devices, consumers can also download digital coupons, discount vouchers and other online promotional offers to incentivize their purchases.

In addition, Consumer Connect has unleashed an extensible range of valuable initiatives. Among them is series of jointly organized academic activities in which students are educated about mobile digital marketing through hands-on experience with GS1 Barcodes and other online product campaigns. Under another educational and promotional initiative organized, consumers were taught to authenticate wine products and retrieve wine-temperature or humidity track-and-trace information on their smartphones.

Plans are underway to strengthen the marketing features of Consumer Connect, to help GS1 members reach out to a wider group of consumers, through initiatives such as social media integration and instant interaction with customers to meet their product and other needs in the fast-paced digital era.

**ezTRADE** is a leading electronic data interchange (EDI) platform in Hong Kong and the southern part of mainland China, that facilitates paperless trading and helps enterprises achieve greater efficiency under GS1 Keys. Presently, around 2,000 companies are connected through it to exchange trading documents, such as orders, invoices and dispatch advices (ASN) daily around the clock.

Already popular with the retail industry for consumer products and healthcare sector, ezTRADE has extended its services to the B2B good business in 2014. The platform will develop additional features to help address challenges in food procurement, supply as well as invoicing and payment processing faced by other sectors as well. Currently in final design, the following new functions of ezTRADE are due for official launch in 2015.

可下載數碼優惠券、折扣優惠券和其他網上推廣優惠，增進購物意慾。

此外，「物密啲」還推行了多項饒富價值的關連計劃。當中包括一連串聯合教育計劃，旨於通過親身體驗，教導專上學生以GS1條碼和其他線上產品推廣活動實行流動數碼營銷。另一項教育和推廣計劃則教導消費者以智能手機驗證葡萄酒產品，並追溯葡萄酒的溫度和濕度等資料。

「物密啲」未來計劃加強營銷功能，讓會員接觸更廣泛的消費群。這包括整合至社交媒體以及與消費者即時交流，務求在瞬息萬變的數碼年代迎合他們對產品和其他方面的需求。



「通商易」是在香港及南中國居領導地位的電子數據聯通(EDI)平台，不但促進無紙交易，還協助企業善用GS1識別碼以提升營運效率。目前已有近2,000家企業全天候透過「通商易」交換訂單、發票及出貨通知單等貿易文件。

「通商易」在零售界已十分流行，多用於消費品及保健產品，2014年更進軍商業對商業貨品貿易，亦正計劃研發全新功能，以協助其他行業應付食物採購、供應，以及發票和付款程序等問題。以下新功能的設計已踏入最後階段，2015年便會正式推出。

#### a) Invoice status visibility

ezTRADE will provide an enhanced new web interface for both Web & Gateway users. One of the new key features here is designed to uplift invoice status visibility. In the past, suppliers are passive to know the invoices matching status on the customer's side until the actual payment received, and it is usually too late to follow-up with the buyer for the discrepancy. With the invoice status visibility function added, suppliers can proactively check the invoicing status through ezTRADE. This being the case, suppliers are made aware of any issues arising from the invoicing process and hence, take corrective actions early to ensure timely invoice processing. This new feature is expected to reduce the incidence of late invoice settlement.

#### b) Mobile Apps Solution

Mobile apps, designed for application on iPhones and Android devices, are commonly used nowadays. By developing a new mobile app, ezTRADE will provide suppliers with an additional channel to receive alerts of EDI Order arrivals and check the status and progress of EDI Purchase Orders on their smart devices.

#### c) 3-way matching process for food industry

Moving beyond ezTRADE's orders and invoices-exchange functions, GS1 Hong Kong is the platform to take on part of the ordering, products receiving and invoice-data process from the buyer's ERP system in the food industry. This will allow buyers to transmit their products receipt data to ezTRADE through the EDI, for storage, tracking and easy retrieval. With this new function installed, ezTRADE will be capable of matching the products receipt data with the corresponding EDI purchase orders and invoices, with the results made visible to both supplier and buyer. This new function will be available to the food industry in the preliminary stage of its development.

#### a) 發票狀態可視化

「通商易」將為互聯網及增值網用戶推出全新網上介面，其中一項主要新功能是提升發票狀態的透明度。過往供應商在收到款項之前，都無法得悉客戶核對發票的狀態，十分被動，而且萬一發票資料有誤，亦會錯過與買家跟進的最佳時機。「通商易」加入發票狀態可視化功能後，供應商便可透過平台主動查看發票狀態，得悉過程中出現的任何問題並及早補救，確保發票流程可準時完成。預計此項新功能可以減少延遲支付發票的情況。

#### b) 流動應用程式解決方案

為iPhone及Android裝置而設計的流動應用程式現已十分流行。「通商易」的最新流動應用程式為供應商提供另一新渠道，以便隨時接收已接獲EDI訂單的訊息，並透過智能裝置查閱EDI採購訂單的狀態及處理進度。

#### c) 飲食業三向配對流程

除了以「通商易」提供訂單及發票交換功能外，香港貨品編碼協會還為飲食業提供額外平台，從買家的企業資源管理系統處理訂單、收貨及發票數據輸入等程序。買家可透過EDI把接收貨品的數據傳送至「通商易」，方便存取、追蹤以及翻查訊息。此項新功能推出後，「通商易」便可把收貨訊息與相關的EDI訂單及發票配對起來，而且供應商和買家都可以查閱有關資訊。飲食業用戶將可率先試用此項新功能。







**ezTRACK** Developed by GS1 Hong Kong in 2008, ezTRACK is a EPCIS standard-based visibility platform that resulted from the commercialization of a project funded by the Innovation and Technology Commission. This platform enables global track-and-trace of products throughout a supply chain from source to destinations, offering real time information visibility along the entire process and enabling stakeholders to achieve business goals based on event-based information. Today, the ezTRACK users' community is globally connected and accessible from Italy, the United States, New Zealand, Taiwan, Singapore, Malaysia as well as Guangdong China, playing a key role in facilitating product-based information flow.

Riding on this standard-based visibility platform and the traceability capability it provides, GS1 Hong Kong has also developed and integrated vertical solutions in ezTRACK to serve industry users, including:

#### a) Product Authentication Solution

To address the ever-growing demand of the consumer-driven FMCG market, GS1 Hong Kong continues to deploy the Product Authentication Solution to serve different industry users. This solution has been applied to a total of over nine million product items from cosmetics to consumer electronics, timepiece as well as food and health-food sectors. Offering one-stop value-added services for brand owners and retailers to serve their customers better, ezTRADE allows consumers to obtain extended product information, including product features and other content beyond those printed on the packaging, just by scanning the product barcode or QR code on a smart device such as a mobile phone or an electronic tablet. Besides, consumers can take advantage of this feature to activate product warranties online, enjoy promotional offers, stay tuned to marketing campaigns and redeem free gifts and e-coupons offered by brand owners and retailers.



**「縱橫網」**是一個由香港貨品編碼協會於2008年開發，以EPCIS標準為基礎的資訊透明化平台。它是創新科技署把資助項目商業化的成果，它讓持份者在環球供應鏈上從源頭到終端追蹤及追溯產品，在整個流程裡擷取實時透明化的資訊，並可按個別事件收取資訊，達成業務目標。時至今天，「縱橫網」社群平台已貫通全球，連結了意大利、美國、紐西蘭、台灣、新加坡、馬來西亞及中國廣東，大大促進了產品的資訊流。

香港貨品編碼協會充分利用這個以標準為基礎的資訊透明化平台，以及其具備的追溯功能，積極開發新應用，並將之整合於不同行業的垂直解決方案，為業界帶來更完善的服務。當中包括：

#### a) 產品驗證方案

為迎合消費者主導的快速流轉消費品市場的新需求，香港貨品編碼協會不斷開展產品驗證方案，全力服務不同行業的用戶。至今共有九百萬件產品採用了這項解決方案，包括化妝品、電子消費品，以至食品和健康保健食品等。「縱橫網」為品牌持有人及零售商提供一站式增值服務，消費者只消用智能裝置如智能手機或平板電腦掃描產品條碼或QR碼，便可獲得額外的產品資訊，包括產品特色以及包裝招紙以外的內容訊息。此外，消費者亦可善用這項功能，於線上啟動產品保養，享用推廣優惠，緊貼市場推廣活動，並兌換品牌持有人和零售商所提供的免費禮品和電子優惠券。



#### b) Cold Chain Management Solution

GS1 Hong Kong's Cold Chain Management Solution is developed for improving supply chain performances and achieving end-to-end cold chain visibility and traceability on a real-time basis. Industry stakeholders can monitor temperature changes along the supply chain and track and trace shipment events along the logistics process on a single portal. For example, this function has provided city'super, an upscale supermarket chain in Hong Kong, the ability to effectively monitor the temperature status of fresh food imported from Japan initially. Under this project, city'super has successfully enhanced the visibility of its perishable items moving along the supply chain with their temperature data accurately captured and uploaded onto ezTRACK. This means that city'super is now able to detect deterioration of perishable food items along its supply chain more easily, thereby enabling it to take immediate remedial action to minimize potential financial losses, while ensuring that the perishable items shipped in from overseas remain fresh and safe for customer consumption.

#### c) EPC-enabled RFID Item Level Tagging (ILT) Serialization Management & Tag Verification

Nowadays, item-level tagging (ILT) has emerged as the latest trend in various industries for high-efficiency inventory management. It is enjoying higher popularity in the United States and Europe, with a wider adoption among businesses engaged in the apparel industry. Several American apparel retailers have already launched ILT to support their omni-channel retailing and marketing strategies and facilitate the sales of apparel products at retail outlet. In response to the fast-growing market demands, GS1 Hong Kong launched its ILT serialization management and electronic proof of delivery (ePOD) services in 2012, so as to engage and support brand owners, retailers, label providers and suppliers for easy ILT adoption.

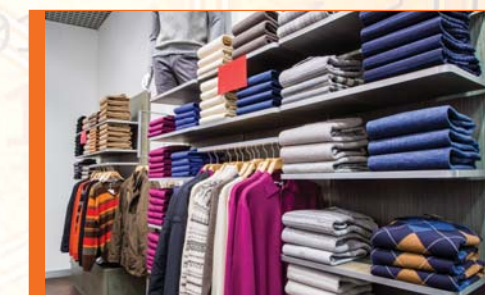
#### b) 冷凍鏈管理方案

香港貨品編碼協會的冷凍鏈管理方案，是專為改善供應鏈表現、實現點對點冷凍鏈透明度和實時追溯效能而開發。業界持份者能監控供應鏈的溫度變化，並可透過單一的門戶網站，追蹤和追溯物流過程中的付運活動。以香港的高級連鎖超市city'super為例，這項方案讓它有效監察日本新鮮進口食品的溫度數據。city'super採用方案後，成功加強了供應鏈上較易腐壞食品的透明度，並可準確擷取溫度數據，然後上載至「縱橫網」。city'super現在能輕易偵測供應鏈上食品腐壞的情況，從而立即採取補救措施，那既能減少財政損失，也可確保食品新鮮安全，顧客可安心食用。

#### c) 以電子產品編號驅動的無線射頻識別單品標籤序號化管理及標籤驗證

時至今天，單品無線射頻識別已是講求高效存貨管理的行業的最新趨勢。它在歐美廣獲採用，特別在成衣業蔚然成風。目前有好幾家美國成衣零售商，已推行了單品無線射頻識別標籤計劃，從而支援全方位渠道營銷策略，並協助旗下零售商店銷售成衣產品。為回應與日俱增的市場需求，香港貨品編碼協會在2012年推出了單品無線射頻識別標籤序號化管理及電子付運簽收證明服務，以支援品牌持有人、零售商、標籤供應商及成衣供應商，讓它們能夠輕易採用單品無線射頻識別標籤。

序號化管理模組以GS1的國際貿易貨品編碼GTIN為基礎，實現簡易和自動化的產品序號管理。所有序號編發歷史都會紀錄在案，以便將來作匯報和審查之用，從而實現可追溯和透明化的序號編配。





The serialization management module enables easy and automatic management of product serial numbers based on GS1 product GTINs. All allocation histories will also be kept for future reporting and auditing in order to provide traceable and visible monitoring on the serials allocation.

The ePOD module reveals the electronic pedigrees by capturing supply-chain business procedures undertaken by different trading parties through ezTRACK EPCIS services, to provide electronic proof to brand owners. This module not only facilitates validation of different business steps, serials duplication and non-registered use to minimize errors, but also provides user-friendly, integrated dashboards for tracking outstanding purchase-order status or tracing individual product items with the related EPCIS pedigree in case of contingency incidents.

#### d) ezTRACK Solution Certification

As of the end of August 2014, a total of 35 Certified ECP/ RFID Engineers from 22 technology companies in Hong Kong have been trained to equip them the necessary EPCIS standard know-hows. A total of 15 vendor partners solutions have been certified under the Solution Certification Program to provide value added solutions to their customers.

## SCM Professional Services and Training

### a) Facilitating business operations through knowledge exchange

GS1 Hong Kong actively brings in industry expertise, global standards, best practices and industry tools to support improvements and transformation of supply-chain processes at every critical stage. In addition, it is dedicated to offering professional consultancy and training for GS1 members to facilitate their business operations.

This year, GS1 Hong Kong has organized 16 basic and advanced barcode workshops to equip members with the necessary knowledge

電子付運簽收證明模組透過「縱橫網」的產品電子代碼訊息服務擷取不同貿易單位的供應鏈商業步驟，為品牌持有人提供產品電子系譜，作為電子證明。這項模組不僅能驗證不同商業步驟、重複的序號和未經登記的序號，從而減少錯誤；它並提供易於使用的綜合儀表板，協助用戶追蹤未獲處理的採購單狀況或當事故發生時追溯個別產品及其相關的電子系譜。

#### d) 「縱橫網」方案認證

截至2014年8月，共有35名認可的產品電子代碼/無線射頻識別工程人員接受培訓，吸取產品電子代碼訊息服務標準的基本知識，他們分別來自22家本地技術公司。另外，有15家供應商夥伴的解決方案通過了「解決方案認證計劃」，為客戶提供增值解決方案。



## 供應鏈專業服務及培訓

### a) 通過知識交流改善業務運作

香港貨品編碼協會積極提供行業專業知識、全球標準、最佳實務和解決方案，以支援供應鏈每個關鍵步驟的升級轉型工程。此外，我們還致力為會員提供專業的顧問及培訓服務，助其提升業務營運效率。

本年度香港貨品編碼協會一共舉辦了16個基本與進階條碼工作坊，為會員提供採納條碼技術所需的一切知識與技術，以便企業能夠有效地改善業務運作。協會更與業界夥伴及供應商夥伴維持緊密合作，共同舉辦超過40場研討

and skills to implement barcode technology in their operations effectively. The organization has also worked closely with its business and vendor partners to organize over 40 seminars and workshops on a wide range of topics, ranging from food safety management and traceability to EPC/RFID technology, Efficient Consumer Response (ECR) strategy, Synchronized Supply Chain Replenishment (SSCR), supply chain simulation, digital marketing, GS1 Global Traceability, supply chain profitability, healthcare traceability, e-Commerce highway and more. All these training and familiarization activities have been tailored to address the needs of the local business community.

### b) Best-practice recommendations by SCM professionals

GS1 Hong Kong leverages on a worldwide network of expertise and global knowledge, coupled with local implementation experience, to help Hong Kong enterprises adopt best practices in supply-chain management (SCM) and offer them robust solutions using GS1 standards. Bundling standards with services, its professional consultants employ a standard-based infrastructure framework, wherein the latest sustainable technologies are adopted to support companies in meeting the evolving needs of their business processes. Through the adoption of world-class SCM practices, GS1 Hong Kong helps companies to understand the causes of the issues facing them, remove supply chain barriers and bottlenecks, lower business costs, incorporate SCM best practices and optimize their supply chain operations.

The GS1 Professional Services team was established to assist GS1 business members to cope with their supply chain issues and is more than a pool of trusted, expert advisors. The team is made up of experienced professionals who are not only experts in GS1 Systems, but possess a great deal of practical implementation expertise across a range of industries. Apart from developing and providing solutions for our clients, GS1 Hong Kong will also offer assistance on solution implementation.

會及課程，主題包羅萬有，涵蓋食物安全管理與追溯、產品電子代碼/無線射頻識別技術、高效消費者回應策略、供應鏈同步補貨、供應鏈模擬、數碼營銷、GS1全球追溯、供應鏈盈利能力、醫療護理追溯、電子商貿高速公路等等。這些培訓和教學活動均按本地商界的需要量身設計。

### b) 供應鏈管理專家推薦的最佳實務

香港貨品編碼協會善用全球專家網絡、環球知識和本地實踐經驗，協助香港企業在供應鏈管理上採用最佳實務，為它們提供以GS1標準為基礎的健全方案。協會的專家以標準結合服務，採用以標準為本的基建框架，並以最新的可持續科技來協助企業迎接商業流程裡日新月異的新需求。通過採用世界級的供應鏈實務，香港貨品編碼協會讓企業了解問題根源，對症下藥，移除供應鏈上的障礙和瓶頸，減省商業成本，並採納供應鏈最佳實務和優化供應鏈運作。

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## 7 Industries served by GS1 Hong Kong 服務與解決方案

### Apparel Industry

#### Enhancing inventory visibility through EPC Item Level Tagging

Speed to market, along with the demands in item variety, product flow rate, product seasonality and inventory accuracy, are pressing issues facing modern retail. With the emergence of omni-retailing, the apparel industry is especially challenged to maintain real-time visibility round the clock. Only by enhancing inventory visibility are retailers able to provide faster delivery, better customer services and minimize out-of-stock situations and markdowns, all of which will help them realize higher profitability. One of the tools available to them, in this regard, is RFID-enabled Item Level Tagging (ILT), through which inventory accuracy can be increased from 63% to over 95%.

#### Supplier Support Program

Since 2011, GS1 Hong Kong has organized an Apparel ILT program in collaboration with GS1 US to support apparel suppliers from Hong Kong and China with the expertise and tools they need to meet the tagging requirements of US importers and retailers. Through this program, GS1 Hong Kong has backed global sourcing companies, including Li & Fung and C&A, in rolling out their ILT initiatives to China, India, Bangladesh and other Asian countries in 2014.

The Supplier Support Program consists of the following components:

- 1) Training – Basic EPC & ILT training for suppliers to fulfill the tagging requirements of their buyers.
- 2) Certified vendors – A list of ILT certified vendors has been compiled and provided to suppliers to help them source RFID tags, readers and related solutions and services.
- 3) A global EPCIS-based visibility platform – ezTRACK supports suppliers with serialized number management, RFID tag verification to ensure readability before shipment and also electronic proof of delivery (ePOD) upon receiving.

### 成衣業

#### EPC單品標籤化計劃 提升倉存透明度

零售業講求把貨品迅速地推出市場，但是這方面的表現極受貨品種類多寡、流轉速度、季節性和倉存準確度影響。對於成衣業來說，實時掌握存貨資訊更是成功滿足全方位零售要求的必要條件。無線射頻識別科技可幫助零售商把倉存準確度由63%提升至超過95%，而當倉存透明度提高後，零售商便可提供更快捷的送貨服務，改善客戶服務水平，並把缺貨和削價促銷的可能性減至最低，從而增加企業的利潤。

#### 供應商支援計劃

自2011年開始，香港貨品編碼協會一直與美國貨品編碼協會合作，大力推動成衣業單品標籤化，又特別重視為中港兩地的供應商提供支援，協助它們滿足美國零售商的標籤要求。透過供應商支援計劃，本會於2014年為跨國採購商利豐及成衣品牌C&A提供支援，協助它們在中國、印度、孟加拉等亞洲國家展開單品標籤化計劃。

供應商支援計劃的內容包括：

- 1) 培訓 為供應商提供基本的產品電子代碼(EPC)及單品標籤培訓，協助他們滿足買家的標籤要求。
- 2) 已認證的方案供應商 為供應商提供已認證的方案供應商名單，協助他們採購無線射頻識別標籤、讀寫器及相關解決方案和服務。
- 3) 以EPCIS為標準的全球追蹤追溯平台「縱橫網」協助供應商進行序列化管理及標籤，以在產品付運前確保所有標籤均可正常讀取，並於抵達後收到交付電子付送簽收證明(EPOD)。



### Food Industry

#### Best practices in food supply chain

GS1 Hong Kong was the project manager of the "Knowledge Sharing of Hong Kong Food Supply Chain Best Practices" project, which was conducted between May 2013 and Oct 2014. The project was organized by the Hong Kong Food Council and financed by the SME fund of the Hong Kong Trade and Industry Department.

Aiming to create a platform for the industry to acquire and share food supply chain practices, knowledge and information, the project encourages collaboration of food supply chain stakeholders, sharpens the competitive edge of the industry, enhances food supply chain control and reinforces Hong Kong's image as a food paradise.

The project has been completed with the hosting of 12 seminars, 6 workshops and a regional forum in May 2014, accompanied by the publication of an industry best practice guidebook. Over 300 industry practitioners have demonstrated their support for these events.

#### Food traceability initiatives to enhance food safety

Jointly developed by GS1 and the food industry in line with the traceability requirements of international food safety standards like ISO22000, the Hazard Analysis and Critical Control Point (HACCP) is a global traceability standard to provide a single traceability process compatible with all quality and regulatory requirements, enabling interoperability among trading partners and allowing efficient recall or tracing of raw materials to upstream supplier origins. It is also a genuine business standard describing the traceability process independently of the choice of enabling technologies.

GS1 Hong Kong has also conducted a number of studies to review their existing traceability systems of local food and catering businesses, using a checklist of control points and compliance criteria known as the Global Traceability Conformance assessment. In addition, companies from the sector can also leverage on the global EPCIS visibility platform

### 食品業

#### 推廣食品供應鏈最佳實務

在香港工業貿易署的認可下，本會獲香港食品業總會委託，在2013年5月至2014年10月間協助推行由政府資助的「智『食』相傳——香港中小企食品供應鏈最佳實務」計劃。

計劃的目標是為飲食界打造溝通平台，讓食物供應鏈持份者就其供應鏈運作模式、知識及資訊進行交流，從而鼓勵持份者互相合作，提高業界競爭力，改善食物供應鏈的管控水平，鞏固香港的「美食天堂」形象。

本會共為本計劃舉辦了十二次研討會和六次工作坊，2014年5月更主辦地區性論壇，又出版飲食業最佳實務指南，促進業界對有關議題的認識和交流。業界對以上活動反應熱烈，參與各項活動的飲食界從業員共超過300名。

#### 全力增進食品可追溯性 改善食品安全

本會與飲食業界參照ISO22000及食物安全重點控制(HACCP)系統等國際食品安全標準，合力研發出全球追溯標準(GTS)，以便統一業界的貨品追溯過程。全球追溯標準符合所有現行的品質及監管要求，可以促進貿易夥伴間的互動合作，加強回收貨品及向上游供應商追溯原料來源的效率。全球追溯標準同時是描述追溯過程的真正商業標準，不受各企業迥異的貨品追溯科技選擇所影響。





- ezTRACK, to capture product events and facilitate integration with other value-added services such as cold chain management.

#### Making “order-to-cash” paperless for higher efficiency

Ordering, delivering and paying are the three most basic steps in product trading. This chain of events is often referred to as “order to cash.” Traditionally, business data supporting this process has been exchanged using paper, dispatch advice notices and invoices produced manually and sent by post or by fax.

Such paper-based documentation supported the operations of the retail and hospitality sector back in the early 1990s and before. With the launch of ezTRADE in Hong Kong, “order-to-cash” has been made largely paperless. ezTRADE is a standard-based e-commerce platform that facilitates paperless trading helping enterprises achieve greater efficiency. Presently, ezTRADE supports over 10,000 procurement transactions daily, involving over 1200 users in Hong Kong and 800 from mainland China.

This service has been further extended to the food catering business in Hong Kong. This has been undertaken to enhance the entire order-to-cash cycle between buyers and suppliers and support inventory replenishment in the sector. In fact, the ezTRADE users' community currently covers over 90% of the retail business in Hong Kong, enabling the efficient and accurate transmission of commercial documents to trading partners along the supply chain using Electronic Data Interchange (EDI) messaging formats.

本會按成員要求進行全球可追溯性準則評估，協助成員更有效地追溯產品的歷史、使用情況和位置，又推出以GS1標準為基礎的追蹤及追溯平台「縱橫網」，方便企業查閱及交換訊息，同時推廣冷凍鏈管理及產品通路管理等增值服務。

#### 強化飲食業「訂單到現金」周期運作

零售界及醫療界早於1990年代已開始推行無紙採購，成果有目共睹。發展至今日，支援無紙化貿易的「通商易」平台已擁有超過1,200名香港用戶和800名內地用戶，每天處理一萬多宗交易，不但加強了買家與供應商之間「訂單到現金」周期的運作，還可支援零售商的補貨工作，為零售業帶來關鍵助益。「通商易」平台於香港現代零售商的覆蓋率已達90%，最近更拓展至飲食零售業，為更多企業提供支援。



#### Unsafe Product Prevention Program (UPPP)

The Unsafe Product Prevention Program (UPPP), an industry-wide collaborative initiative to prevent defective and unsafe products being sold in market to ensure consumer safety, has been embraced by the Centre for Food Safety under the HKSAR Government. The Centre has added GS1 Barcodes (GTIN), the universally recognized product identification numbers, into its Rapid Alert System Form to enable traders to identify affected products efficiently and effectively and take swift, proper action to prevent the sale of unsafe product in the market. This initiative can speed up the food recall process in any contingency incident.

GS1 Hong Kong currently provides unsafe product prevention services in support of over 500 local retail chains, to tie in with the UPPP. Should the Centre of Food Safety issue barcode alerts on any particular retail sector and products, automated messages will be transmitted to the retail stores, blocking barcode scanning at point of sales to avoid potential leakage of unsafe products to the market.

#### Healthcare Industry

##### Supply Chain Modernization project to address patient safety and other issues

A Supply Chain Modernization (SCM) project has been undertaken to facilitate the automation of the pharmaceutical procurement process since 2010 at the Hospital Authority (HA). It represents an important step towards medical safety, supply chain efficiency and traceability of Hong Kong's public hospitals and clinics.

Under this SCM project, GS1 Standards have been applied, including the Global Trade Item Number (GTIN) for individual product identification, the Global Location Number (GLN) for delivery location identification and a comprehensive set of electronic data interchanges (EDI) documents such as purchase order, purchase order response, advanced shipping notices and invoices, to uplift overall supply-chain efficiency and visibility at the organization.

#### 防預不安全產品計劃

本計劃把條碼科技融入食物警報系統，協助業界加快食品回收程序，成果持續獲食物安全中心認可。本會將繼續為本港超過500家連鎖零售企業提供防預不安全產品服務，如果食物安全中心已對某產品發出警報，每當其條碼經過零售點系統掃描器時，系統便會自動向零售商發出訊息，阻截不安全的產品流上市面。



#### 醫療護理業

##### 供應鏈現代化 保障病人安全

醫院管理局由2010年開始實施供應鏈現代化計劃，目標是把所有醫療藥物的採購過程自動化。計劃成功落實後，全港的公共醫院和診所均可受惠，其藥物安全性、供應鏈效率及可追溯性俱較以往更進一步。

醫管局的供應鏈現代化計劃使用了多項GS1標準，例如以全球貿易貨品編碼識別個別產品，以全球位置編碼識別付運地點，並通過電子數據聯通方式發佈各種文件，包括採購訂單、採購訂單回覆、預先付運通知和發票等。

供應鏈現代化計劃於2014年完成，現時醫管局七大聯網共42所醫院有88%的採購活動以自動化過程處理，不但提升了供應鏈的運作效率和準確度，也為病患者節省開支。計劃在有需要時也可輕易擴展，它於2014年的全球醫療護理會議中榮獲「最佳供應商實施個案大獎」。醫管局將繼續與本會緊密合作，繼續探討提升供



The entire implementation, covering 7 clusters of 42 hospitals, has been completed in 2014 and 88% of their pharmaceutical orders have been automated to improve operational efficiency and inventory accuracy as well as reduce the risks of medication errors facing patients. This scalable project has been awarded "The Provider Implementation Best Case Study Award" at the GS1 Global Healthcare Conference in 2014. Looking ahead, GS1 will continue to work closely with HA to further explore possibilities to improve the entire supply chain's ability to ensure pharmaceutical traceability from ward to patient.

#### US FDA Unique Device Identification for elevating patient safety and healthcare business processes

Unique Device Identification (UDI) is a regulation introduced by the U.S. Food and Drug Administration (FDA) that requires medical device manufacturers to label their products with both a unique device identifier and production identifiers (such as expiration date and lot or serial number).

GS1 Hong Kong has offered support for medical device suppliers with standards-based solutions to meet the UDI requirements. Given the Global Unique Device Identification Database (GUDID) created by the FDA for suppliers to maintain a standard set of basic identifying elements for each device with a UDI and upload product data searchable by the public, GS1 Hong Kong has provided a product registry for suppliers for the fulfillment of GUDID criteria.

When fully enforced, the UDI system is expected to unambiguously identify medical devices to allow for more accurate reports of adverse events, manage recalls more effectively, reduce medical errors and provide for a secure global distribution chain. Patient safety will be enhanced with the overall efficiency of healthcare supply chains improved.

應鏈整體效能的方法，確保藥物的可追溯性能夠延伸至每個病房甚至每位病人身上。

#### 美國FDA醫療器材獨有識別系統改善醫療業務運作 為病人提供更佳保障

根據美國食品和藥物管理局(FDA)的規定，所有醫療器材應由統一的全球系統進行產品識別程序，而生產商亦應為每一型號的醫療器材配以獨一無二的識別序號。為支援全球的醫療設備供應商，本會協助多家醫療器材供應商以正確的形式進行產品識別，以配合美國食品和藥物管理局的規定。這個醫療器材獨有識別系統(UDI)不但可以更有效地保護病患者，還能提升醫療器材供應鏈的效率。系統可清楚無誤地識別各種醫療器材，提升事故報告的準確性及器材回收的效率，同時減少醫療失誤，締造更穩健的全球醫療器材銷售鏈。

美國食品和藥物管理局亦建立了全球醫療器材獨有識別資料庫(GUDID)，為供應商提供一套標準的基本識別指標，用以識別所有擁有UDI代碼的醫療器材。有見及此，本會特別成立產品註冊資料庫，方便供應商滿足GUDID的要求。



## ICT Industry

### Vendor Partnership Program

GS1 Hong Kong Vendor Partnership Program has been created to foster collaborative ties among supply chain management providers, enabling them to grow their businesses together, through joint promotions and facilitating adoption of global standard-based services and solutions by local businesses. Members can also promote their offerings through the GS1 community.

By joining the program, vendor partners can enjoy extensive values and benefits, including branding and marketing, market outreach and business development opportunities as well as services and solutions optimization via GS1 standards enablement programs. It also helps them to better address market needs and extend their reach to the global GS1 end-users community.

At the present, more than 50 vendor partners have already joined the program and expanded their business operations hand in hand with GS1 Hong Kong. Hailing from various different industries, these partners include AIDC hardware suppliers, industry application and solution vendors, logistics services providers, professional training providers, system integrators and Internet of Things solution providers.

### Hong Kong Internet of Things Centre of Excellence

Hong Kong Internet of Things Centre of Excellence ("The IoT Centre") was set up by GS1 Hong Kong at the Hong Kong Science Park in 2013, with the support of the Innovation and Technology Commission of the HKSAR Government, the Hong Kong Science and Technology Parks Corporation as well as industries, technology partners and other related organizations.

The IoT Centre, which is a unique showroom in Hong Kong, provides over 40 types of live demonstrations of IoT technology and applications, is divided into five thematic zones, including Manufacturing, Logistics, Healthcare, Logistics and Smart City. Serving

## 資訊及通訊科技業

### 供應商夥伴計劃

供應商夥伴計劃旨在為本會與市場上的服務及解決方案供應商締結夥伴合作關係，一同推廣及採用各種全球標準化服務和解決方案，相輔相成，攜手促進供應商夥伴的業務成長。本計劃乃為支援GS1標準的產品、服務和解決方案供應商度身訂造，務求透過GS1社群積極推廣這些機構的產品。

參加本計劃的供應商夥伴可獲得品牌及市場推廣、市場拓展及業務開發機會，並透過GS1標準支援計劃優化本身的服務及解決方案。這項計劃還有助夥伴機構滿足市場所需，並接觸遍佈全球的GS1終端用戶社群。

本計劃至今已有超過50個供應商夥伴加入，與本會一起擴展業務，茁壯成長。這些供應商來自不同行業，當中包括自動識別及數據擷取(AIDC)硬件供應商、業界應用及解決方案供應商、物流服務供應商、專業培訓服務供應商、系統整合商和物聯網解決方案供應商等。



### 香港物聯網科技應用中心

2013年，本會於香港科學園成立香港物聯網科技應用中心。中心的成立獲得多方支持，當中包括創新科技署、香港科技園公司以及多個鼎力支持物聯網發展的產業、技術合作夥伴及組織。

本中心是可實地示範物聯網科技的展示廳，並以此著稱，其五個主題展區分別為「生產」、「物流」、「醫療保健」、「零售」及「智慧城市」，共展出超過40種物聯網應用科技。本中心同時擔任支援平台的角色，協助業界開拓物聯網業務以及與無線射頻識別/物聯網相關的服務，從而推動多個行業的持續發展，提升各產業的競爭力。作為本港具代表性的無線射頻識別/物聯網技術展示廳，中心不但可以促



as an industry support platform to enable the development of IoT businesses and delivery of Radio Frequency Identification (RFID)/IoT-related services, the IoT Centre helps sustain the competitive edge of different industries, this new establishment endeavors to facilitate knowledge exchange, industry adoption and innovative creations across different industry sectors.

#### Hong Kong Internet of Things Awards

Formerly known as the Hong Kong RFID Awards, the Hong Kong Internet of Things (IoT) Awards program is designed to showcase local creativity and talent in developing new IoT applications or technological products to address business issues and challenges in daily life. Since the inception of the Awards program in 2008, it has attracted over 350 competitive entries from various organizations and education institutions.

Now into its seventh consecutive year, the Award program continues to symbolize the creative spirit of Hong Kong enterprises and students, recognizing and honoring the city's most innovative organizations and young talents who have demonstrated excellence in harnessing IoT-related technologies for improving business operations and optimizing modern living. In 2015, the Award program will be transformed into "Best Smart Hong Kong Award" of the annual Hong Kong ICT Awards program steered by the Office of the Government Chief Information Officer (OGCIO) of the HKSAR Government.

進知識交流，還能夠鼓勵業界更廣泛地使用物聯網科技，不斷推陳出新。



#### 香港物聯網大獎

香港物聯網大獎前身為「香港無線射頻識別大獎」，旨在表揚成功開發物聯網應用程式或科技產品的本地創意人才。他們的創新成果既能解決商業問題，又能應付日常生活中的挑戰。獎項設立至今，已接到超過350宗來自不同組織和教育團體的提名申請。

今年已是本會連續第七年頒發此獎，它一直象徵著香港企業和學生的創新精神。本港最具創意的團體和年輕人才善用物聯網相關科技，以改善企業運作和提升大眾生活水平，本獎項就是對他們的肯定。於2015年，獎項將成為由政府資訊科技總監辦公室策動的「香港資訊及通訊科技獎」下的「最佳智慧香港獎」。



## Logistics Industry

### Feasibility study on Cross-border Supply Chain Visibility (SCV) across Guangdong, Hong Kong and Asia

To strengthen Hong Kong's role as a logistics information hub, the Hong Kong Logistics Development Council commissioned GS1 Hong Kong to conduct a feasibility study project on cross border supply chain visibility across Guangdong, Hong Kong and Asia. The project, which aims to examine how supply chain visibility can enable goods movements tracing and information flow along cross-border supply chains, has been completed in 2014.

Involving cross-border government agencies, including the Chinese Taipei Customs, Hong Kong Customs and Customs in Dongguan and Shenzhen, as well as industry players, with shippers, consignees, carriers and logistics forwarders among them, the project has delivered a number of significant findings:

1) Logistics information exchange platforms with common interfacing standards can enable the sharing of advance cargo information, such as cargo content and related shipment documents, from shippers and logistics service providers to customs, so that risk assessment can be facilitated. As such data can ascertain the "what, where, when and how" issues about goods in transit, it can potentially reduce the need for subjecting cargo for inspection. Ultimately, this will enable the lead time of cross-border trade to be shortened and avert cargo delays, hence uplifting supply chain efficiency on the whole.

2) With the use of security equipment and visibility platforms, the status of cargo movement can be monitored. This can facilitate the work of customs officials in the surveillance of cargo containers and make real-time decisions to resolve any contingency issues, if needed. Likewise, industry players will also be empowered to track and trace the cargo movement with precision while minimizing its risk exposure through the entire cross-border supply chain.

## 物流業

### 香港、廣東及亞洲跨境供應鏈可視化

為鞏固香港的物流資訊中心地位，香港物流發展局委託本會進行「香港、廣東及亞洲間跨境供應鏈可視化之可行性研究」。研究於2014年完成，旨在探討供應鏈可視化如何輔助跨境供應鏈的貨品動向追溯和資訊流通工作。

本次研究結合了政府機關(包括中華臺北、東莞、香港及深圳海關)和業界團體(包括貨運商、收貨人、運輸公司及貨運代理人)的力量，成果如下：

1) 透過採納共同標準的物流訊息交換平台，貨運商及物流服務供應商可預先向海關發放某些貨物資訊，包括貨物內容和相關的付運文件等，海關便可根據資料確認貨物的內容、目的地、抵達時間和用途，從而更準確地評估有關風險。業界既可受惠於更有效率的跨境送貨程序，又能減少海關檢驗貨物的需要。

2) 海關人員可透過保安器材及可視化平台監察貨物動向，在有需要的時候檢驗貨物或作出其他實時決定。業界亦可以精確地追蹤及追溯貨物動向，從而把整個跨境供應鏈流程的風險降至最低。





### Global Data Standards to facilitate APEC's vision on supply chain connectivity

At the 2014 Asia-Pacific Economic Cooperation (APEC) Leaders Declaration, it was concluded that the adoption of Global Data Standards (GDS) is essential for reducing supply chain bottlenecks and facilitating cross-border interoperability in order to achieve the target of a 10% improvement in performance by 2015.

GS1 Hong Kong provided assistance to a capacity building workshop hosted by the Trade and Industry Department in May 2014 in Qingdao, to address how global data standards can facilitate trade growth between countries, boost supply chain security between borders and support interoperable data sharing for supply chain visibility.

### WCO and GS1 combine forces to combat counterfeiting with launch of mobile IPM

Counterfeiting is a growing problem worldwide, accounting for 90% of counterfeit goods seized in Europe and over 70% worldwide. To strengthen detection of fake products, the World Customs Organization (WCO) has equipped itself with an Interface Public-Members (IPM) tool, supported by GS1 standards. IPM enables customs officers to access valuable product information, provided by their lawful owners and stakeholders, to aid counterfeit detection action and related decisions. Customs officers can now scan GS1 barcodes to automatically access authentication product data for faster decisions and approve clearances. As a result, customs departments are better able to detect and seize counterfeits whereas legitimate product stakeholders can step up their brand protection strategies for greater consumer safety as well as reduce overheads and minimize lost revenue.

### 全球數據標準強化APEC供應鏈連繫

2014年亞洲太平洋經濟合作組織(APEC)領導人聲明指出全球數據標準(GDS)可去除供應鏈瓶頸，並促進跨境資訊平台的互通性，有助達到於2015年把供應鏈表現提升10%的目標。

2014年5月，工業貿易署於青島舉辦能力建設工作坊，本會全力作出支援，解釋全球數據標準如何便利國際貿易、提升跨境供應鏈安全性，並透過支援互通的數據交流來改善供應鏈透明度。



### 與世界海關組織攜手打擊假貨 推出手機公共會員介面

跨境假貨問題日趨猖獗，90%於歐洲發現的冒牌貨品都是由外地進口，全世界也有超過70%偽造貨品屬於跨境假貨。為加強偵察偽冒產品的能力，世界海關組織選擇使用獲GS1標準支援的公共會員介面，以便海關人員查閱由版權持有人提供的重要貨品資訊，支援有關偵察偽冒產品的決定。海關人員只消掃描GS1條碼，便可自動獲取貨品認證訊息，從而更迅速地作出決定，加快貨品清關程序，亦可以更準確地偵察及阻截偽冒貨品。對於正貨商戶來說，公共會員介面也可為其品牌和消費者提供更佳保障，節省打擊冒牌的成本，同時減少因假貨造成的收入損失。



## Retail Industry

### Ensuring on-shelf availability through a demand-driven solution

Ensuring on-shelf availability is one of the most critical factors in retail success. This is evident in a leading sportswear company's ability to see its sales doubling at certain outlets and reducing in-store shortages, using a Synchronized Supply Chain Replenishment (SSCR) solution.

Launched by GS1 Hong Kong, SSCR is aimed at helping members to increase inventory turns and reduce out-of-stock so as to optimize sales ultimately. This is a demand-driven solution designed to simulate optimal replenishment based on actual demand instead of traditional forecasting. SSCR can be applied on raw materials to finished products.

Upon its introduction to the fast moving consumer goods sector, the solution has gained popularity further into different retail segments. Companies like Adidas, Esprit, H&M, Speedo and other garment retailers have participated in the SSCR program, experiencing a 10% surge in sales with visible improvements to their in-store product availability.

### Consumer Caring Scheme

The Consumer Caring Scheme has been developed by GS1 Hong Kong to recognize outstanding local companies that demonstrate excellence in consumer care and in implementing Global Efficient Consumer Response (ECR) best practices. The Scheme, which provides an excellent opportunity for companies to increase their brand image and equity to the public, advocates seven core values, including caring for consumers, being sincere, keeping promises, ensuring product quality and safety, focusing on service quality, listening to consumers and caring for employees. Since the Scheme's inception in 2011, over 100 enterprises had participated in it.

## 零售業

### 需求導向解決方案使架上貨品流通無阻

確保架上貨品長流不息，是現今零售業不可或缺的致勝關鍵。知名運動服裝公司自引入「同步供應鏈補貨」運作模式後，銷量顯著上升，個別店舖更錄得雙位數字的銷量增長，店內的缺貨機率亦有所減低。

「同步供應鏈補貨」是一套以需求導向為基礎的解決方案，模擬店舖銷售的實際需求來優化補貨流程，更勝傳統的預測方法。此方案無論在產品原料還是製成品的交易上都能大派用場。

繼快速流轉消費品零售業後，其他零售界別亦陸續引入「同步供應鏈補貨」方案。Adidas、Esprit、H&M、Speedo等企業加入本計劃後均成功減少缺貨率，更錄得最少10%的銷量增長。

### 「貼心企業」嘉許計劃

「貼心企業」嘉許計劃旨在表揚積極實踐關愛消費者精神和全球「高效消費者響應」最佳實務的本地企業，是企業向公眾推廣其品牌形象及價值的大好機會。本計劃共有七大核心價值，分別是：全面關愛消費者、心繫消費者、實踐承諾、監控品質與安全、專注服務質素、用心聆聽及關懷員工。「貼心企業」嘉許計劃於2011年正式啟動，至今已有超過100家企業參加。



By GS1 Hong Kong 香港貨品編碼協會



## Wine Industry

Hong Kong's international status as a key Asian wine hub is reflected by the multitude of its wine-related business activities including auction, retailing, warehousing, catering and transportation. With the removal of all duty-related customs/administrative controls for wine since February 2008, the city has further evolved into a trading and distribution centre of liquor products in the region, particularly mainland China.

GS1 Hong Kong will continue to facilitate global wine supply chain visibility, helping it to enhance product quality, efficiency and authentication for the benefit of the public and companies engaged in the wine business.

### Wine-export visibility collaboration between Australia and Hong Kong

In 2013, APEC endorsed the use of Global Data Standards (GDS) proposed by the APEC Business Advisory Council. With this development, a new form of public-private partnership has been created so as to address supply chain chokepoints in trade facilitation among regions. In order to demonstrate the value of GDS, a proof-of-concept wine project supported by both governments, has been initiated between Australia and Hong Kong, with the participation of Australian wine producer Casella, the Port of Melbourne, Yusen Logistics, Hong Kong importer Telford as well as GS1 Australia and GS1 Hong Kong. Supported by the customs authorities from both economies, this project demonstrates how the application of international data standards can uplift cross-border supply chain visibility, operational flexibility and connectivity. Through the adoption of global standards, end-to-end traceability can also be facilitated, benefiting wine industry stakeholders and consumers ultimately in terms of better import security, product safety and cross-border supply chain efficiency.

### Accelerating wine transshipments to China via Hong Kong

Wine consumption in mainland China has increased dramatically since 2006, making it the world's largest consumer market for alcohol

## 葡萄酒業

香港是享譽全球的亞洲葡萄酒樞紐，與葡萄酒有關的拍賣、零售、倉存、飲食及運輸業務皆十分活躍。自從2008年2月撤銷所有葡萄酒清關及行政管制措施後，香港的地區性葡萄酒貿易及批發中心地位更形鞏固，對中國內地的葡萄酒業更是舉足輕重。

本會不斷致力提升葡萄酒業界的全球供應鏈透明度，目標是改善其供應鏈的管理水平及運作效率，打擊假貨，使公私營企業雙雙受惠。

### APEC澳洲出口至香港葡萄酒供應鏈可視化計劃

2013年，亞洲太平洋經濟合作組織(APEC)通過了商貿諮詢理事會的建議，開始引入全球數據標準，建立新的公私營合作關係，從而紓緩供應鏈瓶頸，促進跨地區貿易。為彰顯全球數據標準的價值，澳洲及香港合作推出一項葡萄酒概念認證計劃，得到兩地政府支持。計劃的參與者包括澳洲葡萄酒生產商Casella、墨爾本港口公司、郵船物流有限公司、香港進口商匯泉國際有限公司，以及兩地的貨品編碼協會。在兩地海關支援下，本計劃證明全球數據標準可以提升跨境供應鏈的透明度和靈活性，加強各持份者之間的連繫，並改善各單位點對點追溯貨物的能力。全球數據標準能夠增強供應鏈的保安、安全性和運作效率，所有持份者及消費者均可從中受惠。



products. Yet, at the same time, the Chinese government has imposed more stringent policies on wine imports to protect consumer safety and interest and combat counterfeiting.

To strengthen Hong Kong's wine trading hub and transshipment port status, GS1 Hong Kong has worked closely with the Shenzhen China Inspection and Quarantine (CIQ) Bureau and the CCIC Food Traceability Centre to carry out a wine pilot project spanning Europe to China via Hong Kong. Through the pre-inspection of wines by the CCIC Food Traceability Centre with a specific authentication tag affixed on each bottle or pallet of wines at the vineyard, inspection reports are generated during the process and trusted wine information shared via a standard-based traceability network – CCIC315.com enabled by GS1 Hong Kong's ezTRACK™. This enables CIQ to acquire inspection details and carry out risk assessments prior to shipment arrival on mainland China, even while the wines are still being stored or repacked in Hong Kong. Such a logistics arrangement helps to minimize inspection of wine samples and accelerates the entire process as a result, benefiting Hong Kong wine traders with a more efficient importation process.

### New mobile app promotes wine with a dash of fun

During the Hong Kong Wine and Dine Festival organized by the Hong Kong Tourism Board in October 2014, WineLuxe, one of the local wine magazines, and GS1 Hong Kong jointly launched a mobile application, "Consumer Connect +", through which wine lovers could vote for their favorite wines for the "Most Popular Wine Hong Kong Awards 2014". Using this app, they can also obtain comprehensive information of wine products with just one scan of the QR code by their smartphones, regardless of brand, country of origin, grape variety, optimal wine-serving temperature or distribution agent.

In addition, the app allows the event's participants to take a poll to vote for their favorite wines and join a lucky draw. While adding elements of fun to the event, the app helps promote wine appreciation in a more interactive manner and provide insights to traders into wine market trends.

### 加快葡萄酒經香港進口至中國的過程

中國的葡萄酒消耗量自2006年開始不斷攀升，現已成為全世界最大的葡萄酒市場。與此同時，中國政府對進口葡萄酒的監察亦越來越嚴格，務求保障消費者安全，全力打擊假酒。

為鞏固香港作為葡萄酒貿易中心和主要進口港的地位，本會與中國檢驗檢疫局的深圳分部以及中國檢驗認證集團的食品追溯中心緊密合作，攜手展開一項葡萄酒試驗計劃，以經香港進口至中國的歐洲葡萄酒作為試驗對象。根據計劃，食品追溯中心會先行在酒莊檢驗葡萄酒，並在每瓶或每箱酒上貼上特定的認證標籤，然後把有關檢驗報告和可靠的葡萄酒資料上傳到以GS1標準為基礎的追溯平台——由本會「縱橫網」系統建立的「CCIC315.com」網站。透過這個程序，中國檢驗檢疫局可了解檢驗細節，並在貨品運到中國內地時進行風險評估，即使葡萄酒曾在香港逗留或重新包裝亦不受影響。這做法可把必須接受檢驗的樣本數量減至最少，從而加快檢驗程序，香港的葡萄酒進口商亦得享進口效率提升之便。

### 品酒嚐趣

2014年10月，香港旅遊發展局主辦香港美酒佳釀巡禮，同時頒發2014香港最受歡迎葡萄酒大獎。本會與主力報導葡萄酒資訊的本地雜誌《酒·派》合作，藉此機會推出手機應用程式「Consumer Connect+」。下載程式後，美酒愛好者只須以智能手機掃描酒瓶上的QR碼，便可獲取該瓶美酒的詳細資訊，包括品牌、來源地、葡萄品種、最佳品嚐溫度和批發代理名稱等等。

美酒佳釀巡禮的參加者亦可透過程式投選各人心中的最佳葡萄酒，並參與抽獎遊戲。那不但令活動倍添樂趣，還能以更互動的方式推廣葡萄酒，而業界亦可透過程式洞悉葡萄酒市場的最新趨勢。












# Services and Solutions at a Glance

## 解決方案與服務一覽

### The Global Language of Business

### 環球貿易的共通語言

<p><b>Driving standards development and adoption</b></p> <p>引領標準發展並促進業界採納</p>	<p><b>GS1 BarCodes</b></p> <p>Global Standards for Identification and Data Capture</p> <p>應用於自動識別及數據擷取的全球標準</p>	<p><b>GS1 eCom</b></p> <p>Global Standards for Electronic Business Messaging</p> <p>應用於自動識別及數據擷取的全球標準</p>	<p><b>GS1 GSDN</b></p> <p>Global Network for Data Synchronization</p> <p>應用於全球數據同步的網絡</p>	<p><b>GS1 EPCglobal®</b></p> <p>Global Standards for RFID-based Identification and Traceability</p> <p>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</p>	<p><b>GS1 Traceability</b></p> <p>A Traceability Process for Product Recall and Quality Management</p> <p>支援產品召回及品質管理的追溯過程</p>	<p><b>GS1 B2C</b></p> <p>Global Network for Data Synchronization</p> <p>應用於全球數據同步的網絡</p>
<p><b>Engaging industries and assisting enterprises in solving business issues with relevant standards-based services and solutions</b></p> <p>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><b>GS1 BarCode numbers registration and administration</b></p> <p>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</p> <p>為本地企業提供 GS1 條碼系統及條碼質素保證的支援</p>  <p><b>BarcodePlus</b></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</p> <p>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><b>Global Electronic Party Information Registry (GEPIR)</b></p> <p>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</p> <p>一個儲存了世界各地逾一萬萬個供應商資料的全球性網上資料庫，為業界帶來無限制的商機</p>	 <p><b>ezTRADE</b></p> <p>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</p> <p>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><b>GS1 HK DataPool</b></p> <p><b>GS1 HK Datapool</b></p> <p>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</p> <p>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><b>ezTRACK</b></p> <p>縱橫網</p> <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>  <p><b>Value+ Value+</b></p> <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><b>COLD CHAIN MANAGEMENT Cold Chain Management Solution</b></p> <p>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><b>Warehouse Management System</b></p> <p>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><b>Item Level Tracking Solution</b></p> <p>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舖的單件貨品供應鏈透明度</p>	<p><b>GTC/GTS</b></p> <p><b>Global Traceability Conformance (GTC)</b></p> <p>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><b>Global Traceability Standards (GTS)</b></p> <p>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>	 <p><b>Consumer Connect</b></p> <p>物密啲</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><b>Enabling knowledge exchange between multiple stakeholders throughout the supply chain ecosystem</b></p> <p>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</p> <p><b>Workshop and training course:</b> Barcode Workshops, SSCR Workshop, Digital Marketing Workshop, ECR Workshop, Internet of Things Certification Programs, etc.</p> <p><b>Industry seminar and conference:</b> Annual Supply Chain Management Excellence Summit</p> <p><b>Award Scheme:</b> Hong Kong IoT Awards, Consumer Caring Scheme</p> <p><b>RFID Demonstration Centre:</b> Jiangyin Internet of Things RFID Demonstration Centre</p> <p><b>Hong Kong Internet of Things Centre of Excellence (IoT Centre):</b> A centre to facilitate the development of IoT and extensive adoption of IoT/RFID technology</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><b>工作坊與培訓課程：</b>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><b>業界研討會與會議：</b>供應鏈管理高峰年會</p> <p><b>獎項計劃：</b>香港物聯網大獎、「貼心企業」嘉許計劃</p> <p><b>無線射頻識別技術演示中心：</b>江陰市物聯網無線射頻識別技術演示中心</p> <p><b>香港物聯網科技應用中心：</b>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><b>Facilitating local-global collaborations</b></p> <p>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"> <li>Retail ECR</li> <li>Food &amp; Wine Traceability</li> <li>Healthcare Supply Chain Modernization</li> <li>Apparel Item-level Tagging</li> <li>Cross-border Logistics Supply Chain Visibility</li> </ul> <p>透過以下方案提升香港業界的競爭力</p> <ul style="list-style-type: none"> <li>高效消費者回應零售</li> <li>食品及葡萄酒追溯</li> <li>醫療供應鏈現代化</li> <li>成衣單品標籤</li> <li>跨境物流供應鏈透明度</li> </ul>					





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