

Data Drives Supply Chain Efficiency

for the New Retail Age

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COO – GS1 Hong Kong



4 Trends Shape The Future

2022 Global Supply Chains

Resiliency

Sustainability

Visibility

Technology



3 Keys to Succeed at **On-Demand E-Commerce**

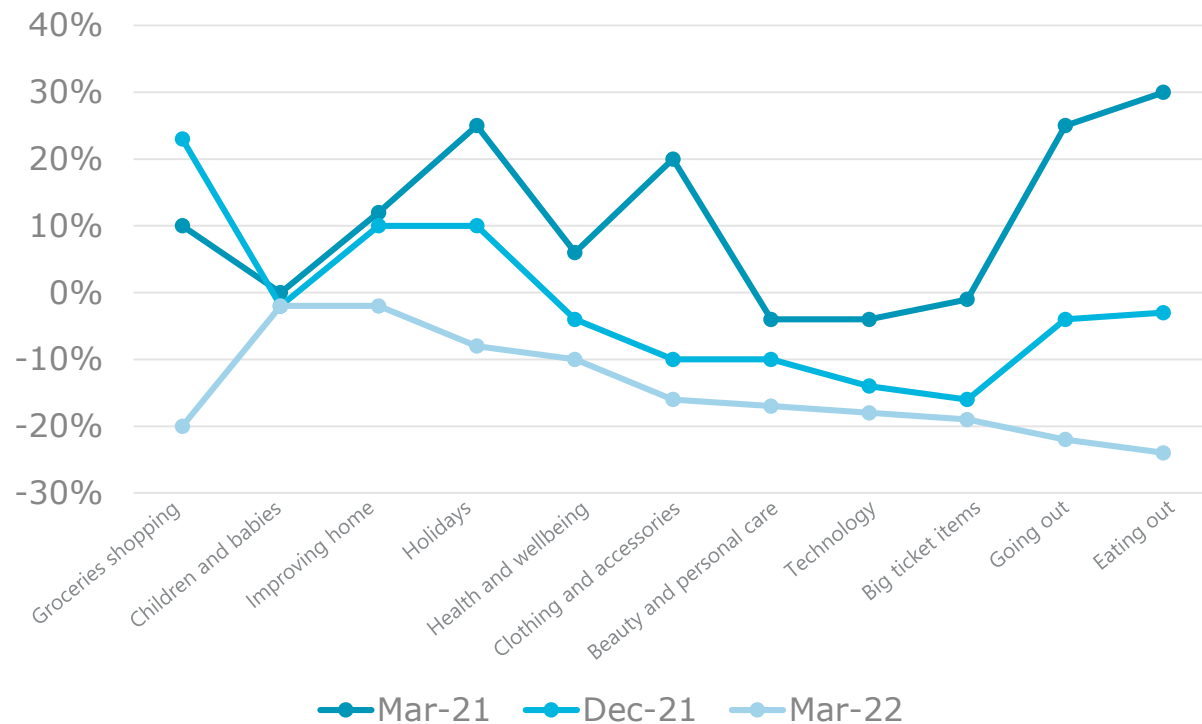
Automated
Fulfillment

Decentralized
Inventory

Economies of
Density

Changes in **CONSUMER** Spending during the outbreak

Net spending intention in the next 12 months



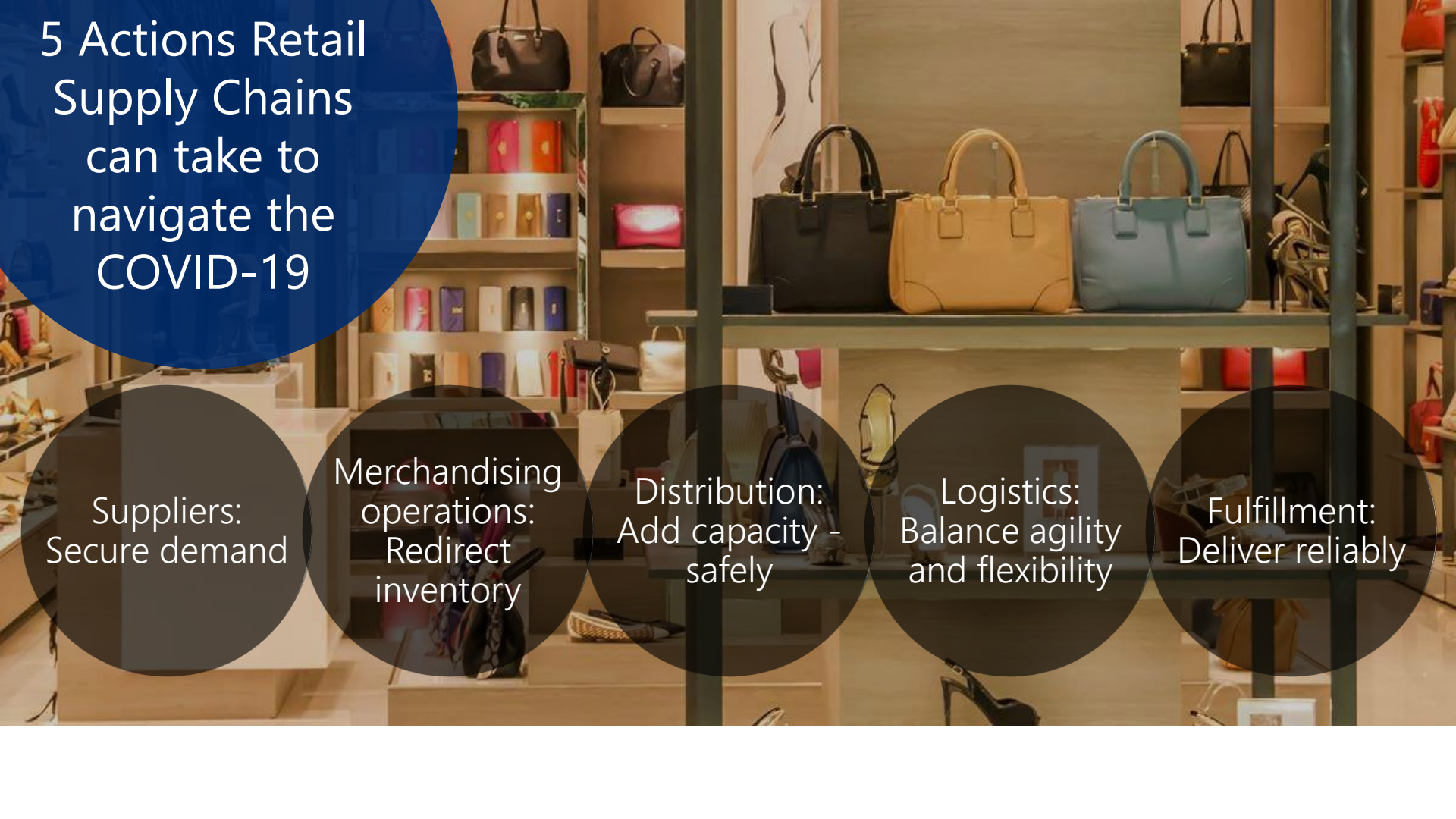
Source: PwC Consumer Sentiment Survey, March 2022

Changes in **CONSUMER** **Spending** during the outbreak

Net intent to change spending over 2 weeks, by country, by category
(% change)



- ▲ Net intent is calculated by subtracting the percentage of respondents stating they expect to buy more from the percentage of respondents stating they expect to buy less.
- ▲ Source: McKinsey Marketing & Sales survey conducted March 21-23, 2020; all data are weighted to match countries' populations of people 18 years and older

A photograph of a retail store interior, likely a handbag boutique. The shelves are filled with various styles and colors of handbags, including black, yellow, and light blue. The lighting is warm and focused on the merchandise.

5 Actions Retail Supply Chains can take to navigate the COVID-19

Suppliers:
Secure demand

Merchandising
operations:
Redirect
inventory

Distribution:
Add capacity -
safely

Logistics:
Balance agility
and flexibility

Fulfillment:
Deliver reliably



SMART RETAIL & SUPPLY CHAIN



amazon style

The Internet of Things

IN RETAIL

The opportunity for IoT in retail is huge, and **getting started with a quick, high-value project is easier than you think.**

IoT is more than just the "Things" of connected devices, products or sensors. IoT can connect systems, providing unified visibility, real-time decisions, and deeper insights into customers, competition, product portfolio and performance.

BY THE NUMBERS

56% of smartphone users plan to use their device while shopping
ACCENTURE

85% of shoppers prefer personalized offers reflecting their past shopping behavior
SYNQUERA

54% use or would like to use digital touchscreens in-store
CISCO

61% would visit and do more shopping in a store with beacon marketing campaigns
SWIRL

RETAILER BENEFITS —
CARREFOUR'S BEACON-BASED MARKETING

600% new users
400% more time spent in app
+50% conversion rates

— URBAN OUTFITTERS IN-STORE PUSH MESSAGING

60-70% engagement rate

Shopper interacts with beacons as she walks into the store.

Connections to IoT devices using ThingWorx allow retailers to track an extra dimension of data from her visit.

More secure.

RFID tags, radio antennae, and infrared cameras track merchandise before it leaves the store.

Rich, interactive experience.

Digital tags and interactive displays allow shoppers to do research and customize products.

Completely centralized information.

All IoT devices talk to each other and the CRM for instant customer feedback and retailer action.

Smartly connected mobile app experience.

Send special offers and greetings, and shoppers can scan products for competitive price checks and instant discounts.

Personalized virtual closets.

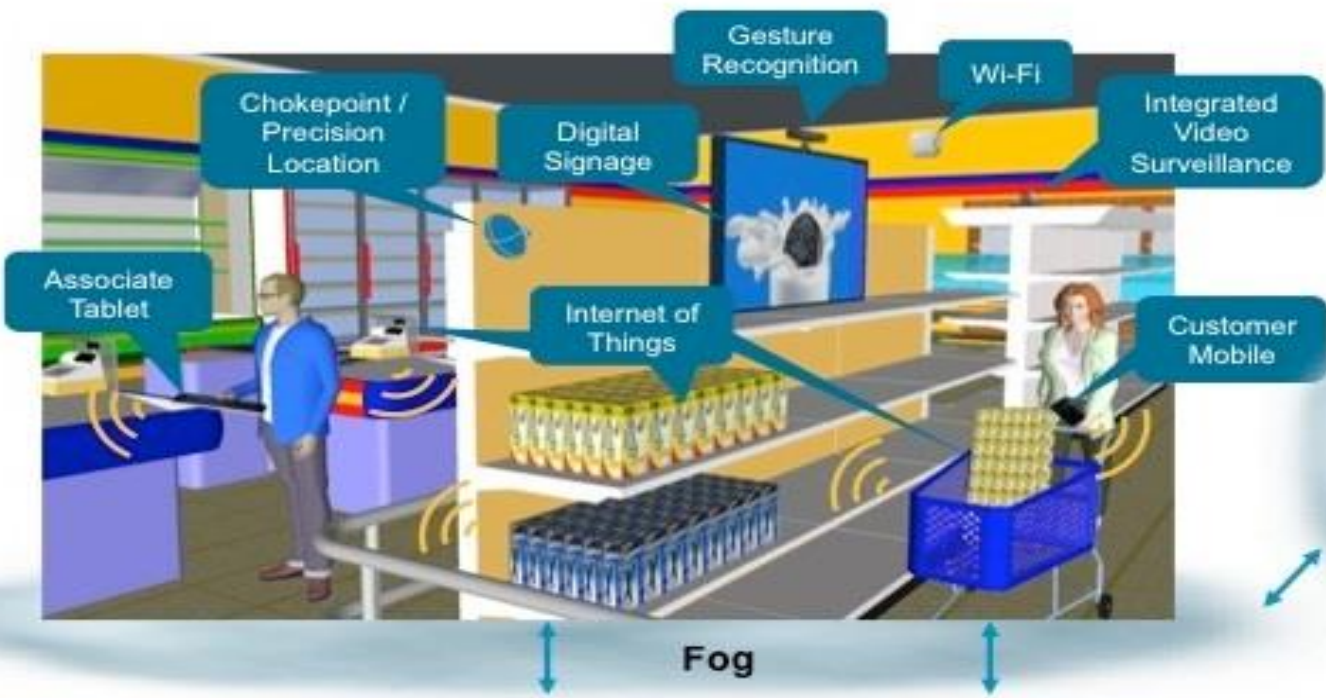
Try on new clothes with items shoppers have at home using purchase histories.

KALYPSO + ThingWorx
A PTC Business

**Quick wins are easy to find.
DON'T DO NOTHING**

The technology is here now to create an incredible shopping experience for your customer and build huge value for retailers.

Capturing Store Insights for Timely Engagement



Continuous Channel Customer Interaction



Wisdom from the Cloud



SUPPLY CHAIN

can mean the
different
between
omnichannel success
and failure

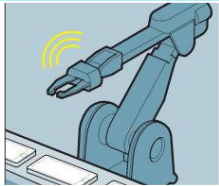


- ▲ Improve retail supply chain decisions with an accurate retail demand forecasting shopping journey
- ▲ Reduce working capital with inventory optimization
- ▲ Leverage real-time inventory management
- ▲ Drive allocation decisions with retail science at the core
- ▲ Support complex fulfillment operations with warehouse management
- ▲ Improve decision-making and maximize productivity by simulating transportation options

SMART RETAIL SUPPLY CHAIN

Reimagining Retail Commerce in New Normal World

Automated production at Factory



Machines Provide constant feedback on product capacity and information on shipment-production status.

Autonomous truck to warehouse



Driverless trucks move goods to warehouses, with live transit-location updates via satellite link.

Automated warehouse



Machines handle all operations, from picking to transporting goods, with continuous information flow on status of goods.

Predictive shipping



Goods are dispatched from warehouses to stores and to online retail supply chains ahead of demand, based on anticipated demand.

Shipment rerouting by customer



Via mobile phone, customer has ability to view order status and input a new delivery destination.

Last-mile delivery



Drones perform last-mile delivery and return pickups.

A group of business professionals in a meeting room are gathered around a wooden table. They are holding several large, interlocking puzzle pieces in various shades of blue and teal. The pieces are arranged in a circular pattern, symbolizing a complete supply chain or a strategic business plan. The background is slightly blurred, focusing attention on the puzzle pieces and the people's hands.

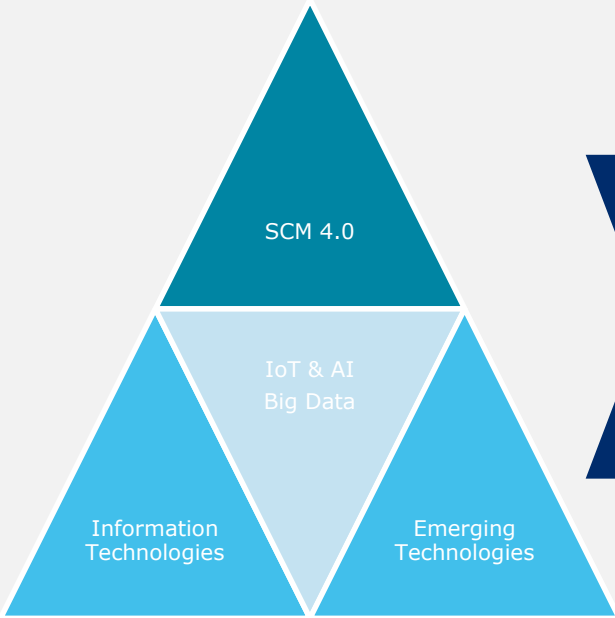
Smart Supply Chain

Jump start **performance**
and **customer satisfaction**

Smart Supply Chain

= *Data + AI + IoT*





Smart Supply Chain

- Digital
- Agile
- Value Net
- Data Driven
- Real Time
- Control Tower
- Responsive
- Sensing
- Intelligent
- Social

New Paradigm Industry 4.0

New Business Context IoT & AI

New Corporate Culture
Collective Leadership

New SC Management System
Skills, Competences and
Processes SCM 4.0

Fuel Better
**CONSUMER
EXPERIENCE &
DRIVE BUSINESS**
with Valuable
Insights





SMART RETAIL SUPPLY CHAIN **IMPACTS**

- ▲ Business Intelligent
 - ▲ Real-time Data/Predictive Analytics
 - ▲ Control Tower
 - ▲ Process/Performance management
- ▲ Automation / Hand-Free SCM
 - ▲ Instantaneous Supply/Demand Planning
 - ▲ Automated Processing/warehousing
- ▲ Digitalization
 - ▲ End-to-end Visibility
 - ▲ Agility Network
 - ▲ Traceability Management

Who is **GS1** ?



GS1 - A Global Standards Organization

Headquartered in Brussels, Belgium; since 1973

Neutral &
not-for-profit

Global
& local

User-driven
& governed

Inclusive &
collaborative

115+

national
chapters

100M+

products carry
GS1 barcodes

6B+

barcode beeps
everyday

2M+

globally registered
companies

Global Recognition and Partnership



GLOBAL DATA STANDARDS

Delivering Values across the Supply Chain



Identify



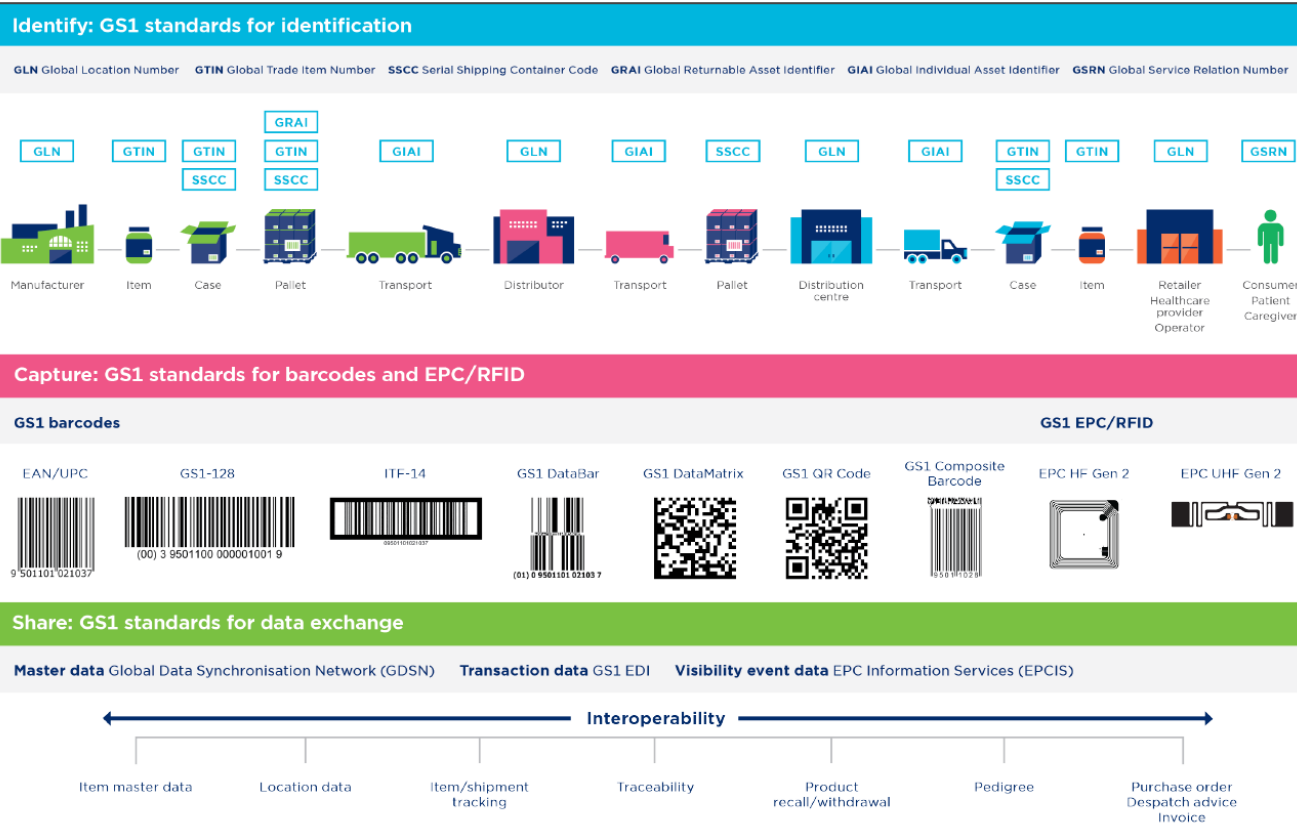
Capture



Share



Use



Services

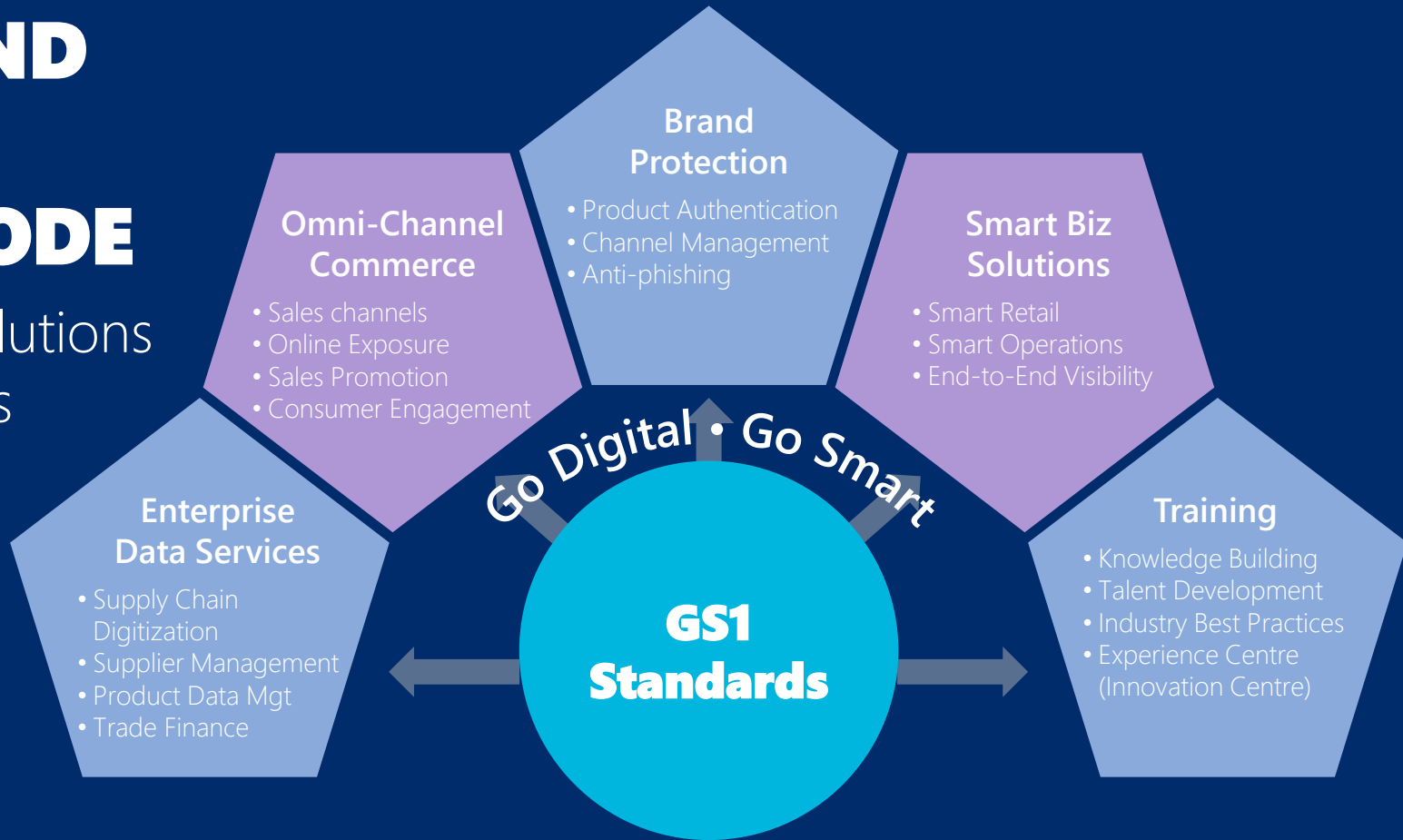


Coherence

Harmonization

BEYOND THE BARCODE

GS1HK Solutions
& Services

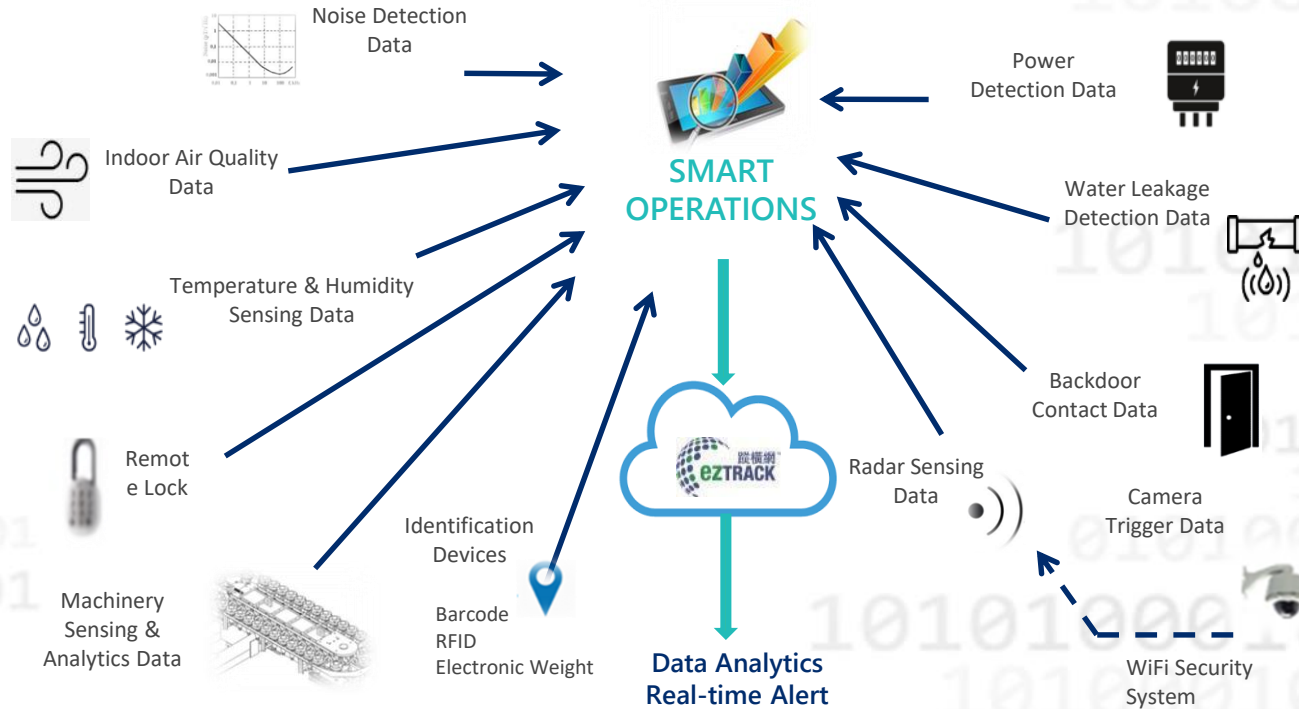


Enable Digital Transformation with Data-Driven **SMART OPERATIONS**

Transform businesses with automated data capturing & real-time actionable insights throughout out the entire operation flow

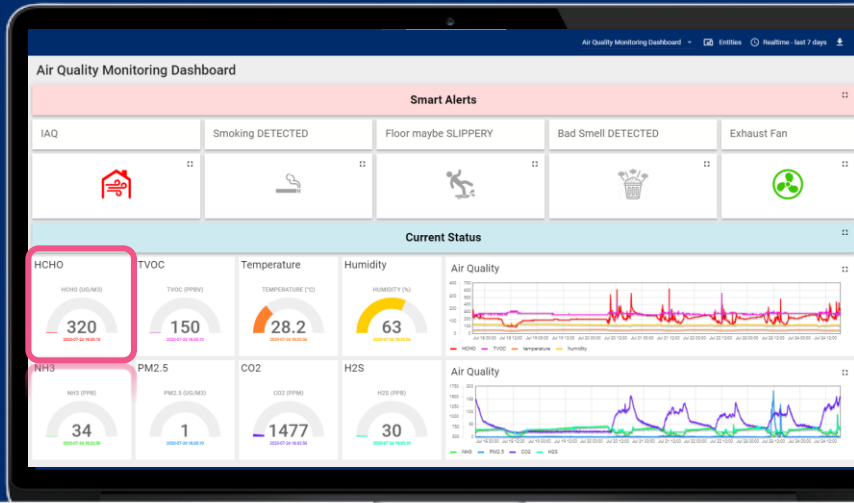
GS1HK SMART OPERATIONS

Gain Insights from Data that Matters



SMART OPERATIONS

Move from Reactive to Predictive Operation Management



Air Quality Control

The Platform performed preventive action on abnormal cases (turn on the exhaust fan when detected the situation with bad air quality)

- ✓ **Real-time Monitoring & Alert**
Monitor performance & progress, capture key metrics and stay on top of any unusual situations
- ✓ **Enhanced Collaboration**
Integrate data from multiple data sources, enhance visibility across functions and drive collaboration across departments
- ✓ **Insights-into-Actions**
Provide visualization & predictive analysis, proactively detect issues and identify underperforming areas, streamline and automate corrective actions
- ✓ **Operational Excellence**
Transform data into knowledge, enable smart decision making to improve operational effectiveness

GS1HK SMART OPERATIONS

Smart Factory

Values:

- Productivity
- Fault Management
- Product Quality

Services:

- Process Design
- IoT Devices Sourcing
- Digital Forms
- Dashboard Design & Real-time Alert



Smart Warehouse

Values:

- Utilization
- Efficiency
- Responsiveness

Services:

- Layout Design
- Process Design
- Materials Handling Equipment (MHE) & System (WMS) Sourcing
- IoT Devices Sourcing (Sensors, Digital Scales)
- Project Management



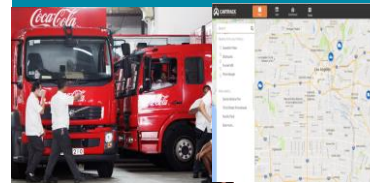
Smart Fleet

Values:

- Track & Trace
- Fulfillment (B2B, B2C)
- Visibility

Services:

- IoT Devices Sourcing (Cold Chain)
- Systems (TMS) Sourcing & Integration
- Dashboard Design & Real-time Alert



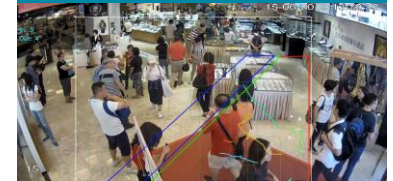
Smart Store

Values:

- Traffic
- Customer Experience
- Sales Growth

Services:

- IoT Devices Sourcing (Traffic, Movement)
- Dashboard Design & Real-time Alert



Thank You!

GS1 Hong Kong

www.gs1hk.org

For enquiries, please contact us at **2861 2819** | services@gs1hk.org



「疫」向思維：由防轉攻的三部曲
From Defense to Grow in New Normal

Mikron NG

Co-Owner and Chief Commercial Officer –
Business Market & China Business
HKBN Enterprise Solutions

Infinite Play, Customer-In



A Leading Integrated Telecommunications & Technology Solutions Provider



企業方案
Enterprise Solutions



HKBN Ltd.
(SEHK Stock Code: 1310)



Residential Solutions

- Serves **ONE MILLION** customers every **1 in 3 families** in Hong Kong
- **Infinite Play**: 5G; OTT Entertainment; All-Round Security; WiFi-6; Smart Home

Disney+ **Netflix**
JOOX...

F-Secure **TREND MICRO**

Smart ID **HKBN Smart**

Enterprise Solutions

- Serves **~110,000 / every 1 in 2 active enterprises** in Hong Kong¹
- Comprehensive **Information and Communication Technology** and with unbeatable values for private and public sectors
- Connectivity, Cloud, Cybersecurity Managed IT and Systems integration, etc.

1 in 3 
Hong Kong families

1 in 2 
active companies
in Hong Kong

Growing From Strength To Strength



2013

2015

2016

2018

2019

2020

2021

Listed in
HKEX
mainboard

Listed in HASE
Sustainability index
since 2016



Hang Seng Corporate
Sustainability Index
Series Member 2020-2021



Hang Seng Corporate
Sustainability Index
Series Member 2020-2021

MSCI
ESG RATINGS



CCC B BB BBB A AA AAA

AA rating (Since 2020)
IT SECTOR LEADER

*Since 2016, we have been a constituent of the Hang Seng (HASE) Corporate Sustainability Benchmark Index, which has recognised us with AA ratings for the past two consecutive years (2020 and 2021) – the highest in Hong Kong's telco industry!

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Strong Regional & Local Presence Facilitate Retail Biz into GBA



Headquarters
Hong Kong

Asia
Mainland China: Beijing, Shanghai, Guangzhou, Shenzhen, Macau, Zhuhai, Hengqin, Jiangmen, Qianhai, Chengdu

Singapore

Malaysia



**We are in the age of the new normal.
Agility is king.**

Coronavirus reshaped our lives





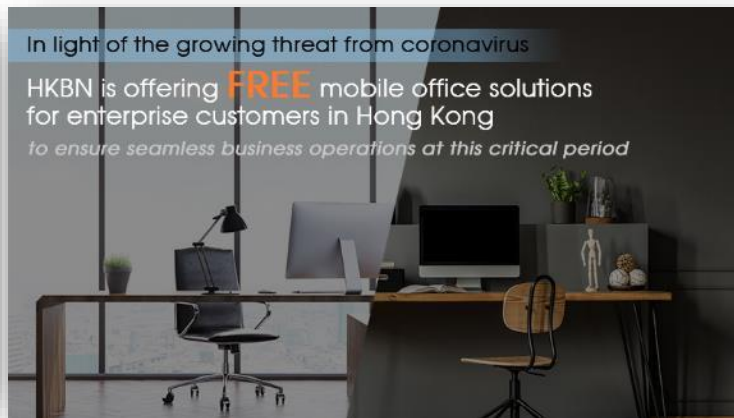
A good partner helps you **overcome.**

In #ToughTimes, we are together



In Jan 2020, 1st wave, we

- offered **One-month Waiver Relief** to all residential and enterprise customers
- Launched “**Business Continuity Service Anywhere**”
- **3-month FREE** remote office solutions for enterprises



A good partner walks side-by-side to solve your pain-points



Solutions

最新推廣 服務方案 市場洞察 公司優勢 客戶支援

hket

PHILIPS
UV-C吊頂式上層空氣消毒燈具

飛利浦UV-C光源
證實有效滅活COVID-19病毒
(通過由波士頓大學新興傳染病實驗室測試)

香港寬頻推消毒燈具

*原價 \$7,500
7500元包免費送貨及安裝 (安裝(價值\$1,200))

*優惠至轉款及結賬時

Speedy Response, Professional, Hassle-free

- Edges: 1. **IMMEDIATE** available; 2. Government (FEHD) approved solution; 3. Installation included; 4. one-stop to apply for government certificate

Immediate solution with high flexibility



Best-fit, Innovative, Problem-solving

- Edges: 1. Pay by installment → ~\$100 per day; 2. technical support including; 3. Immediate available

A man in a dark suit and tie is the central figure. The background is a dark, abstract composition featuring a large green line graph with an upward-pointing arrow. Scattered throughout are various 3D models of viruses in different colors (green, red, purple, pink). Several numerical values are displayed in green and yellow, some with upward-pointing triangles, suggesting stock market data. A semi-transparent white box with a thin border is centered over the man's chest, containing the text.

Desperate times calls for innovative measure.

Game-changing partnership to create multiple wins – Barter & Bundle



MyHKBN App



HOME+ App

- ✓ Buy HKBN Service with Your Service
- ✓ Leverage HKBN / HOME+ customers
- ✓ Co-marketing / Branding → Your coupons at MyHKBN / HOME+ App

Fill the IT gap for your development & expansion



HK + GBA

w/ Largest Microsoft Accredited Engineers and more...

- ✓ Available in HK and across GBA
- ✓ Your IT Partner with accredited & trusted engineers
- ✓ Pay on usage: token-base or monthly subscription

Capture market opportunities with value for money solution



ePayment Solution

Free device rental offer in first two months for new user registration

An advertisement for an ePayment Solution. It features a dark blue background with white and orange text. On the right, there is a photograph of a person's hands holding a credit card over a smartphone that is being used for payment at a terminal.

- ✓ One-stop application
- ✓ One-device with 12 payment options
- ✓ Value-for-money service

Key Takeaways

- ✓ New post-covid era needs Agility
- ✓ A good partner grows with you
- ✓ Innovative solutions bridge you to new retail era

Talk to our experts and get your **HK\$5,000**
enterprise consumption voucher.

Mikron NG

Co-Owner and Chief Commercial Officer –
Business Market & China Business
HKBN Enterprise Solutions



Digital Transformation Increases Financial Performance

Predict, Prove, and Deliver ROI through RFID

Unlock your hidden potential with Checkpoint

Benny Ngan
Senior Business Development Manager
5, May 2022

Checkpoint 



Company Background

Founded in 1951 in Toronto, Canada, CCL (Connecticut Chemical Limited) is one of the largest label companies in the world, providing innovative solutions to Home & Personal Care, Premium Food & Beverage, Healthy Care & Specialty, Automotive & Durables and Consumer markets worldwide.

 Headquarters: Toronto (Canada) and Framingham (USA)

 Product and service cover 43 countries

 204 production facilities

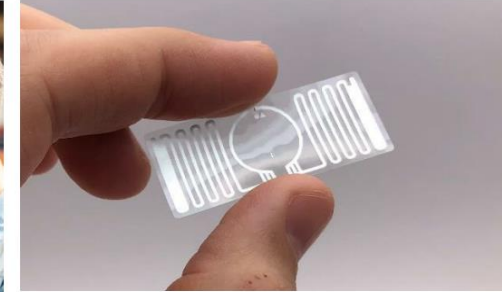
 25,100 employees

 C\$5.7 billion revenue (2021)



Checkpoint 

- Leading **intelligent retail solutions** provider
- A complete offering of RF, RFID and AM technology to **protect retailers' revenue and reduce shrinkage**
- Checkpoint high theft solution adopted by **90% of the top North American retailers & 70% of the top global retailers**
- **Vertically integrated** RFID solution provider of hardware, software and RFID labels
- Checkpoint source tagging solution **protects top 50+ retailers globally with 1.6 billion RF labels applied at source**
- Checkpoint's unique **Client Success** team helps guarantee the success of solution deployment and continuous improvement on ROI



The challenge for retailers

Empty shelves

Supply chains are often global, and getting stock in the right place at the right time is tougher than ever. After all, customers cannot buy what they cannot see.

Too much stock

Despite the above, in an effort to keep up with customer demand, retailers are stocking more and more items, 42,000 items on average according to our experience*.

Omnichannel

Retailers now sell online, on mobile, and in-store. Managing inventory and providing a consistent service to customers across all channels is a much bigger task.

Increased competition

With the advent of e-commerce, retailers are competing against retailers all around the world that can deliver to customers in their locale.

Customer demand

Retail is now an experience, and the onus is on retailers to step up and deliver what the customer demands.



Your route to taking control



Step 1.



PREDICT ROI with Store Scan

Use a free and easy Store Scan to predict what your ROI will be if you were to deploy RFID. Discover how many of your products are already tagged, and how accurate your inventory is in these areas.



Step 2.

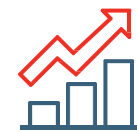


PROVE ROI with an RFID pilot

Why not put the prediction to the test with a pilot in a handful of stores? See the results for yourself in a small-scale, controlled environment before you decide to continue further.



Step 3.



DELIVER ROI by deploying RFID

The best way to get the most out of RFID is through a wider-scale deployment. So why wait? RFID can help your business sell more and lose less.

Step 1: Predict ROI

Store Scan
Free. Fast. Simple



Is RFID right for you?



Checkpoint® 

A Store Scan will predict how much you can...



...REDUCE UNDERSTOCKING:
stores are replenished with the right product at the right time = sales uplift



...IMPROVE ON-SHELF AVAILABILITY:
reduced out-of-shelf situations = increased sales of key lines



...IMPROVE WORKING CAPITAL EFFICIENCY:
increased inventory accuracy in-store and overstocks eliminated = lowering costs



...ENABLE EFFICIENT OMNICHANNEL OPERATIONS:
reduction in safety stock and lower order cancellation rates = sales increase



...INCREASE EFFECTIVE STORE ASSOCIATE TIME MANAGEMENT:
reduction in back office tasks = increased customer satisfaction



...INCREASE ERP SYSTEMS EFFICIENCY:
effective management of re-orders supporting store replenishment = sales uplift

Step 2: Prove ROI

Pilot

Assess. Implement. Review.



Demonstrate the value of RFID.



Do a pilot to PROVE your ROI

Store Scan can only predict ROI based on the stock that a retailer currently has on their shopfloor

A pilot is where that ROI is proved based on certain key performance indicators that are important to the retailer

Get the detail you need before making a decision on deployment

At Checkpoint we use an economic, customer-led approach to demonstrate the value of RFID

We pilot with selected merchandise, set SMART KPIs, and key milestones to measure ourselves against

Feedback is provided at regular intervals, with pre-scheduled weekly updates and monthly KPI reviews

The pilot is carefully managed to give the fairest demonstration of the value of RFID

By proving the ROI in this manner retailers can leverage all the work done in the pilot for their production rollout

Step 3: Deliver ROI

Deployment

In-store. Across the supply chain. At source.



Let's get started together.



Step 3: Delivering ROI through RFID deployment

In order to get the most out of RFID, retailers have to fully commit to a wide-scale deployment. After all, a pilot can only prove ROI, deployment delivers it.

We engage.

At Checkpoint we know that when it comes to RFID one size doesn't fit all. Our Client Success Managers work with each customer to meet their particular needs.

We support.

RFID deployments don't have a definitive end, and Checkpoint is dedicated to continuous improvement and support. Support that we are happy to provide.

We commit.

At Checkpoint we see our customers as partners, who we work with every day to help them get the most out of their RFID deployment.

At Checkpoint, we don't
"download and disappear".
We're dedicated to client success



A division of CCL Industries, Checkpoint Systems is the only vertically integrated RF/RFID solution provider for retail.

With consumer demands accelerating at an extraordinary rate driven by technology, Checkpoint delivered intelligent solutions - bringing clarity and efficiency into the retail environment anytime, anywhere.

Checkpoint's intelligent retail solutions are built upon 50 years of radio frequency technology expertise, innovative high-theft and loss prevention solutions, market-leading software, RFID hardware and comprehensive labelling capabilities to brand, secure and track merchandise from source to shelf.



Thank you

Checkpoint® 