



The Global Language of Business

Enabling Phygital Retail through Trusted Product Data

Annual Report 2017-2018



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

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 product data.

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

WE ARE



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Message from the President

I am pleased to present the Annual Report of GS1 India highlighting its key achievements and activities in 2017-18.

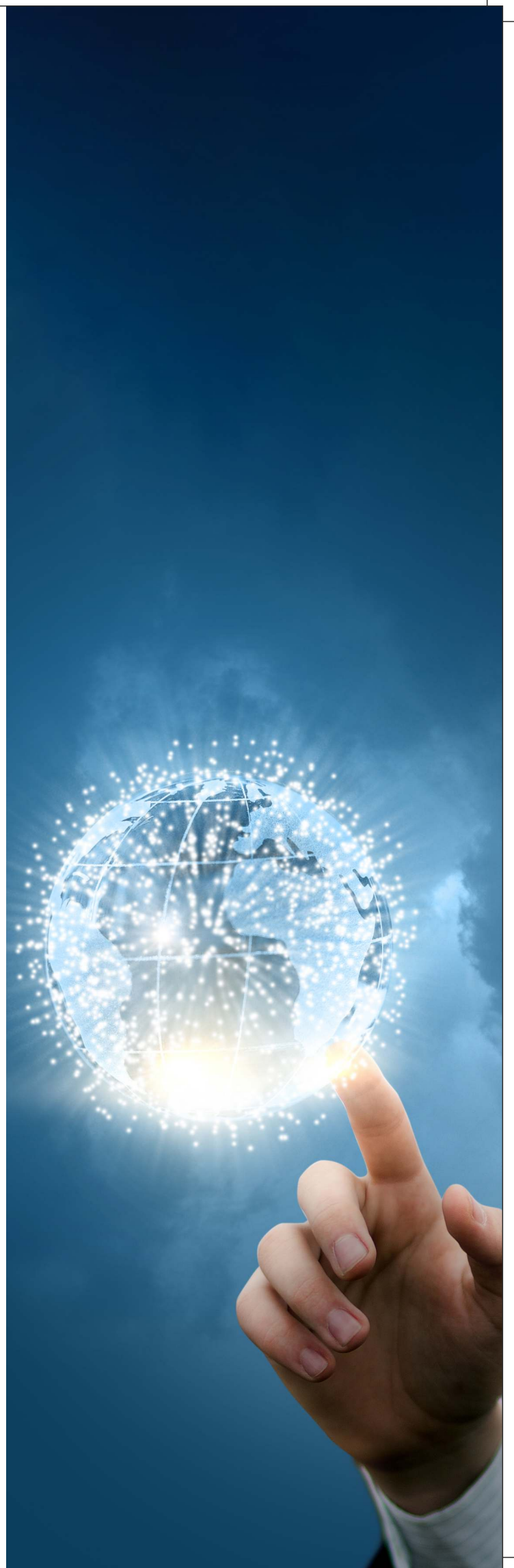
It was another year of consistent performance by GS1 India in acquiring new subscribers, deepening implementation of standards across industry sectors, and exceeding targets.

Retail remains the mainstay of GS1's business worldwide and accounts for over 10% of India's GDP.

Changing demographic profile, increased disposable incomes, growing internet and smartphone penetration, and changing consumer tastes and preferences are driving the growth of this sector in India.

Omni-channel retailing is fast becoming the norm for shoppers with blurring of physical and digital retailing in what is now termed as 'Phygital' shopping. Rapid advances in technology are redefining retail spaces by integrating physical and digital experiences.

Physical retailers are aiming at enhancing the experience of shopping with the use of technologies for better store navigation, virtual mirrors, digital kiosks for faster checkouts, etc., while online retailers are using digital technologies to enable search and order merchandise with a smart phone, anytime, anywhere.



GS1 standards are helping the industry meet the challenges of omni-channel commerce and satisfy the expectations of consumers before, during, and after the purchase of products - whether shopped online, in-store or via mobile apps.

GS1 India's DataKart service, launched in 2016, is substantively benefitting suppliers, retailers/etailers, and POS solution providers in optimizing their operational efficiencies and reaching out to their customers more effectively. Due to intensive efforts undertaken with suppliers and retailers in the past year, DataKart is now well positioned to become the de-facto platform for uploading, storing and sharing trusted data on retailed products, sourced directly from brand owners. It drew special commendation from GS1 Global for its rich and advanced features and functionalities.

Beyond Retail, need for open, universal global standards in identification, capture, and share is felt by other industry sectors as well, which include Defence, Agriculture, Food/FMCG manufacturing, and Transport & Logistics.

GS1 India made significant breakthroughs in the above with the implementation of its standards and

solutions in ammunition tracking and stock management in the Defence sector, Railways, e-tolling, and hosting of farm data of exporters of red chilli on ITC's (International Trade Centre) portal, under United Nations.

GS1 India's office at BKC, Mumbai, became operational with modern amenities to meet its growing requirements. Space for its new Delhi office has also been finalized.

I would like to thank the Board of Management for its continued pro-active support in furthering the objectives of GS1 India and complement the GS1 India team, led by the CEO, on another year of sterling performance.



Bhupinder S. Bhalla

Message from the CEO

It was another year of satisfactory performance with consistent growth in subscriptions from allocation of company prefix numbers, DataKart and revenues from Consulting services, resulting in targets for 2017-18 being exceeded.

Adoption and rollout of DataKart by brand owners and retailers was under special focus through the year. This required companies to consolidate their product data management business processes to realise seamless integration and higher efficiencies.

In this process, several functionalities/features got added to DataKart based on Industry inputs, making the service richer and even more valuable for all trading partners.

Consumers too benefitted from access to trusted information on retailed products and their attributes, sourced directly from brand owners through the 'Smart Consumer' mobile app.

Towards raising awareness on DataKart, two key conferences were organized by GS1 India in partnership with relevant Government bodies and Industry. This helped in generating strong interest amongst CPG companies and retailers, leading to several breakthroughs in subscriptions to DataKart.

The Indian Army moved ahead with adoption of EPC standards in RFID tags by their Ordnance factories for ammunition tracking



and inventory management. When fully rolled out, this would constitute the largest implementation worldwide of EPC/RFID standards in the Defence sector.

Army hospitals in Delhi and the Western Command, mandated suppliers of medicines to incorporate GS1 barcodes to enable them seamlessly track their movement in the supply chain.

In collaboration with CII, a first-ever study on the state of traceability in the Indian food sector was undertaken to identify gaps, and recommend the way forward. Implementation of its recommendations are expected to lead Indian food Industry to adopting global best practices in traceability and product recall.

With experience and expertise acquired over the years, GS1 India started offering Consulting/ Tech advisory services on product traceability and recall, a need for which is strongly felt by industry, regulators and consumers.

We hosted Mr. Miguel Lopera, President & CEO, GS1 Global, during the year and arranged several high-level meetings with our customers. He lauded GS1 India for its creative approach, performance and overall contribution to the GS1 community.

Substantial efforts were undertaken at enhancing the skillsets of employees across functions in the desired areas of expertise.

Several activities related to gathering product data, validating and hosting it on DataKart from our subscribers, were outsourced to keep costs under control and move internal staff to more value added work for higher productivity and results. Outsourcing all routine work, across functions, would be the strategy moving forward.

Many other important developments and activities were undertaken this year, details of which are highlighted in this Annual Report.

I take this opportunity to thank GS1 India employees in helping us achieve our goals. Special thanks to the members of Management Board for their continued support and to Shri Bhupinder S. Bhalla for his excellent guidance and leadership.



Ravi Mathur





An Overview

GS1 India is a Standards body, founded in 1996 by the Ministry of Commerce and Industry, Government of India, CII, FICCI, ASSOCHAM, FIEO, IMC, APEDA, Spices Board, IIP, and BIS.

It is affiliated to GS1, a global standards organisation headquartered at Brussels.

Our mission is to improve the efficiency and visibility of supply chains across physical and digital channels through the use of global GS1 standards.

About GS1

GS1 is an industry-led global organisation, which oversees operations of 112 GS1 organisations across the world.

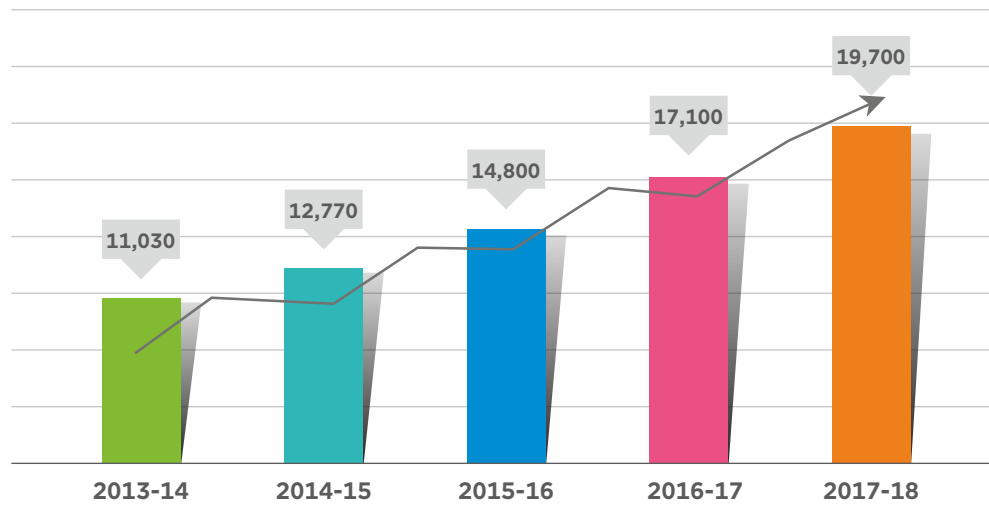
GS1 started with the barcode, which was first scanned in 1974 at a Supermarket in Ohio. From then onwards, GS1 standards have evolved to enhance efficiency, safety, and visibility across industry sectors.

Over two million companies, across 25 industry sectors such as Retail, Healthcare, Transport & Logistics, use GS1 standards, which are endorsed and referenced in ISO standards.

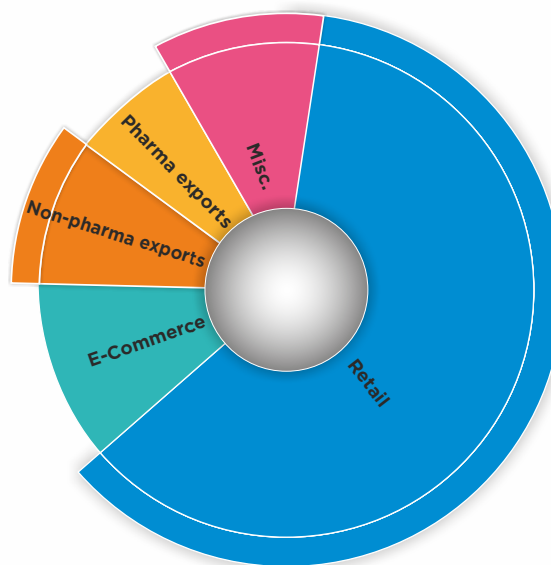
GS1 helps everyone involved in making, moving, and trading goods to automate and standardise their supply chain processes using the common language of GS1 global standards.

Highlights

Growth in subscriptions



Sector-wise distribution of subscriptions





Our standards

GS1 System of Standards create a common foundation for business by uniquely identifying, accurately capturing, and automatically sharing important information on products, locations, assets, and more. GS1 standards make it possible for companies to speak the same language, connect with each other, and enable visibility in the supply chain, irrespective of their geographic locations.

GS1 standards are open, interoperable, user driven, and mostly used in Supply Chain Management. Open standards enable interoperability, flexibility, and vendor independence, which result in reduction of costs of end-products to businesses and consumers. Flow of physical supplies and data sharing/querying also become faster, more accurate, and seamless across multiple trading partners in supply chains.



Identify

- Companies & locations (GLN)
- Products (GTIN, SGTIN)
- Logistic units & shipments (SSCC, GSIN, GINC)
- Assets (GIAI, GRAI)
- Documents (GDTI)
- Others



Capture

Barcoding & RFID



Share

Master Data

- Global Data Synchronisation
- GS1 Smart Search

Transaction data

- XML
- EANCOM

Event data

- EPCIS



Use

Enable:

- Track & Trace
- Authentication & counterfeit detection
- Product recall
- Inventory management





Our Services

GS1 India services are designed to facilitate implementation of GS1 standards seamlessly across companies, big & small, and across sectors.

"DataKart enables substantive reduction in time & effort spent in updating SKU information."



Murali Nambi
VP - IT Governance & Integration
Reliance Retail

Our Services



Single source of reliable product data



DataKart operates as a single national repository of trusted information on retailed items, populated directly by brand owners/manufacturers.

Brand owners/manufacturers can share information about their products and attributes with multiple retailers and online shopping portals, in one go and in real time, including product changes, new product introductions, and product promotions.

DataKart also enables capture of carton-level information related to dimensions, weight/volume, etc., which in turn enable efficient trucking/warehousing operations.

The 'Smart Consumer' mobile app of the Department of Consumer Affairs, Government of India, uses DataKart for providing information digitally to consumers to enable them verify physical marking/label information on consumer products, including on license numbers/certificates issued by Regulatory bodies.

Currently, DataKart hosts information on over 4.65 million SKUs of over 10,500 companies that use GS1 standards.





GTIN Validation

Through DataKart, retailers/etailers can validate GTINs (product codes) to identify incorrect and duplicate GTINs.

This helps in improving data quality and overall accuracy of Item Masters/Product Catalogues maintained by retailers and etailers.



Consulting & Advisory

As a trusted consultant/advisor, GS1 India works with government bodies, industry, to help them empower consumers, increase sales, reduce operational costs and comply with Regulatory requirements. Varied applications covered under these services include logistics & warehousing management, upstream & downstream traceability, product authentication, counterfeit detection, EDI, product recall management, etc.

In this year, several Consulting projects were undertaken for Railways, Defence (Central Ammunition Depot), Bureau of Energy Efficiency, and Tata Global Beverages Ltd.



e-Cataloguing & Imaging

E-Cataloguing & Imaging service offers a convenient, 'one-stop solution' to meet various product cataloguing and imaging needs for selling products online, in stores, or both.

Digital images and product attribute information, captured through this service, conforms to GS1 Product Image Specification Standards & GS1 Package Measurement Rules, which are used by leading retailers and online shopping companies worldwide.



Barcode verification

GS1 India offers barcode verification services for both 1-D and 2-D GS1 barcodes. Barcodes submitted by companies are verified to ensure conformance to GS1 standards and scanning efficiency with different point-of-sale scanners.

Barcodes are rigorously tested on several criteria, such as size, colour, print quality, quiet zone, check digit, and barcode placement. Subscribers receive a detailed barcode verification report along with recommendations for modification, if any.







Our Projects

Our projects are implementations of GS1 standards that enable businesses enhance their supply chain efficiency and productivity.

Solution based on GS1 standards is helping Polycab Wires to detect counterfeit and take action against unscrupulous suppliers using their brand name.



Enabling consumers to verify AGMARK certificates

GS1 India worked with the Directorate of Marketing and Inspection, Ministry of Agriculture & Farmer Welfare, Government of India, to make the information on certificates issued for AGMARK products accessible to consumers through the 'Smart Consumer' mobile app of the Department of Consumer Affairs, Government of India.

The objective is to enable consumers to

authenticate AGMARK certified products and their certification details, prior to purchase. This is done through a simple scan of the product barcode using the 'Smart Consumer' app.

This would help detect unauthorised use of AGMARK certification and build greater consumer trust in AGMARK products.

Authenticate star ratings on electrical appliances

Bureau of Energy Efficiency (BEE), Ministry of Power, Government of India, certifies electrical appliances with star ratings based



on their energy consumption levels. Each star rating carries a validity date, and hence, products are subject to periodic inspection to ensure their compliance with BEE's star rating criteria.

BEE has notified electrical appliance manufacturers to upload information related to star ratings of their products using GTINs (EAN/UPC product codes) for access by consumers.

In future, consumers would be able to provide feedback to BEE, in the event of any deviation/unauthorised use of star rating labels by manufacturers, thus helping to curb prevalent malpractices.

Tata Global Beverages gears up to implement product recall using GS1 standards

Tata Global Beverages (TGBL) is the 2nd largest player in branded tea in the world with focus on branded natural beverages - tea, coffee and water. With a long history and experience in the beverages market, and a heritage of innovation and development, the



Company has evolved from a predominantly domestic Indian tea farming entity to a marketing and brand-focussed global organisation.

As an emerging global brand and a company with consumer-first mindset, TGBL engaged GS1 India to study and identify gaps in their



Our Projects

downstream supply chain processes from a product recall perspective, in line with the requirements/guidelines on food recalls notified by FSSAI.

GS1 India submitted a report based on global best practices with their recommendations on how TGBL could enhance and automate their supply chain processes for more accurate and automated tracking of their supplies across locations.

DataKart to feed CSD's consumer grievance redressal app

Canteen Stores Department (CSD) under Ministry of Defence sells over 5,000 products to Defence personnel and their families through 4,500 outlets across the country.

With a captive consumer base of over 12 million, CSD carries the responsibility of making sure that their entire product range is available at all times and of the requisite quality. GS1 India has developed a consumer redressal mobile application for CSD titled 'Canteen Stores Department Grievance Redressal', which can be downloaded from Google Playstore by Defence personnel for reporting any issues related to product quality.

Through a simple scan of the barcode on products, authentic product information drawn from GS1 India's DataKart platform gets digitally displayed on mobile phones with option for reporting quality issues, if any. This helps CSD in consolidating grievances received from across various unit-run canteens, enabling it to take steps to address them expeditiously, to the satisfaction of its consumers.

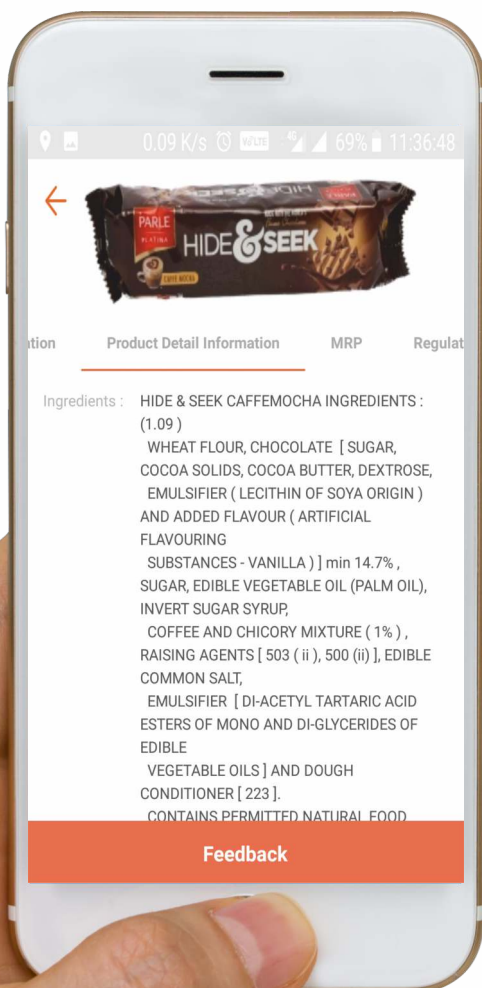
Polycab fights counterfeits with GS1 standards

Polycab, one of India's leading cable and wire manufacturers has been facing major challenges due to high incidence of counterfeits in the market which pass off as genuine products, endangering lives of consumers and negatively impacting Polycab's brand image.

To counter this problem, Polycab engaged with GS1 India to develop a solution by which product authenticity could be easily verified by consumers prior to purchase.

The solution comprised using unique serialized GS1 product code (SGTIN), encoded in a 2D barcode on each of their products. Prior to purchase, consumers could download Polycab's mobile app and scan the barcode on the product using their mobile phones. This would provide them with the authentic unique serial number (SGTIN) allocated by Polycab for that product, enabling verify that the product is genuine.

Additionally, Polycab generated and affixed unique serialized barcode label (SSCC) on each carton and linked this serial number with the



serial number (SGTIN) of each product inside the carton which was meant for sale to consumers. This linkage between the two serial numbers, one on the product and another one on the carton make it virtually impossible for counterfeiters to know these numbers in advance & the linkage between the two.

Command Hospital (Western Command) takes the lead in automation

Army Command Hospital (Western Command), Chandimandir, faced major challenges with expiry management, mismatches between physical supplies and system inventory and time consuming manual

and error prone processes for recording medical supplies receipt and issuance through their medical stores.

GS1 India was asked to design a system to address the above challenges. The solution comprised directing medicine suppliers to print GS1 barcodes (SSCC) for each carton using GS1 India's DataKart application and affix the same prior to despatch.

On receipt of the cartons at the hospital, DataKart enables the hospital print barcodes for each medicine and affix the same at their end.

Through the above, Army Command Hospital was able to automate their medical supplies receipt and issuance processes, eliminating manual errors and efficiently managing product expiry.



Our presence @ events



National Retail Conference on 'Transforming Retail Through Innovation'

This year, we organized two national conferences in collaboration with the Industry and the Government. These were **National Retail Conference** on 'Transforming Retail Through Innovation' and **National Conference** on 'Enabling Regulatory Compliance & Connecting with Consumers'.

Besides, some of the other national and international events that saw GS1 India presence include:

International events

- GS1 General Assembly 2017
- GS1 Asia Pacific Forum 2017
- GS1 Global Forum 2018
- Annual meeting of Asian Harmonisation Working Party in December 2017
- EABC Workshop for RCEP Business Stakeholders in July 2017

National events

- CII National Retail Summit 2017
- AIDC Summit 2017
- FICCI MASCRAGE 2017
- FICCI Massmerize 2017
- CII's 12th Food Safety & Quality Summit 2017
- MPEDA's AQUA AQUARIA 2017
- FICCI Foodworld 2018
- India Food Forum 2018
- 4th Annual Conference organised by Centre for Responsible Business in November 2017
- Fifth Government-Industry dialogue on Medical Devices & Digital Health
- The BIG Debate: An Interactive Town Hall Session - Authentication Solution Providers' Association.

Our presence @ events



National Conference on 'Enabling Regulatory Compliance & Connecting with Consumers'



India Food Forum 2018



CII National Retail Summit 2017



PharmaTech Expo 2016



FICCI Mascreade 2017



GS1 Global Forum 2018



GS1 Asia Pacific Forum 2017



The Authentication Forum 2018





Global Developments

GS1 organisations across the world are venturing into new areas to spread awareness on GS1 standards and help solve problems with the use of global standards.

GS1 global standards enable blockchain network users to scale enterprise adoption and maintain a single, shared version of the truth about supply chain and logistics events.

GS1 Cloud: World's largest source of trusted product information

GS1 is developing GS1 Cloud as the largest source of trusted product information in the world, making it possible for businesses to meet the expectations of today's digital world.

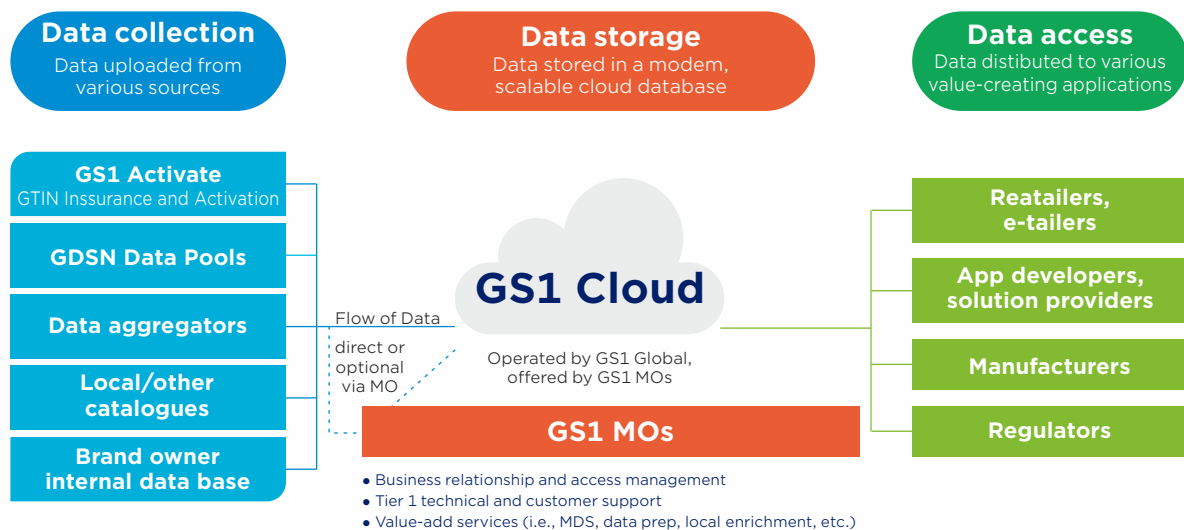
The data in GS1 Cloud will be available to retailers, e-tailers, marketplaces, apps and brand owners through an online portal and via Application Programming Interfaces (APIs).

It will also be used in consumer-facing

channels, and will be analysed for data quality and digital usage.

As a result, consumers will be able to get brand-sourced product data from retailers, e-tailers, marketplaces and apps, leading to increased consumer satisfaction and trust.

Companies across industries - including healthcare - will benefit as the distribution of trusted product data becomes more efficient and seamless.



GS1 standards cited in new European regulation against tobacco illicit trade

GS1 standards (GTIN and SSCC) are quoted in the new European regulation on technical standards for the establishment and operation of a traceability system for tobacco products.

The European Commission has adopted three acts calling for:

- a traceability system for tobacco products
- data storage contracts as part of this traceability system
- technical standards for security features

These acts were adopted on 15 December 2017 and published in the Official Journal of the EU on 16 April 2018.

The EC Impact Assessment, Regulatory Scrutiny Board Opinion Annex states, "In relation to the modalities for the generation of a serialised unique identifier, the majority of governmental organisations support Option A (a single standard provided by a relevant standardisation body), to be preferably based on GS1, especially in the form of a serialised GTIN".



Trust starts with traceability: Connect the dots with new Global Traceability Standard 2.0

For more than a decade, the GS1 Global Traceability Standard has been at the forefront of guiding the implementation of traceability solutions, from upstream suppliers to consumers and patients.

Challenges have intensified and new drivers have emerged, calling for a sense of urgency to create better traceability solutions. This is a need for increased transparency between trading partners and with consumers.

The new GS1 Global Traceability Standard provides the much-needed framework to ensure that traceability systems are interoperable and scalable, where trading partners can easily collaborate and share information for visibility across the entire chain.

As a result, recalls can be faster and more precise; food and medicines can be easily authenticated; sustainability efforts can be

strengthened; and consumer trust can be elevated since this new GS1 Global Traceability Standard fully leverages event data.

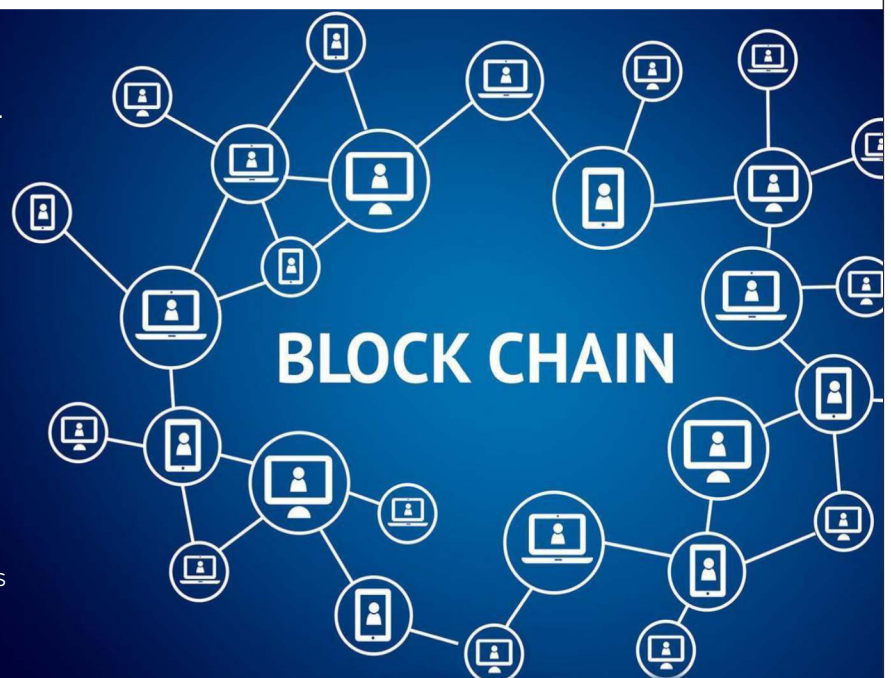


GS1, IBM and Microsoft Announce Collaboration to Leverage GS1 Standards in Enterprise Blockchain Applications

IBM and Microsoft partnered with GS1 to leverage GS1 Standards in their enterprise blockchain applications for supply chain clients.

GS1 global standards for identification and structured data enable blockchain network users to scale enterprise adoption and maintain a single, shared version of the truth about supply chain and logistics events — increasing data integrity and trust between parties, and reducing data duplication and reconciliation.

Data stored or referenced by blockchain networks can be structured for shared communications and interoperability through the use of standards. For example, the GS1 and ISO open standards of Electronic Product Code Information Services (EPCIS) and Core Business Vocabulary (CBV) enable standardised exchange of data and item-level tracking.



GS1 standards to be used in Consumer Internet of Things

IoT is transformational to systems, devices, technologies and applications—across industry and around the world—driven by:

- an expectation by businesses and consumers that all things will be “connected”
- increasing capabilities and lower cost of microcontroller and communications technologies
- the explosion of cloud-based data gathering, processing and sharing platforms

GS1’s ‘Global Language of Business’ connects the physical and digital worlds. Identification of objects, assets, locations, etc., and automatic data capture are powered by GS1 barcodes and EPC/RFID. GS1 standards for data sharing enable interoperable, trusted and transparent data, which are foundational to unleashing IoT capabilities.

Working in the Consumer Internet of Things

(C-IoT) sphere, a subset of IoT, GS1 focuses on use cases that directly impact consumers or individuals. This shift represents a move beyond traditional focus on B2B discussions of beacons, in-store merchandising, logistics efficiencies, and RFID tagging—to a future that includes a variety of integrated interfaces between people and things, sensory inputs from the consumer (vision and speech), and also elements invisible to the consumer (continually operating tags, zero-power devices).

C-IoT is about facilitating rich, ongoing experiences between a consumer, his/her products, the brand, and the retailer, by connecting those products with data and services via the internet, far beyond the point of sale.

As GS1 continues to work on these concepts, we recognise that the architecture of any IoT implementation must ensure that any object can be seamlessly identified across industries and domains, and that data can be exchanged in an interoperable, unambiguous, and scalable manner. Different identifiers are needed for different purposes, with two main categories of identification requirements:

1. Object identifiers are used for uniquely and persistently identifying physical and virtual objects. GS1 standards meet this requirement perfectly.
2. Communication identifiers are used to identify unique devices in the scope of communications with other devices, including internet-based communication. Typical examples include IPv4 and IPv6 IP addresses.

Seamless, trusted sharing of “big data” is enabled by GS1 standards. IoT is driving increased connectivity of “things” – which leads to massive data collection. Data quality is more important than ever and GS1 standards provide the foundation for accurate, sharable, searchable and linkable data, starting with standardised attributes.



GS1 strategy for T&L



Businesses today are experiencing the convergence of two key market forces: the physical and the digital. To cater to the needs of this new landscape, GS1 community has created a comprehensive, forward-looking, global T&L strategy. As part of the strategy, GS1 would act as a horizontal enabler that is relevant across all of the sectors.

Its vision is to achieve end-to-end visibility throughout the supply chain — from source to consumer. To succeed, GS1 around the world would continue to drive the use of global

standards that identify, capture and share information about the movement of products. It will also enable the digitalisation of T&L processes and enhance interoperability between stakeholder systems for a highly efficient, sustainable and collaborative T&L environment.

GS1 provides T&L stakeholders with the foundation needed to change T&L processes, develop and use standardised web APIs and enable interconnected platforms.

GS1 Management Board

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- Julio Nemeth, President Global Business Services, **Procter & Gamble** (Vice-Chair)
- Renaud de Barbuat, Chief Information Officer France, **Carrefour** (Vice-Chair)
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- Mark Batenic, CEO, **IGA, Inc.**
- Rakesh Biyani, Joint Managing Director, **Future Retail** Ltd.
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- José G. Loaiza Herrera, Vice President of International Business, **Grupo Exito**
- Miguel A. Lopera, President & CEO, **GS1 Global Office** (Ex-officio)
- Meinrad Lugan, Member of the Board of Management, **B. Braun Melsungen**
- Gary Lynch, CEO, **GS1 UK**
- Daniel Myers, Executive Vice President Global Integrated Supply Chain, **Mondelēz International**
- Hidenori Osano, Vice President & Executive Officer, Senior Chief Officer of IT Innovation, **AEON Co., Ltd**
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- Steve Schuckenbrock, CEO, **CROSSMARK**
- N. Arthur Smith, CEO, **GS1 Canada**
- Lin Wan, Senior Vice President, **Cainiao (Alibaba Group)**
- Chenghai Zhang, CEO, **GS1 China**





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