

A photograph of a busy city street, likely in Japan, with many pedestrians in motion, creating a blurred effect. In the background, there are modern buildings, a traffic light, and various signs, including one for 'SWAROVSKI' and another with Japanese text '英会話 & 留学'.

**WITHOUT GLOBAL  
STANDARDS, CAN THE  
RETAIL INDUSTRY GIVE  
CUSTOMERS WHAT  
THEY WANT?**

# GLOBAL STANDARDS HELP THE RETAIL INDUSTRY PUT CUSTOMERS FIRST



It was a year of firsts. BBC launched Teletext, Lucy – an almost complete hominid skeleton over 3 million years old – was discovered in Africa and MRI scanners were invented. This wasn't the only scanning technology that would change the world: the world's first retail barcode was scanned too and Automatic Data Capture (ADC) had become a reality.

This was 1974 and, since then, standards have helped the retail industry to identify, track and trace products across their supply chains, enhance efficiencies, minimise waste and save costs. A report by the Cranfield School of Management calculated these savings at £10.5 billion a year in the UK alone.

In the four decades since this first barcode scan, the retail industry has changed dramatically and continues to evolve at an unprecedented rate, driven largely by advances in digital technologies. One of the biggest changes has been the rise of e-commerce and online shopping, with the internet becoming the high street of choice for many customers. In fact, in the UK, online sales increased by 21.3 per cent during 2016 and, by the end of 2017, over two billion mobile phone or tablet users will make some form of mobile commerce transaction<sup>1</sup>.

## Customer expectations are at an all-time high

As the world moves ever more online, the barcode – and the unique number it represents – continues to give customers and retailers more control over their decisions. For example, today's shoppers can search, find, and compare products across the internet. Retailers, on the other hand, can analyse customer buying habits with greater ease than ever, identify sellers and track the movement of goods across a global supply chain. Without easy access to this data, our industry would be shrouded in secrecy and distrust – customers would have little insight and knowledge and would not be empowered to make informed purchase decisions.

Changing lifestyles, global online retailers and the accessibility of product data mean customer expectations are at an all-time high. Customers expect, even demand, that every retailer will offer what their previous best retail experience has been. We recognise that the future of global standards is in harnessing this shift in power and hence, we must become customer-centric.

## What can the retail sector do to become more customer-centric?

Automatic data capture for every product throughout the supply chain can inform retailers in real-time and help them to plan in a much more efficient way. Other advances in digital technology can support this – the internet of things, cloud computing, artificial intelligence, augmented reality, voice recognition and Blockchain, to name a few. The big win for the retail sector is to be able to offer customers valuable and useful product information via a global standard 'eco-system'.

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<sup>1</sup> <https://www.invespcro.com/blog/mobile-commerce/>

Standards can be seen as restrictive, expensive and slow to implement. But this needn't be the case. Any perceived negatives are also greatly outweighed by the benefits of a standardised data infrastructure. With globally agreed standards, individual retailers can ensure customers' needs are fulfilled and empower them to choose the right, authentic products to suit their lifestyle needs. This is a win-win scenario that will fuel the supply chain, in real-time, with factual consumption and choice data and enable retailers to better serve customer needs.

The alternative to having clearly defined standards is a world in which customers are at risk of limited information and choice, or even counterfeit goods and potential health scares, leading to distrust and a breakdown in relationships between the retail industry and customers.

The ideal future state can only be achieved through true collaboration across the retail sector with an industry wide integration, in both relationships and technology.

What sort of future do you want to see? The choice is yours.

A handwritten signature in black ink, appearing to read 'Gary Lynch', with a large, stylized initial 'G' at the start.

Gary Lynch

**Chief Executive, GS1 UK**

# THE FUTURE WILL FIT SOMEWHERE BETWEEN TWO EXTREMES

## **A WORLD OF COMPLETE CUSTOMER-CENTRICITY, COLLABORATION AND TRUST**

A world of complete customer-centricity, collaboration and trust comes with agreed processes, some legislation and a sustainable pace of change. Importantly, all producers and retailers would operate in a fair and transparent eco-system.



## **A WORLD OF CHAOS, LIMITED CHOICE AND DISTRUST**

A world of chaos, limited choice and distrust also comes with a world of speed, haste, no red tape, fast-paced innovation and proprietary technology. A dominant player could potentially become the 'de facto' retailer of choice, meaning other less 'powerful' retailers could lose out.

# ONE END OF THE SCALE: A WORLD OF COMPLETE CUSTOMER-CENTRICITY, COLLABORATION AND TRUST

Centralised and standardised information is the backbone of a retail industry that values customer-centricity, collaboration and trust.

## Customer-centricity

In a future that is customer-centric, every product has its make-up of ingredients, authenticity and provenance available to every customer. This information will be fed by a single industry standardised database which, in turn, will feed other commercial databases, such as Google product search, retailer supply chains and customer apps. Customer apps, for example, provide exciting vehicles to collect large amounts of data and make it available in accessible formats to solve everyday challenges, such as navigating a major city's transportation system.

In addition, understanding and catering to customers' needs will contribute to the bigger picture of gaining customer loyalty. This transparency empowers the customer and builds a trusting, long-lasting relationship between brands, retailers and customers.

These statistics illustrate the importance of standardising this data and putting it in the hands of the customer:



**92%**

of consumers reported that it is somewhat or very important to know where their food comes from.



**37%**

of consumers in a Unilever survey said they would switch brands if another brand shared more detailed product information.



**33%**

of US consumers said they would be willing to pay more for food with better allergen and ingredient information, representing a sizeable revenue-generating opportunity for retailers.



**21%**

of the people surveyed said they would actively choose brands if they made their sustainability credentials clearer on their packaging and in their marketing.



**74%**

of those surveyed by the Global Poverty Project, revealed they would pay an extra 5% for their clothes if there was a guarantee workers were being paid fairly and working in safe conditions.

Source: <https://www.foodmanufacturing.com/article/2016/03/customers-want-know-more-about-where-ingredients-their-food-come> CIPD

<http://www.prnewswire.com/news-releases/study-ninety-four-percent-of-customers-say-food-product-transparency-from-brands-and-manufacturers-is-important-impacts-purchase-300287311.htm>

<http://www.nasdaq.com/article/uk-online-shopping-and-e-commerce-statistics-for-2017-cm761063>

<https://www.theguardian.com/women-in-leadership/2015/apr/02/the-rise-of-the-conscious-consumer-why-businesses-need-to-open-up>

<https://www.unilever.com/news/Press-releases/2017/report-shows-a-third-of-consumers-prefer-sustainable-brands.html>

## Collaboration between retailers and brands

These benefits to retailers, brands and customers can only be realised through total collaboration. This collaboration must centre on how and what information is collected and the ways customers use and access it.

True collaboration will offer freedom of choice to consumers and open up a new way of interacting with customers for brands and retailers. That will enable a fair and level playing field for all providers of authentic products, no matter how large or how small.

## Structuring and storing information

To improve customer experience, we need to collaborate as an industry and ensure the most relevant data is collected and correctly structured. At a minimum, the following considerations need to be taken into account:

- The scope and detail of the information the industry should be collecting, for example, materials or ingredients, allergens, source, time, location, expiry, and so on
- How to create a data structure that enhances and appends the existing Global Trade Item Number (GTIN) structure
- How to ensure information is machine-readable and structured using the language of the internet
- The best way to present, track and trace information, whether that is barcodes, RFID, internet of things and Blockchain
- How to share data in a central, industry-wide database via an agreed API.

## Accessing the data

The industry needs to agree on how customers can access information and how it should be presented.

An agreed set of customer-centric, royalty free, global standards made accessible to all would mean:

- Customers can access data in any way they choose – for example, mobile device, internet of things, augmented reality or virtual reality – and at any time and place they want
- Brands, retailers and solution-providers can become more innovative in the way they provide customer access. For example, this data, fed via an API, will allow them to create apps and websites that can be 'fuelled' by the standards data
- This means you can offer customers new ways to shop. That could be based around:
  - Social responsibility and fairtrade
  - Circular economy (recycle, repair, resale)
  - By diet type, if food (vegetarian, vegan, gluten free, salt, allergen details, calories)
  - Based on source (provenance, organic, authenticity).

## How Blockchain can play a key role

To ensure product authenticity and consumer trust, Blockchain, using global data standards, can operate as described below.

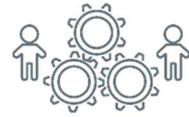


Blockchain is a shared digital ledger

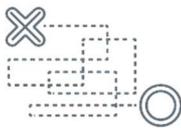
In other words it's a constantly updated list of transactions



It is supported by a peer-to-peer network that's either public or private



Every member on the community network used the same consensus mechanism to verify every element of the product information data, made through the network.



This creates a unique permanent audit trail



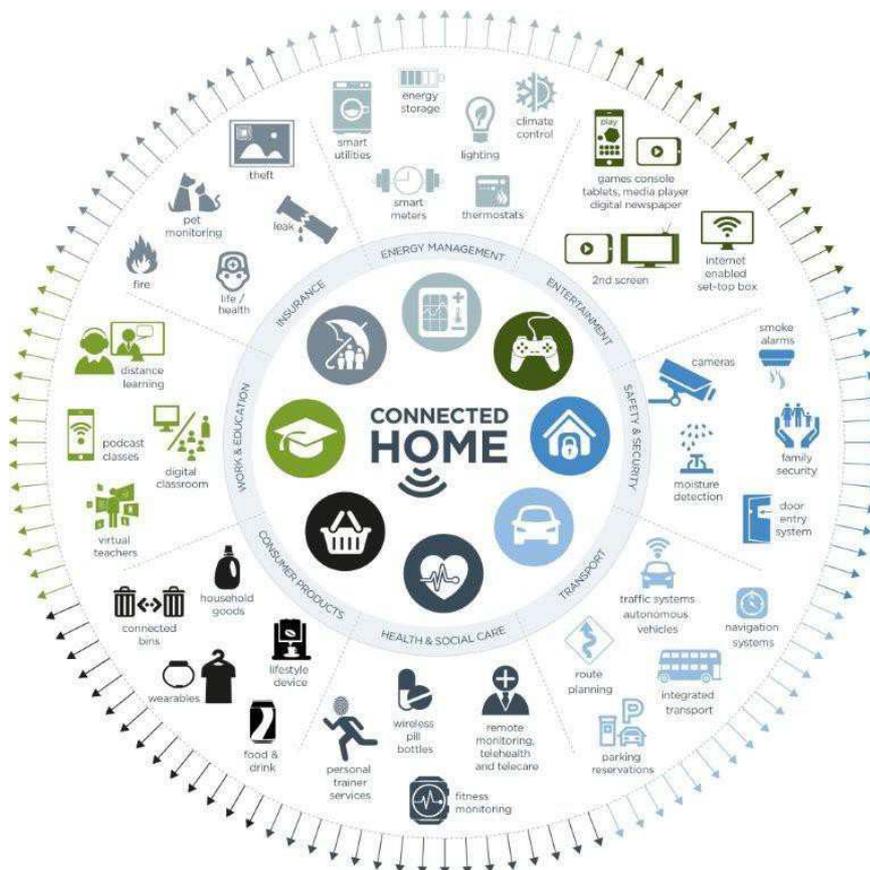
There's no single point of failure and no way to make modifications to the product/good record



Blockchain is the technology behind bitcoin, Ethereum and other cryptocurrencies

## The evolution of the connected home

The 'connected consumer' will want product information readily accessible in their homes. Whether for fashion, food, electronics or white goods, the ability to offer accessible information in the home is already technically feasible.



# THE OTHER END OF THE SCALE: A WORLD OF CHAOS, LIMITED CHOICE AND DISTRUST

Without a means of collecting, sharing and standardising product information, the future of our industry could be one of chaos and distrust. Unreliable and untraceable product data puts customers at risk of limited choice and difficulty finding and accessing products, and even counterfeit goods and health scares. It may also lead to unethical manufacturing or sourcing practices.

- Poor quality food products that find their way into the supply chain can cause major health risks to customers
- Customers wouldn't know what was authentic and what wasn't
- The cost and risk to retailers would be huge, as they wouldn't be able to identify the impostor goods either, and hence have to remove all produce from the supply chain to be safe
- Dominant retailers with already trusted brands would dominate the market, and this would prevent new products, brands and retailers entering the market. It would be an unfair and unethical industry.

The implications of not having a global standard will be chaotic for the customer and detrimental to the retailer or brand:



**53%**

of customers will boycott a product if its manufacturer has a poor CSR reputation.



**10%**

wage premium commanded by employees working for a company with a poor reputation.



**33%**

of a FTSE 100 company's value is based on reputation.



**72%**

of employees feel it is important to work for a company led by a CEO whose highest priorities include CSR.

Source: <https://www.foodmanufacturing.com/article/2016/03/consumers-want-know-more-about-where-ingredients-their-food-come>

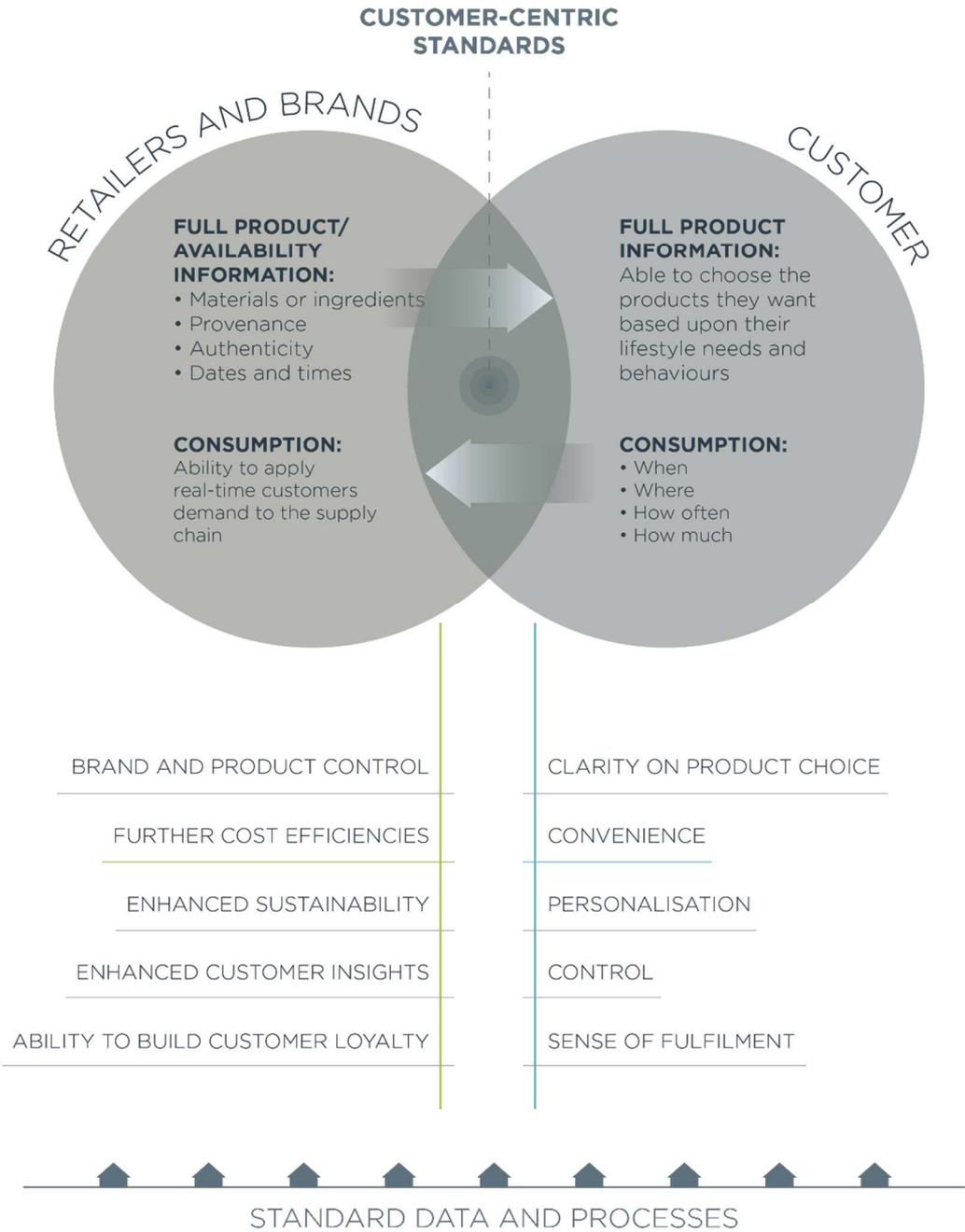
<https://www.cips.org/en-GB/cips-for-business/supply-assurance/cips-risk-index/>

# A SOLUTION FOR THE INDUSTRY

An agreed set of global standards should be fed by the source of all goods entering the market place. Product information will then be authenticated by an independent standards body.

Purchase decisions can be informed by the global standards data, and people can choose what they want, however they choose to interact, suited to their own individual lifestyle needs.

Through emerging technology (internet of things, Augmented Reality, visual recognition) purchase information can then be fed back in real-time, enabling retailers to reshape their supply chain and become customer-demand driven.



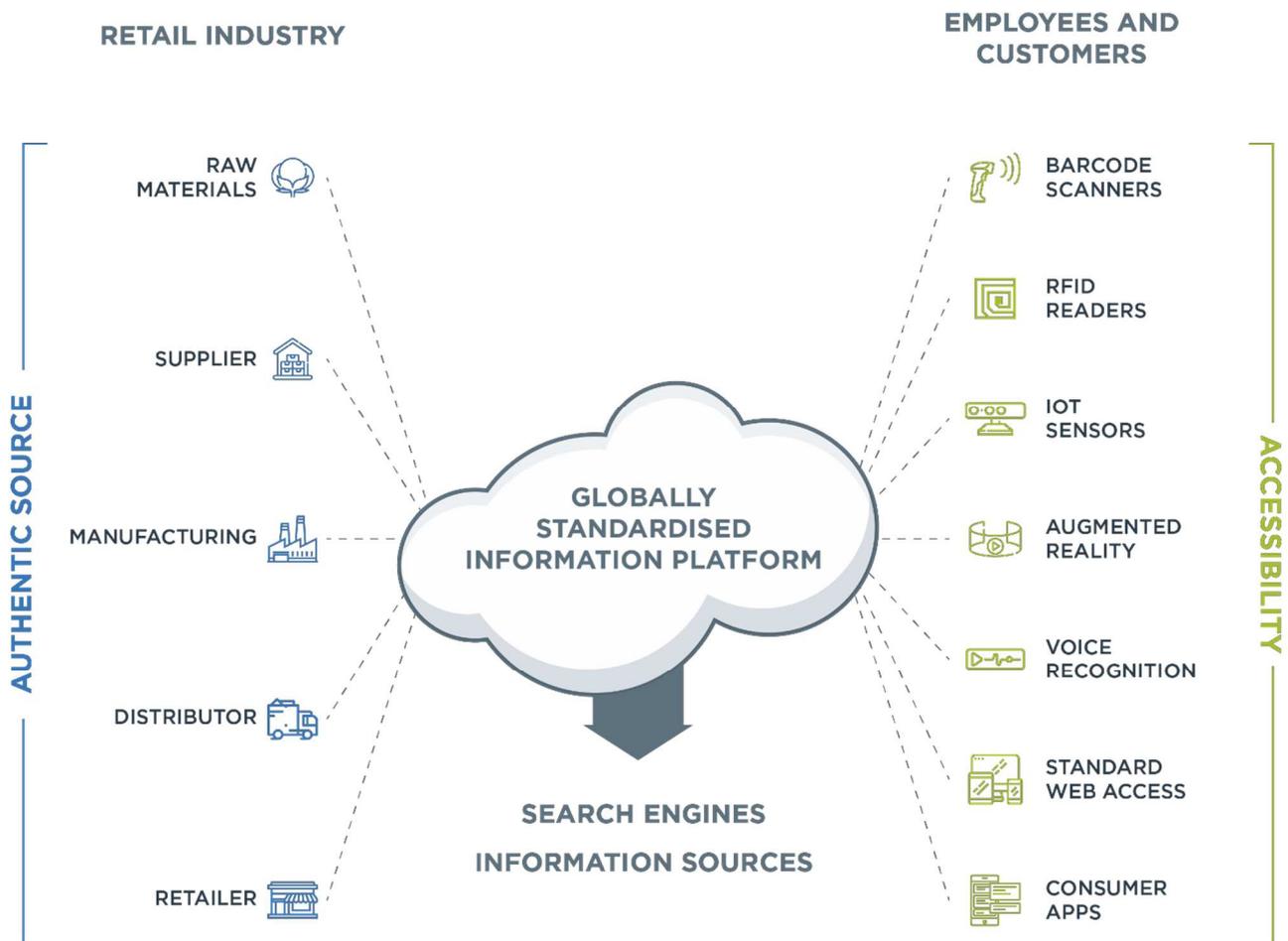
# PA'S PERSPECTIVE: A FUTURE GLOBAL STANDARDS PLATFORM

GS1 in the UK is already leading the way. Today, they are taking the first step to building a Global Standards Platform with the creation of their Digital DNA initiative, and encouraging UK retailers to collaborate and share their product information on an independent, single platform. The desired future is a global intra-industry collaboration, in a similar vein. This would create a truly Global Standards Platform fed by data from all sources, verified by a Blockchain ledger, and accessible to all.

It represents a pull and push eco-system that is fed by producers at every stage of the supply chain. In turn this makes information readily available, to be accessed via any form of interactive technology. This still uses the 'traditional' methods of barcode scanning and RFID readers, but also includes all aspects of emerging technology.

This will change the face of how customers will shop in-store and can have all the information they require so they can suit their lifestyle needs.

Retailers will also be able to revolutionise their ecommerce platforms (desktop, tablet and mobile) and use this product information to make the path to purchase slicker and aligned to suit their own customer segments. They'll have the ability to offer true personalisation and convenience.



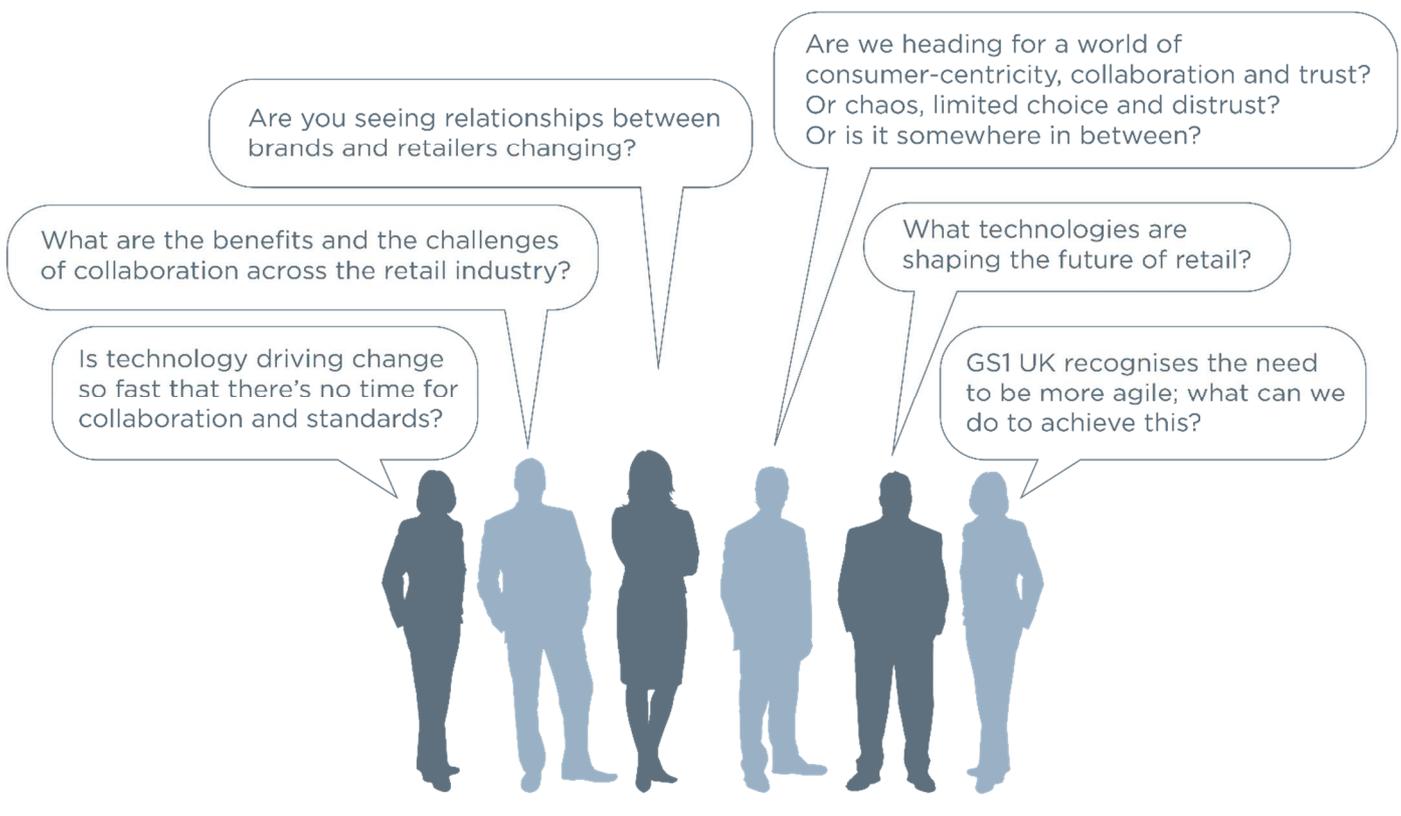
# HAVE YOUR SAY

Through standardisation and centralisation of data, the retail sector can empower customers and allow them to make informed purchase decisions. Participation in this 'opt in' collaboration demonstrates the industry's desire for openness, transparency and, ultimately, putting the needs of the customer first. It has also been demonstrated that sharing data and information breeds trust and loyalty.

This project will also provide retailers and brands with an opportunity to rethink customer experience and be better informed about how customers' behaviours and needs evolve.

Collaboration is our future.

## What do you think?



**TELL US YOUR THOUGHTS AND JOIN THE CONVERSATION**

[WWW.GS1UK.ORG/FUTURESTANDARDS](http://WWW.GS1UK.ORG/FUTURESTANDARDS)

 #FUTURESTANDARDS

### *Recent initiatives*

<https://www.gs1uk.org/our-industries/news/2017/06/29/google-launch-the-manufacturer-centre-at-gs1-uk>

<http://www.prnewswire.com/news-releases/gs1-ibm-and-microsoft-announce-collaboration-to-leverage-gs1-standards-in-enterprise-blockchain-applications-300518489.html>

# HOW GS1 STANDARDS HAVE HELPED THE RETAIL INDUSTRY AND CUSTOMERS





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