Why GS1 Identification keys and Standards are important

- Information is stored and managed by one trusted party.
- Makes it easy to share basic information.
- Makes it easy to plan when and how to buy and sell something.
- Steps by steps to implement GS1 identification keys and Standards in various data carriers (eg. Barcode, 2D, QR Code, RFID etc) in supply chain to enable full visibility.
The Most Visible Form of GS1 Identification Keys and Standards

Items sold at stores/Supermarkets have a barcode label somewhere on their packaging.

At checkout, the barcode symbol is scanned...

The barcode number is referenced in a database...

The price is displayed on the POS screen.
The member company generates barcode symbols from the assigned keys.

The barcodes are made to be a part of the product.

Information about each product is sent to distributors & retailers.

The product is shipped to distributors & retailers.

The same barcode is used throughout all transactions.
Driving Adoption of GS1 Identification Keys and Standards (Application Identifiers) to enable Traceability in the Supply Chain

(01) GTIN
(17) Expiration date
(10) Batch / Lot
(21) Serial
How GS1 Application Identifiers are use in Data Carriers in GS1 128 and 2D

There are more than 100 GS1 Application Identifiers (AIs), which your business can use to identify additional data within a data carriers to increase the supply chain visibility.

Commonly used AIs:

- **01** for GTIN
- **10** for Batch or Lot Number
- **11, 13, 15 & 17** for various Date Formats
- **21** for Serial Number
Different Types of GS1 Data Carriers

EAN-13

UPC-A

EAN-8

UPC-E

ITF-14

GS1-128
Different Types of GS1 Data Carriers

GS1 2D DataMatrix  GS1 QR Code  GS1 DataBar

EPC UHF Gen 2  EPC HF

Note: There are many non-GS1 barcodes in the market but only GS1 standard barcodes are used throughout a supply chain
GS1 Core Values Address Many Needs

GS1 Core Values

- Track & Trace
- Interoperability and Visibility
- Efficiency
- Safety
- Transparency
- Reduce Cost
- Anti Counterfeit
- Collaboration
- Global Standards
- Consumer
- Businesses
- Government
- Enhance Security
- Sustainability
- Recall
- Efficiency

The Global Language of Business