



# Mobile app: GS1 Japan Scan

## **GS1 Japan Scan: Background of the Development and its Purpose**

In Japan the use of the GS1 standards has been spreading to various industries including healthcare and food raw material sector. In these industries detailed product information including expiration date, batch/lot numbers along with GTIN, is encoded in barcodes. This benefits consumers' safe use of the product, and enables secure traceability, etc. Using barcode symbols following the GS1 standards are essential to share various information correctly among trading partners. In the market, however, there still are barcode symbols that do not meet GS1 standards, as well as software and devices that do not correctly detect/process the GS1 standard. This is because not only a lack of understanding of GS1 standards, but also a shortage of the tools with which barcode symbols can be checked easily. Therefore GS1 Japan introduced a new smartphone application called "GS1 Japan Scan" that allows users to carry out a simple check of their products' barcode on the go if it meets the GS1 Standards' requirements. The application has been developed to promote the usage of the GS1 standards and prevent issues related to misunderstanding of GS1 standards.

## **Expected Usage and Advantages of GS1 Japan Scan**

- 1) Allow person in charge of designing or printing of barcode labels easily check created barcodes.
- 2) Allow person in charge of receiving goods promptly identify the cause of the problem that occurred during barcode scanning (e.g. an incorrectly encoded barcode symbol, a fault of a barcode reader or in the software of the receiving control system).(\*1)
- 3) Easily demonstrate the advantages of using the GS1 system.

## **Basic function of GS1 Japan Scan**

- 1) Scan a barcode symbol.
- 2) Confirm whether the symbol is GS1 standard barcode.  
For example:  
EAN/UPC symbol?  
GS1 DataMatrix or non-GS1 DataMatrix?
- 3) Display data items with their application identifiers.  
For example:  
(01) → GTIN (Global Trade Item Number)  
(17) → Expiration date

\*1 Its function is limited to the checking of data items, the print quality of bar codes is not assured. The printing quality needs to be checked by a barcode verifier.

(10) → Batch or Lot number

4) Check if the barcode conforms to the industry rules, for example, medical devices, pharmaceuticals, food raw materials.

### How to use GS1 Japan Scan

Fig. 1 through Fig. 4 illustrates how GS1 Japan Scan works.

Fig. 1 is a screenshot of capturing and decoding a barcode symbol. If the barcode is not a GS1 barcode, the application prompts with an alert.

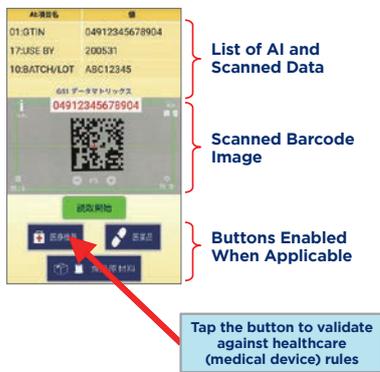
Fig. 1 Results Example

#### ◆ Non-GS1 Standard Barcode Non-GS1 DataMatrix



If the barcode is a GS1 barcode, the application shows sets of AI and data items and barcode image. Also the check-by-industry buttons will be enabled.

Fig. 2 Displaying scanned data items



Tapping these buttons, users can check if the barcode conforms to the industry rules. At the

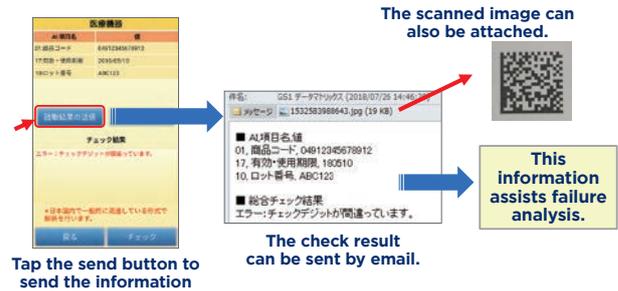
moment 3 buttons (medical device, pharmaceuticals and food raw materials) are available. Following screenshot (Fig. 3) suggests that necessary information for medical device are encoded that "All good" is displayed, meaning that there are no issues with this GS1 DataMatrix symbol.

Fig. 3 Check Result: example of Medical Device



This application has a very useful function to share information, which assists the analysis of scanned data (see Fig. 4). Users can email information such as AI, data items, image of a barcode, data verification report, which help them with analyzing failures.

Fig. 4 Information Transmission Function



### Conclusion

GS1 Japan will continue to improve the application by gathering users' feedback. We are committed to expanding the usage of this application to promote the proper understanding of GS1 standards, and the widespread use of barcode symbols that conform to GS1 standards.

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