Support Arts and Crafts International Centre of Thailand (SACICT) was established according to Section 7 of the Royal Decree to promote and support Thai arts and crafts in domestic and international markets, in line with Her Majesty Queen Sirikit’s projects. Most of SACICT’s suppliers are local artists and craftsmen.
Solution

• Datasheet was created to match GS1 identifiers with internal codes.

• Database containing the master data was built. Master data was saved into both GS1 Thailand’s Member Portal and SACICT’s database.

• GS1 identifiers were assigned to product items and were matched with internal codes.

• GS1 DataMatrix, a 2D barcode carrying the unique number, was applied along with GTIN-13. The label has a limited space to place two symbols so the SACICT’s team chose for GS1 DataMatrix to put next to GTIN-13 barcode. GS1 DataMatrix allowed to add more information about the product, such as a serial and a batch numbers, a date of receiving the product on stock, an URL to the web page, as well as to track and trace each sold item. When a cashier scans GS1 DataMatrix on the label of an item at a Point of Sale, the system reflects the data of What, Where, When, and Why of it. Barcode scanners were configured accordingly to support the 2D barcode function.

• The GTIN (Global Trade Item Number) set-up was defined. Since there are too many colour and shape varieties within one product category, it was decided to allocate GTINs by the size of products.

• ‘SmartBar’ App, an application developed by GS1 Thailand, was implemented to scan GTIN-13 and GS1 DataMatrix barcodes for checking product information.

Challenge

SACICT was using internal barcode identifiers for their products, and also GTIN-13/EAN-13 for checking out items at points of sale, but these two could not march together. SACICT was looking into implementing 2D barcodes on price tags to add additional information, such as a batch number, a serial number, an URL of its website.

Not only GS1 identifiers were needed, but also an e-catalogue with master data, there were no products descriptions and pictures in the database, so inventory data was not accurate. SACICT did not have any system in place to manage their high-mix low-volume items inventory and flow.

Therefore, SACICT turned to GS1 Thailand for advice and support, and set the following objectives:

• Implement GS1 identifiers to identify items efficiently.
• Ensure that inventories are managed easier and more accurate.
• Develop a complete product database including products descriptions and photos.

Barcodes before and after implementation of GS1 identifiers

GTINs allocation by size pf products
GS1 DataMatrix is a two-dimensional (2D) barcode. Two-dimensional (2D) barcodes can hold a significant amount of information and may remain legible even when printed at a small size or etched onto a product. 2D barcodes are used in a wide range of industries, from manufacturing and warehousing to logistics and healthcare.

A 2D barcode looks like squares or rectangles that contain many small, individual dots

Benefits

With implementation of GS1 identifiers GTIN (Global Trade Item Number) and GS1 DataMatrix, SACICT’s inventory management has become easier and more efficient. Additional information added with GS1 DataMatrix has allowed for tracking the date and the place when and where each item is sold.

• Items can be identified more efficiently which makes inventory easier and more accurate.

• There is a complete database of products on stock, including product photos.

• SACICT can track the date and the place of each sold item. GTIN and GS1 Data Matrix provide for visibility of product origin and their movement through the chain from craftsmen to the selling moment. The next phase of the project is planned to set up further tracking of items to the level of customers who purchase them at Point of Sales.

• GS1 DataMatrix, a 2D barcode, contains more information about the product that was available before, such as a serial and a batch number, a date of receiving the product on stock, a link to the webpage.

• Consumers can access all available information about products, from origin to product description, by scanning barcodes with the ‘SmartBar’ App.

Product information encoded in GS1 DataMatrix

<table>
<thead>
<tr>
<th>AI</th>
<th>GS1 Identifier</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>GTIN</td>
<td>Arranged by GS1 Thailand</td>
<td>8852897249039</td>
</tr>
<tr>
<td>10</td>
<td>Batch Number</td>
<td>Supplier’s ID – Date of receiving the item</td>
<td>0187-180611</td>
</tr>
<tr>
<td>21</td>
<td>Serial Number</td>
<td>Pattern – Serial Number</td>
<td>015-00001</td>
</tr>
<tr>
<td>8200</td>
<td>Extended</td>
<td>URL of the webpage of Item’s information</td>
<td><a href="http://www.sacictarts.net">http://www.sacictarts.net</a></td>
</tr>
<tr>
<td></td>
<td>Packaging URL</td>
<td></td>
<td>product.php?id_product=294</td>
</tr>
</tbody>
</table>

GS1 Thailand
The Federation of Thai Industries
11 th Flr. Creative Technology Bldg. (UTK) 2nd Nang Linchi Rd.,
Thung Maha Mek, Sathon, Bangkok, Thailand
T +66 23451200 | E info@gs1th.org
www.gs1th.org