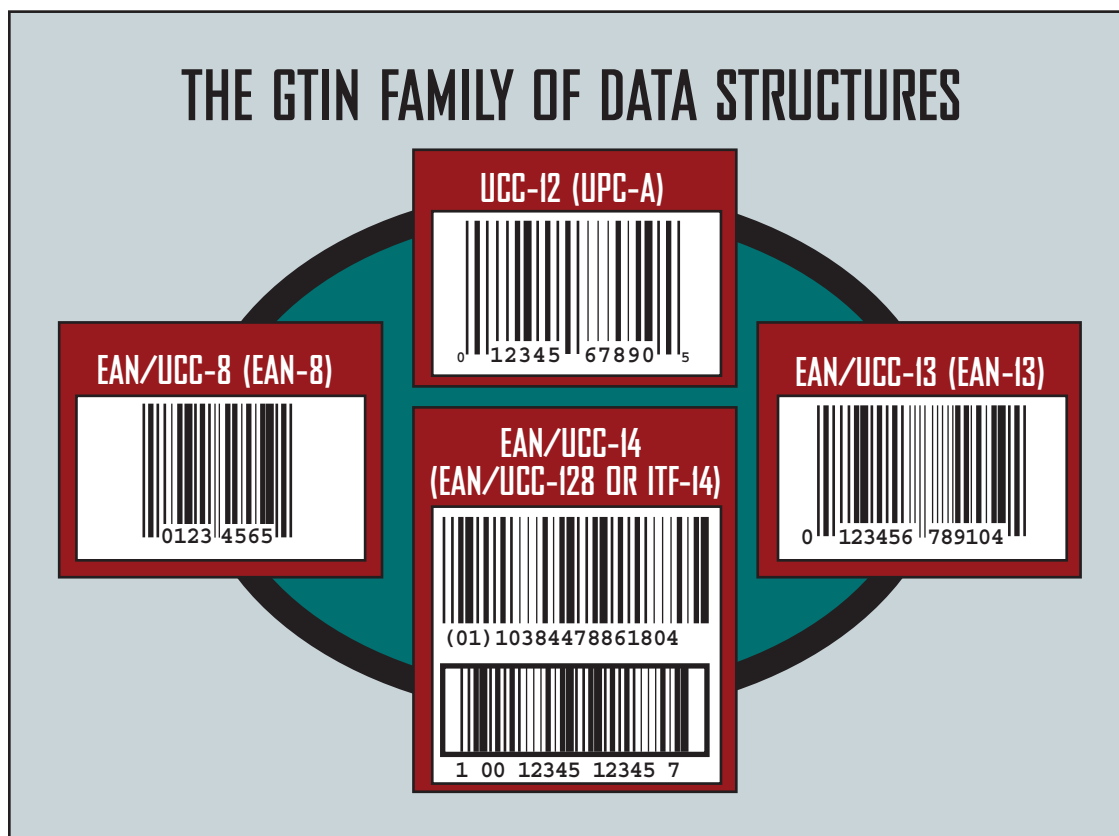


THE GTIN FAMILY OF DATA STRUCTURES



BASIC BUILDING BLOCKS

How GTIN can simplify your migration to RFID

With a significant number of retailers “mandating” RFID initiatives for their manufacturers and Wal-Mart’s second- and third-tier companies moving towards compliance, it is important to revisit some of the basic building blocks necessary for RFID. One of the most important short-and-long term components is the Global Trade Identification Number (GTIN). Though not necessary to migrate into RFID, GTIN will make life simpler downstream and so it deserves consideration when constructing an RFID approach.

WHAT IS GTIN?

GTIN is a family of GS1 global data structures that can include up to 14 digits. In the United States, UPC codes are a form of GTIN. GTIN is a new term, but not a new idea. As related to the rest of this article, GTIN, especially the 14-digit variety, can become the basis for a more powerful data structure when migrating to RFID. The 14 digits become part of EPCglobal’s larger 96-bit RFID “label” standard and provide unique identification and visibility into your supply chain.

WHY SHOULD I CONSIDER GTIN WITHIN RFID?

When considering GTIN, don’t just think about today’s needs; look forward to tomorrow. For most companies “slap and ship” should not become their RFID strategy. “Slap and ship” is a milestone within the larger return-on-investment-based (ROI-based) RFID strategy. Embedding GTIN compliance

within your RFID strategy will provide measurable data synchronization gains today. However, the ability to uniquely identify your pallets, cases and items will drive your future.

Imagine being able to seamlessly identify your shipment down to the case or item level. The unique identification provides perfect order information throughout the entire supply chain process allowing you to have visibility into every case or item as it leaves your dock, travels through your — and your customers’ — distribution centers via third party logistics providers, and ends up in your customers’ backrooms. Creating this “perfect order” will automatically reduce unauthorized deductions while raising service levels for everyone. You could do it today via barcodes without GTINs, but the GTIN embedded within the RFID data structure will make it significantly easier.

AREAS TO CONSIDER

The following issues should be considered by consumer packaged goods (CPG) organizations during review of their existing structures:

- ▶ Each trade item must have a unique GTIN
- ▶ Retail unit and the case of the product should have a unique GTIN
- ▶ Intermediate units must have unique GTINs
- ▶ Different case counts of the same product must have unique GTINs
- ▶ Don’t forget seasonal items
- ▶ Aligning your UPC-codes so that the unit code and case code use the same main structure. The

differentiator should be the leading indicator (for example: 0=unit, 1=case, 2=pallet, while the unit/case number is 123456).

There need to be differentiators for the same units being placed in multiple sizes or types of cases. For example: A unit that rolls up into a 12 inch x 24 inch case needs to have a unique number when compared to the same unit rolling up into a 24 inch x 12 inch case.

GTIN ALLOCATION GUIDELINES

When becoming GS1 compliant, new GTINs may be issued based on product changes (brand name, package design, content, promotions, language cluster, etc).

A few issues to consider and to be aware of:

- ▶ Cases should not begin with “0” (zero) for hierarchy purposes.
- ▶ When there is more than one product per case the indicator digit may not be 1 through 8 to indicate a packaging hierarchy. Thus, the new GTIN-14 must have an indicator digit of “0” (zero) and a new item reference number.
- ▶ Company prefix cannot use anything but a “0” (zero) to fill unused numbers.
 - If you are zero-filling by adding numbers to a company prefix AND to become GTIN-14 compliant, do NOT fill with anything but zeroes.
 - The GS1 governing body uses non-zeroes for purposes throughout the world.
- ▶ There is testing for Reduced Space Symbology (RSS) within the industry. Although not required, if CPG organization migrated towards RSS, you would be required to migrate to a 14-digit schema.
- ▶ Company prefix lead digits of 1, 8 and 9 are now used by GS1 for specific purposes. Please ensure that you are not using 1, 8 or 9 as lead digits in any company prefixes. 0, 2, 3, 4, 5, 6 and 7 are NOT impacted.

“Embedding GTIN compliance within your RFID strategy will provide measurable data synchronization gains today.”

- JOHN ROSSI, CLARKSTON CONSULTING

CONCLUSION

This short article cannot provide all the details you need when considering an RFID strategy that encompasses GTIN. For most CPG companies, GTIN’s complexity is in direct correlation to their number of SKUs. Creating the master data file layouts for your SKUs and properly mapping them to be GTIN and EPC compliant takes some time, but it is well worth it. Many CPG companies have data synchronization initiatives completed or underway, and GTIN compliance should become part of every one of these initiatives. For those thinking about ROI-driven RFID, GTIN is one of the most important building blocks. Sooner or later, you’ll want to become GTIN compliant, now may be the best time. **CG**



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