Foodservice Data Quality Scorecard Instructions

Foodservice GS1 US Standards Initiative

Introduction

The Foodservice Data Quality Scorecard is a pre-programmed spreadsheet tool designed to support data recipients in measuring and analyzing case dimension and barcode data quality. The scorecard is a companion to the Foodservice Data Quality Guide.

The scorecard is a spreadsheet with algorithms built into various worksheets. Data recipients use one worksheet to record case measurements which they have physically captured from their products, as well as the corresponding case measurements they received from their suppliers through the Global Data Synchronization Network™ (GDSN®). For those recipients also tracking barcode quality, the scorecard also includes a worksheet for barcode scans and Global Trade Item Number® (GTIN®) matching. The scorecard algorithms then compare the data entered, and provide a summary of results which can be shared with the data source company (i.e., supplier, manufacturer, or brand owner). This exercise supports trading partners in identifying and resolving data discrepancies, and fosters opportunities for both parties to evaluate their package measurement data and processes to improve data quality.

Scorecard Spreadsheet

The scorecard spreadsheet includes four worksheets for collecting and analyzing data. Scorecard users populate the *Supplier Data* worksheet to analyze dimension attribute data quality and/or GTIN barcode data quality. All other fields will be populated per the algorithms/calculations embedded in the worksheet.

The spreadsheet is meant to be populated with data from one supplier at a time so that each supplier is scorecarded individually without any information or data about other suppliers. This enables data recipients to share the scorecard with the associated supplier to work through data quality issues together.

Table 1 Scorecard Worksheets

Worksheet	Description
1 – Summary	This worksheet provides an overall summary of the results which is automatically populated by the spreadsheet based on the data entered in the other worksheets.
2 – Supplier Data	Recipients populate this worksheet with the case dimension data and/or barcode GTIN they collected in the physical audit, and the corresponding case GTIN and dimension data they received from the supplier through the GDSN. This data is then used to populate other worksheets and enable algorithms.
3 – GTIN Barcodes	For those recipients also tracking barcode quality, this worksheet shows a summary of results for scans and GTIN matching.
4 – Explanation	This worksheet defines the rationalization used to populate tolerances and other key fields throughout the scorecard.

NOTE: All other worksheets are hidden.

Best Practices for Using the Scorecard

Measurement Tools:

- As a best practice, the use of digital calipers and digital scales is recommended for performing measurements. Cubing and weighing systems are commonly used in foodservice operations. In addition, these systems often come with their own database software that allows the input of serial data directly from the equipment into a PC application.
- Many digital tools allow users to export data into a text file, which can then be converted to Excel and loaded into this scorecard. Users will need to make sure they copy and paste the correct data fields to the corresponding columns. Titles may vary by tool, but the standard values should be the same.

GDSN Package Measurement Training:

- Staff who are responsible for collecting this data should understand the GDSN Package Measurement Standard. All parties across the supply chain need to follow the GDSN Package Measurement Standard to assure that measurement processes are consistent and, in the event of a discrepancy, parties are able to quickly identify the source of the data issue.
  - GDSN Package Measurement Standard
  - Package Measurement Rules Webinar
  - GS1 US Classroom Training Package Measurement

How to Use the Scorecard

- Select the supplier and case GTINs to be evaluated.
- Enter the GTIN and the case dimension data provided by the supplier via GDSN into the *Supplier Data* worksheet.
  - **IMPORTANT:** The GDSN data populated in the scorecard should exactly match what was received via the GDSN. It is assumed that the GDSN data has not been augmented or changed in the recipient's databases.
- Perform a physical audit of a sample set of cases and record the results in the *Supplier Data* worksheet.
  - To analyze case dimension data quality, capture the dimensions of the sample cases.
  - To analyze barcode GTIN data quality, scan the barcodes on the sample cases to capture the case GTIN.
- Once you have populated the information on the *Supplier Data* worksheet, the scorecard will populate the rest of the spreadsheet per the embedded algorithms, tally the scores for the *Summary* worksheet, and provide a summary of results for barcode scans and GTIN matching on the *GTIN Barcode* worksheet.
- Share the scorecard results with the supplier. Work together to examine and resolve data discrepancies, and identify opportunities to improve processes to promote data quality.

Note: To help brand owners understand the financial impact of data quality issues, the GS1 US National Data Quality Program developed the following ROI calculators that illustrate the cumulative effects that bad data has on their bottom line. Consider providing the links to those calculators to your suppliers when you share the scorecard results to help encourage them to engage in data quality efforts.

- Transportation Costs & Case Weight – See the cumulative effect a half-pound error in case weight may have on transportation costs
- Warehouse Costs & Case Dimensions – Learn how a quarter-inch error in case dimensions will impact your warehouse costs
- Transportation Costs & Case Dimensions – Determine the aggregate effect a quarter-inch error in case dimensions can have on transportation costs

Guidance for Inputting Data and Populating the Supplier Data Worksheet

- Scorecard users record GDSN and audit data in the *Supplier Data* worksheet. All other fields are populated per the algorithms and calculations embedded in the worksheet.
- Table 2 (below) provides guidance about each column in the *Supplier Data* worksheet.
- The Table 2 "Populate" column describes the data to be populated in each column as one of the following:
  - **AUDIT**: data collected from physical audits (YELLOW)
  - **GDSN**: data received from GDSN (BLUE)
  - **MANUAL**: data that is managed by the recipient, including internal item numbers, sync status and other data
  - **CALCULATED**: data that is automatically calculated and populated by the scorecard

IMPORTANT: Many of the algorithms are stored in Row 1 of the scorecard spreadsheet. Do not delete the data or this row. In addition, there are formulas, algorithms, and V-Lookups included elsewhere in the spreadsheet. Please be careful not to delete these values!

Table 2 Supplier Data Worksheet Columns

Column	Column Name	Populate	Comments
A	System GTIN	Manual	This is the internal GTIN number, stored by the recipient. **NOTE: The System GTIN column should be pulled from GDSN and should be a 14 digit number. Otherwise the GTIN percentages might not display accurately. If the product has a GTIN-12 (i.e. with a U.P.C. barcode), then zero fill the number. (Example: 037000904410 vs. 00037000904410)*
B	Priority	*Calculated*	Once the spreadsheet is complete, discrepancies will be calculated and prioritized for users to more efficiently manage the list of errors.
C	Scanned GTIN	Manual	This is the GTIN scanned from the barcode on the case. ▪ If the item will not scan, enter *"Barcode Won't Scan"* ▪ If no barcode present, enter *"No Barcode"*
D	Scanned GTIN Match System GTIN	*Calculated*	The algorithm will compare Column A and Column C. It will populate a value of TRUE or FALSE depending on the result. For "FALSE" items, recipient may check and see if the item has different levels published (i.e. Each, Case). May have the wrong GTIN in their system at the case level.
E	Internal #	Manual	An internal item number, which may be assigned by the recipient. In cases where the GTIN scanned doesn't match, this can be used to tie the item record back to internal systems.
F	Carton # Scanned	Manual	Recipients may choose to use this field if they record the number of case samples scanned for a single item.
G	Cubiscan Length (in.)	Audit	Populate with the case length collected during the audit. May be automatically uploaded at the time of data capture, if systems allow.
H	Cubiscan Width (in.)	Audit	Populate with the case width collected during the audit. May be automatically uploaded at the time of data capture, if systems allow.
I	Cubiscan Height (in.)	Audit	Populate with the case height collected during the audit. May be automatically uploaded at the time of data capture, if systems allow.
J	Cubiscan Weight (lbs.)	Audit	Populate with the case weight collected during the audit. May be automatically uploaded at the time of data capture, if systems allow.
K	*Hidden*		
L	Cubiscan Date	Audit / Manual	This may be populated automatically during the audit and uploaded at the time of data capture, if systems allow. Otherwise, recipients can manually enter the date.
M	Notes	Manual	Allows the recipient or supplier to enter their own notes for an item record.
N	System Length	GDSN	Case length data received through the GDSN.

Column	Column Name	Populate	Comments
O	Length Variance	*Calculated*	Algorithm is present
P	*Blank*		Header is blank. Algorithm returns a result of "OK" or "NOT OK"
Q	System Width	GDSN	Case width data received through the GDSN.
R	Width Variance	*Calculated*	Algorithm is present
S	Blank		Header is blank. Algorithm returns a result of "OK" or "NOT OK"
T	System Height	GDSN	Case height data received through the GDSN.
U	Height Variance	*Calculated*	Algorithm is present
V	Blank		Header is blank. Algorithm returns a result of "OK" or "NOT OK"
W	System Weight	GDSN	Case weight data received through the GDSN.
X	Weight Variance	Calculated	Algorithm is present
Y	Blank		Header is blank. Algorithm returns a result of "OK" or "NOT OK"
Z	Sync'd or Not Sync'd	Manual	Recipient will populate with Y (Yes) or N (No) to denote if the item has been synchronized through the GDSN.
AA	Catch Weight	Manual	Recipient will populate with Y (Yes) or N (No) to denote if the item is catch weight.
BB	Storage Temp	Manual	This will determine the standard tolerances used against each item. Please enter one of the following: ▪ "DRY GOODS" ▪ "REFRIGERATED GOODS" or ▪ "FROZEN GOODS"

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