The University of Tennessee

Report Verification Process

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Developed and approved by the Business Intelligence Community of Practice

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Co-chairs: Jay Eckles, Ed.D., and Dennis Hengstler, Ph.D.

Tools subcommittee chair: Ed Johnson

Policy, Standards, and Definitions subcommittee chair: Allen Dupont, Ph.D.

Training and Support subcommittee chair: Denise Haley

Resources subcommittee chair: Ron Loewen

Members:

Shawn Bryan, UT Health Science Center
Mike Ebbs, UT Health Science Center
Lisa Ford, UT Foundation, Inc.
Kriss Gabourel, UT System Administration
Denise Gardner, Ph.D., UT Knoxville
Scott Gordy, UT Institute for Public Service
Jeanne Hermann, Ph.D.,
    UT Health Science Center
Janice Hodge, UT System Administration

Tom Hoover, UT Chattanooga
Les Mathews, UT System Administration
Desiree McCullough, Ph.D., UT Martin
Cyndie Nichols, UT Institute of Agriculture
Kristen Noblit, UT Chattanooga
Steven Robertson, UT Martin
Mark Savage, UT Knoxville
John Toman, Ph.D.,
    UT Institute of Agriculture
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Purpose
The purpose of the Report Verification Process is

1. Provide a mechanism to ensure the consistency and accuracy of reports delivered to decision makers
2. Provide decision makers with information about the meanings of report elements
3. Provide decision makers with a clear visual indication of what reports have been formally vetted
4. Include subject matter experts in report development
5. Ensure the documentation of data and report definitions and metadata

Report Verification is not a required process. Any user provided access to data and analytical tools according to the Data Governance Process may utilize those data and tools to produce and share reports. Report Verification simply serves as a means of ensuring and communicating the quality of a report.

What verification means

VERIFIED REPORT

- Data come from UTSA Data Warehouse
- Definitions come from centralized metadata catalog
- Definitions have been negotiated and approved university-wide
- Standard tools have been used
- Subject Matter Experts (SME) have approved the report
- The report has been tested
- Accuracy of data has been verified

<unverified reports>

- Data may come from any university source, including UTSA Data Warehouse
- Data elements may or may not have documented definitions
- Definitions may not have been negotiated
- Any tool may be used
- No indication of SME approval, testing, or accuracy verification

Note: Lack of verification does not indicate a lack of quality, simply that the quality has not been verified according to the criteria in this process.

Request for Verification
The director of business intelligence (as defined in the Data Governance Process) will provide a centralized system to request the verification of a report. Either the report author or any consumer of a report may submit a request for verification.

Prioritization of Verification
In the event that available resources prevent a report from being verified immediately, the director of business intelligence will prioritize the activity along with all other activities of the UTSA ITS BI team.
This prioritization will take into account input from the requester and advice from the Business Intelligence Community of Practice.

Note that most of the actual work of verifying a report is done by the report author and Subject Matter Experts. They will likewise have to prioritize the request for verification along with all other activities in which they are engaged. The director of business intelligence does not set priorities for these individuals, but will work with them to coordinate the verification process.

**Verification Process**

**Source of Data**

Verified reports may only use data from the semantic layer of a centralized data warehouse. Any data not in a centralized data warehouse that a report author desires to use in a verified report must be incorporated into the centralized data warehouse. This is to ensure that the data used in a verified report come from a single, trusted source to ensure consistency among verified reports.

**Source of definitions**

All data elements in a verified report must be defined in the centralized metadata catalog. Any data elements not in the metadata catalog that a report author desires to use in a verified report must be first documented in the catalog and the definition approved. This is to ensure that similar fields on multiple verified reports all semantically mean the same thing.

**Negotiation of definitions**

In the event that a data element is required for a report and that data element’s definition does not exist in the metadata catalog, the definition must be created through a negotiation process as defined in the Data Governance Process.

**Tools utilized**

Verified reports may only be authored using UTSA-administered analytical tools. This is to ensure that all verified reports have similar user interfaces.

**Subject Matter Expert approval**

Before receiving the verification icon, a report’s design must receive approval from a subject matter expert (SME) in each area covered by the report. In this instance, design means the mechanism by which data are collected, modified, aggregated, etc. in preparation for display to the user. For example, an SME must approve the calculations used to produce aggregates, the fields selected to display data, any changes to data such as sign changes or format conversions, etc.

The SME(s) assigned to approve the report will be determined by the data stewards whose data make up the report. The report author may serve as a SME with the approval of the appropriate data stewards. The name of the SME(s) and the date(s) of approval should be listed on the report itself, if technically feasible. The name of the SME(s) and the date(s) of approval must be listed in the metadata catalog entry for the report.

**Testing**

The author of the report must provide evidence (normally test cases and test logs) that the report has been tested to operate as designed.
Verification of accuracy
A representative of the intended audience for the report must verify that the data on a sample of the report is accurate. This representative may be an approving SME or an actual end user. This representative may not be the report author; at least two authorized people must independently verify accuracy.

Verification may be achieved by comparing the new report to known correct existing reports, to enterprise information system screens, or to any other known good source of data. The comparison used to verify accuracy should be recorded in the documentation of a report’s verification.

Documentation of definitions
Before receiving the verification icon, all data elements on the report must have a corresponding definition in the metadata catalog, and the report itself must have an entry in the metadata catalog. The report entry must indicate the data stewards whose data are included in the report, the SME(s) who approved the report, the benchmark used for verifying accuracy of the report, and the date(s) of approval.

Verification Icon
Once a report has been verified as meeting the following criteria...

- Pulling from a centralized data warehouse
- Using definitions from the metadata catalog
- Using centralized analytical tools
- Having been approved by one or more SMEs
- Having been tested
- Having been verified for accuracy
- Having had an entry documented in the metadata catalog

...the Business Intelligence Community of Practice will approve the report as Verified and will approve the use of the Verification Icon on the report. This is the Verification Icon:

![VERIFIED REPORT](image)

This icon should, to the degree technically feasible, be displayed on the top right corner of the first page of the verified report as displayed on screen or on print.

No report that has not been verified and approved by the Business Intelligence Community of Practice may display the Verification Icon. Any concerns regarding a report bearing the Verification Icon may be addressed to the chair of the Business Intelligence Community of Practice (the director of business intelligence). He or she will be able to confirm the verification status of the report in question and address any issues that may exist with the report. Individuals associated with reports bearing the Verification Icon that are not in fact verified will be notified of the problem and asked to remove the
Verification Icon. Failure to remove the Verification Icon will result in notification of all potential recipients of the report that the report falsely displays the Verification Icon, is not verified, and may not be relied upon.

**Maintenance of Verification**

Any time a modification is made to a verified report that changes the displayed data in any way (typically indicated by a modification in the metadata catalog to the definition of a verified report), the report will require renewed approval of one or more SMEs, renewed evidence of testing, and renewed verification for accuracy. Renewed verification is not required for minor changes that do not affect data display, for example (but not limited to), correction of typographical errors.

Failure to obtain these renewals will remove *Verified* status from the report, and the report must cease using the Verified Icon.