Spotlight on the regulatory reporting data dictionary

Enhancing regulatory conformance
Executive summary

Regulatory reports are complex and require financial institutions to assess and consolidate large volumes of data, calculations, interpretations, etc., to fulfill regulator expectations. Firms contending with existing reporting requirements are further challenged with additional requirements as a result of the COVID-19 pandemic (e.g., emerging risk data collection). Concurrently, the rise in organizational and regulatory complexity has led to a push for greater reporting transparency, consistency and accuracy.
How do financial institutions gain confidence in conformance with regulatory reporting requirements?

This is easier said than done. Based on our 2018 regulatory reporting survey,¹ US financial institutions continue to grapple with recurring issues in demonstrating regulatory conformance such as:

60% of firms confirmed reliance on multiple data sources, resulting in lack of a “single source of truth”

80% of participating firms described their data quality as being medium to low, resulting in manual adjustments and errors

47% of respondents reported creating data documentation with limited source-to-report transparency

These challenges, further exacerbated by incremental and ever-evolving regulatory constraints, can be a significant hurdle and require dynamic tools that enable a transparent, sustainable and scalable process. One such tool to establish, validate and maintain long-term conformance is the report data dictionary.

Report data dictionary

The report data dictionary decomposes and documents key components of the reporting process, including requirements, interpretations and data transformations, to demonstrate conformance with reporting requirements.

While most firms are familiar with a data dictionary as an inventory of data elements and definitions, this briefing details how it can be expanded into a critical enabler of conformance and aims to answer key questions:

1. What is the report data dictionary and how can it help in the conformance process?
2. What makes conformance with instructions difficult to achieve?
3. How can a report data dictionary help firms address reporting challenges?
4. Who benefits from the report data dictionary?
5. How can firms create and maintain a sustainable, scalable approach?

Conformance with instructions signifies ongoing alignment of institutions’ data and processes to reporting requirements. It requires complete transparency into how various organizational inputs come together to address Federal Reserve Bank (FRB) reporting instructions. The report preparation process can be broken down into three main layers between system and report, namely:

**Regulatory reporting requirements.** Regulatory instructions are broken into granular requirements along with FAQs, and any additional internal interpretations specific to each reporting institution.

**Reporting layer.** This layer captures transformation logic and/or reporting filters applied to specific data elements between the point of data provisioning and the report to meet granular requirements.

**Data storage and aggregation layer.** Report data is traced back one system hop from the reporting layer to capture data transformations, enrichments and defaults applied within the provisioning system (i.e., where final user accesses data).
Decoding conformance with instructions – report data dictionary

The report data dictionary is a conformance tool that identifies and documents each distinct layer of the reporting process, helping reporting teams connect the dots between how reported data is sourced, transformed and consolidated to prepare regulatory reports. It provides the granular details needed to enable robust review and challenge, highlights gaps and remediates recurring issues.

The purpose of the report data dictionary is not to recreate data lineage but to demonstrate how data is sourced and transformed for regulatory reporting.

Report data dictionary: key components

The report data dictionary further decomposes each layer into specific components and demonstrates how they link together to execute instructions:

- **FRB and detailed requirements**
  - FRB reporting
  - Instructions and FAQs
  - Detailed business requirements
  - Firm-specific interpretations

- **Data mapping**
  - Data sources
  - Data elements and definitions
  - Data logic/transformations and related business translations

- **Conformance analyses**
  - Reporting gaps in data, logic, process, documentation, etc.
  - Issue validation
  - Issue/impact assessment

- **Ongoing remediation**
  - Remediation planning
  - Issue prioritization
  - Remediation implementation
Deconstructing complex relationships

While conformance to instructions is the foundational focus of regulatory reporting teams, it is challenging for most organizations, even industry leaders, as evidenced by recurring examination findings. This is primarily because regulatory conformance involves multiple components such as FRB instructions, interpretations, granular requirements, data elements and transformations. The report data dictionary enables organizations to deconstruct the “one to many,” “many to one” and “many to many” relationships between each of these components, providing greater understanding into the underlying complexity of each reported line.

Below is an illustrative example of the complex, multilayered interrelationships among different components.

- One regulatory requirement Micro Data Reference Manual (MDRM) may have many granular business requirements.
- One FAQ may apply to multiple MDRMs.
- One MDRM and business requirement can link to multiple data elements.
- Many data elements can address one requirement/MDRM, depending on transformations performed.
- One reporting gap (erroneous logic, incorrect data element, etc.) may impact many MDRMs.
- The report data dictionary creates a comprehensive view of these linkages, enhancing transparency and identifying misalignments and redundancies in reporting.
Spotlight on the regulatory reporting data dictionary

Validation of regulatory conformance

Firm-specific information
- Physical data attributes
- Data sources
- Reporting gaps and errors

Transformation logic

Granular business requirements

FRB instructions

Data elements and definitions

Regulatory interpretations

Regulatory report

Regulatory requirement 1 (MDRM)
- Data element 1
- Business requirement 1.1

Regulatory requirement 2 (MDRM)
- Data element 2
- Business requirement 1.2

Regulatory requirement 3 (MDRM)
- Data element 3
- Business requirement 1.3

Business requirement 1.1
- Data element 4

Business requirement 1.2
- Data element 5

Business requirement 1.3
- Data element 6
Benefits of the report data dictionary

By breaking down the report preparation process into its critical elements, the report data dictionary enables organizations to focus on systemic reporting issues, address high-risk areas and strengthen key capabilities:

<table>
<thead>
<tr>
<th>Key risks</th>
<th>Critical reporting capabilities</th>
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| Firms face significant gaps in documentation of reporting information, which leaves the firm open to unidentified risks. | Source-to-report traceability  
A report data dictionary consolidates and records reporting information fragmented across multiple systems, sources and owners for full traceability. |
| Multiple data sources require firms to rely on fragmented data, which is a primary challenge in creating a single source of truth, resulting in inconsistent reporting. | Standardized data  
The tool standardizes reporting data (e.g., data elements, definitions, sources, transformations) across reports, enabling firms to identify common data elements, optimize data sourcing, eliminate reporting redundancies and enhance cross-report validation. |
| Given the vast amount of data required to satisfy regulatory requirements, firms continue to struggle with identifying sources of errors, causing compromised data quality. | Data quality enhancement  
Data dictionaries have proven instrumental in identifying data gaps/errors to enhance data quality rules for accurate reporting. |
| Knowledge of regulatory requirements and “data that matters” varies significantly across the organization, making it difficult to hold stakeholders accountable. | Consistent firmwide understanding  
The tool fosters an integrated view of reporting to all groups involved in regulatory reporting, a crucial prerequisite for enforcing accountability. |
As more and more firms adopt report data dictionaries as critical documentation to demonstrate repeatable, consistent and accurate reporting, they are evolving into multiuse and multiuser tools that can be leveraged by multiple stakeholders to gain deeper insights into FRB requirements for varied initiatives:

<table>
<thead>
<tr>
<th>Critical reporting capabilities</th>
<th>Benefits derived</th>
<th>Stakeholders supported</th>
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<tbody>
<tr>
<td>• Source-to-report traceability</td>
<td>• Regulatory conformance validation</td>
<td>• Regulatory reporting</td>
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<tr>
<td></td>
<td>• Issue management</td>
<td>• Senior management</td>
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<tr>
<td>• Standardized data</td>
<td>• Optimal data sourcing</td>
<td>• Data providers</td>
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<td></td>
<td>• Cross-report validation</td>
<td>• Enterprise data management</td>
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<td></td>
<td>• Automation initiatives</td>
<td>• Technology team</td>
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<tr>
<td>• Data quality enhancement</td>
<td>• Improved data across the supply chain</td>
<td>• Lines of business</td>
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<tr>
<td></td>
<td>• Data quality and controls enhancement</td>
<td>• Internal audit</td>
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<td></td>
<td>• Targeted transaction testing</td>
<td>• Quality assurance</td>
</tr>
<tr>
<td>• Consistent firmwide understanding</td>
<td>• Training programs</td>
<td>• Regulatory reporting</td>
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<tr>
<td></td>
<td>• Accountability policy</td>
<td>• Lines of business</td>
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<td></td>
<td>• CFO attestation</td>
<td>• Senior management</td>
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Metrics related to volume and materiality of reporting discrepancies, highlighted by a report data dictionary can enable management decision-making on crucial strategic priorities.
Sustainability of the report data dictionary

Historically, financial institutions have created report data dictionaries manually in spreadsheets. This significantly reduces the advantages of the report data dictionary as firms are inundated with ongoing maintenance challenges, including:

- Delayed responsiveness to internal and external changes
- Difficulty in identifying and tracking overlap between reports, schedules, systems, etc.
- Labor intensiveness and tendency of manual errors
- Limited ability to derive meaningful metrics for decision-making
- Automation using off-the-shelf software packages
- Managed services with technology enablement

To support a sustainable and dynamic conformance process, **firms are increasingly investing in future-focused approaches**, including:

- Standardized conformance process for enhanced report consistency and accuracy
- Timely change management in response to regulatory, organizational and financial changes
- Reduction of risk with external regulators and internal audit
- Cost-effective and scalable delivery model for a single, searchable regulatory repository that can be leveraged for data analytics
- A holistic and dynamic source-to-report view to enable dashboard capabilities for management reporting and decision-making
- Strategic linkage to supplementary regulatory data and processes such as data lineage and transaction testing (data tracing)

As firms plan their response to the regulatory uncertainties and increased risk the industry is facing in these unprecedented times, the report data dictionary can be a key driver of strategic change within financial organizations to build, strengthen and maintain their conformance framework.

For further information, please visit EY Insights.
Key contacts

To learn more about how the changing regulatory reporting environment might affect your organization and how Ernst & Young LLP can help, please contact one of our professionals:

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