## Business Requirements

* **Enable banker to map each metric (e.g., Debt/Market Cap, EPS, Revenue) to a selected source of truth.**
* **Support multiple external data providers (FactSet, Bloomberg, CapIQ, PitchBook, etc.) and internal sources (Excel backups, CRM, Aiden Notetaker).**
* **Allow banker to select specific date/time for data validation (e.g., market close on July 28, 2025).**
* **Show comparison results:**
  + **Value in deck vs. value from source**
  + **Highlight mismatches clearly**
* **Provide option to accept update, dismiss mismatch, or mark reviewed.**
* **Support audit logging for compliance (who validated, when, which source).**
* **System must handle both point-in-time values and time series metrics.**
* **Performance: Review a deck of 30–50 slides in ≤10 seconds.**

## Acceptance Criteria

1. **Source Selection**
   * **Given I open the Data Review panel, when I select a metric, then I can choose from approved sources (FactSet, Bloomberg, CRM, etc.).**
2. **Date/Time Granularity**
   * **Given I select a date and time, then the system pulls the exact value from the source at that timestamp.**
3. **Mismatch Highlighting**
   * **If the deck value ≠ source value, then the system highlights the difference in red with both values shown.**
4. **Resolution Options**
   * **When a mismatch is flagged, I can:**
     + **Accept → auto-update deck with source value**
     + **Dismiss → keep current value but log action**
     + **Mark Reviewed → acknowledge mismatch without changing the deck**
5. **Audit Logging**
   * **All validation actions are logged with user ID, timestamp, source used, and resolution decision.**
6. **Performance**
   * **A review of 30 metrics must complete in ≤10s with <1% error rate in pulling values.**

## Definition of Done

* **Banker can select metrics and map them to one or more approved sources of truth.**
* **Deck values are automatically compared with source values at selected date/time.**
* **All mismatches are displayed in a summary list with jump-to-slide links.**
* **Resolution workflow (Accept, Dismiss, Mark Reviewed) is fully functional.**
* **Logs are captured for compliance and exportable in standard formats (CSV, PDF).**
* **Feature validated with real data from at least two external providers + one internal source.**
* **Works consistently in PowerPoint desktop and web add-in.**

## Dependencies

* **Data Source Connectors → APIs for FactSet, Bloomberg, CapIQ, internal DBs.**
* **PowerPoint Add-in Parsing Layer → to extract metric values from charts/tables/text.**
* **Data Mapping Service → linking slide metric labels (e.g., EPS) to source field names.**
* **Audit & Compliance Service → to store and export validation logs.**
* **Date/Time Selector Component → standard input control tied to data query engine.**