## Business Requirements

* **Provide a Data Review summary panel listing all detected inconsistencies.**
* **Each entry must include:**
  + **Data field name (e.g., “Meta Adjusted Debt / Market Cap”)**
  + **Value in deck vs. source value**
  + **Data source attribution (e.g., FactSet, Excel backup, internal DB)**
  + **Slide reference(s) where the inconsistency appears**
* **Banker must be able to click an entry to jump to the flagged slide.**
* **Allow banker to Accept/Reject suggested updates (auto-update values vs. keep current).**
* **Support multiple data sources (FactSet, Bloomberg, Excel uploads, internal APIs).**
* **Maintain an audit trail of resolved mismatches and history of overrides.**
* **Must run locally within PowerPoint add-in for security and compliance.**
* **Performance: compare values across a 40-slide deck in ≤5s.**

## Acceptance Criteria

1. **Mismatch Detection**
   * **Given a value in a slide differs from the linked data source, then it is flagged in the summary with both values shown.**
2. **Multi-Slide Coverage**
   * **When the same field appears on multiple slides (e.g., Debt/Market Cap), then all instances are listed with slide numbers.**
3. **Navigation**
   * **When I click an inconsistency in the summary panel, then the add-in navigates to the relevant slide and highlights the object.**
4. **Source Attribution**
   * **Each entry shows the data source (FactSet, Excel, etc.) and date of last refresh.**
5. **Resolution Actions**
   * **Banker can Accept (update to source value), Dismiss, or Mark as Reviewed directly in the panel.**
6. **Audit Logging**
   * **All actions (Accept/Dismiss/Reviewed) are logged with timestamp and user ID for compliance.**
7. **Performance**
   * **The scan must complete in under 5 seconds for a 40-slide deck.**

## Definition of Done

* **Inconsistency summary panel lists all mismatches across the deck.**
* **Each mismatch includes field name, deck value, source value, source attribution, and slide reference(s).**
* **Clicking an item navigates to the correct slide/object.**
* **Accept/Reject/Dismiss workflow updates slide values or suppresses the error.**
* **Supports at least 2 external data sources (e.g., FactSet + Excel).**
* **Successfully validated on sample decks (20, 40, 60 slides) with >95% detection accuracy.**
* **Audit log generated for all actions, exportable for compliance.**
* **UX validated for clarity with bankers (≤2 clicks from mismatch to fix).**

## Dependencies

* **PowerPoint Add-in API → to parse slide text, tables, and charts for numeric fields.**
* **Data Source Connectors → FactSet, Bloomberg, Excel, internal APIs.**
* **Comparison Engine → fuzzy matching of numeric formats (%, decimals, commas).**
* **Navigation Service → jump-to-slide with object highlighting.**
* **Audit/Logging Service → record updates, overrides, and dismissals.**