## User Story

**As a banker, I want a one-click scan that flags formatting errors across the deck,  
 so that I can instantly find and fix issues without manually checking each slide.**

## Business Requirements

* **Provide a “Run Checker” button in the PowerPoint add-in.**
* **The scan must evaluate the entire deck (all slides) in a single click.**
* **Checks include:**
  + **Content, Layouts & Templates → approved corporate templates, placeholders, sensitive data, abbreviations.**
  + **Numbers & Currency → decimal precision, scale (M, B), thousands separator.**
  + **Alignment → header, sub-header, body, footnotes.**
  + **Fonts → family, type (Regular, Bold, SemiBold), size, line height.**
  + **Case → Title Case, Sentence Case, etc.**
  + **Branding → correct color palette (RBC vs Client branding).**
* **Results must display in a clear, itemized report showing:**
  + **Rule violated.**
  + **Location (slide number, object).**
  + **Suggested correction.**
* **The scan must finish within 5 seconds for a 20-slide deck.**

## Acceptance Criteria

* **Given I click Run Checker, when the scan completes, then I see a list of all formatting errors by slide.**
* **Given a slide passes all checks, then it is marked as compliant with a green checkmark.**
* **Given an error is flagged, then the rule violated and suggested fix are displayed.**
* **Given multiple errors exist on the same slide, then all must be shown in the results.**
* **Given I switch formatting templates (e.g., from Tech Team → AI Team), when I re-run the checker, then results reflect the updated rules.**
* **Given the deck is error-free, then the result states “No issues found.”**

## Definition of Done (DoD)

* **“Run Checker” button triggers a single-pass scan across all slides.**
* **Results cover all six preference categories (content, numbers, alignment, font, case, branding).**
* **Errors are flagged with slide number, object, and recommended fix.**
* **Scan completes within performance threshold (< 5 seconds for 20 slides).**
* **Works consistently on PowerPoint desktop and Office 365 web.**
* **QA validates accuracy by running tests on sample decks with known violations.**
* **Banker documentation updated with how to use the one-click checker.**

## Dependencies

* **PowerPoint Add-in Framework → trigger full-deck scan.**
* **Formatting Rules Engine → applies vertical-specific rules (content, numbers, fonts, case, branding).**
* **Results UI Component → displays flagged errors with context and suggestions.**
* **Vertical Templates Repository → ensures scan uses the correct source-of-truth rules.**
* **Performance Optimization Layer → ensures scan runs within latency requirements.**

# **Story: Fuzzy Search & Typos Sweep Across Slides**

**As a banker  
 I want to search all slide text—including near matches and misspellings  
 So that I can quickly catch wrong names, leftover placeholder text, and typos before sending a deck.**

## Business Requirements

* **Provide a single search box in the add-in that scans all text-bearing objects (titles, body, tables, charts, shapes, notes, footers, masters).**
* **Support fuzzy matching (configurable similarity threshold) and spell-checking with finance/client dictionaries.**
* **Include watchlists for sensitive strings: client names, tickers, executives, internal placeholders (e.g., “Lorem ipsum”, “Insert subtitle”).**
* **Results must show slide #, object type, the matched snippet, and why it matched (exact, fuzzy %, spelling).**
* **Enable bulk actions: replace all, ignore/whitelist, add to dictionary, or jump to slide to edit.**
* **Must run locally within the PowerPoint add-in and respect permissions/compliance (no content leaves the environment).**
* **Performance targets: scan a 30-slide deck in ≤3s, 60-slide in ≤6s on standard machines.**

## Acceptance Criteria

1. **Exact & Fuzzy Matches**
   * **Given I search for “Meta Platforms”, results include exact hits and near matches (e.g., “Meta Platfroms”, “Metta Platforms”) with a similarity score.**
2. **Misspellings & Placeholders**
   * **Given the deck contains typos (e.g., “teh”, “margin presure”) or placeholders (“Insert title”, “TBD”), they appear in results with labels Spelling or Placeholder.**
3. **Coverage**
   * **Text found in tables, charts, SmartArt, notes, slide masters, and footers is included in results.**
4. **Context & Navigation**
   * **Each result shows a snippet with the term highlighted and a Jump to slide action that selects the offending object.**
5. **Bulk Replace & Whitelist**
   * **I can Replace all occurrences (e.g., “FaceBook” → “Facebook”) and Add to dictionary/ignore specific terms to suppress future flags.**
6. **Watchlists**
   * **When a monitored name/ticker is misspelled or mismatched, it is flagged as High Priority.**
7. **Settings**
   * **I can set a fuzzy threshold (e.g., 80–95%), toggle include notes/masters, and choose case sensitivity.**
8. **Report**
   * **After a scan, I can export a CSV/clipboard summary of findings (slide, object, issue, suggestion).**

## Definition of Done

* **End-to-end scan indexes all slide text sources and returns results with slide/object context.**
* **Fuzzy matching, spell-check, and placeholder detection work with configurable settings.**
* **Jump-to-slide focuses the exact object for edit in PowerPoint.**
* **Bulk replace, add-to-dictionary, and ignore lists function and persist for the user.**
* **Watchlist of client entities loads from the rules store and flags high-priority mismatches.**
* **Performance SLAs met (≤3s for ~30 slides; ≤6s for ~60).**
* **Works on PowerPoint desktop and O365 web add-in.**
* **QA suite includes decks with known typos, near matches, placeholders, tables/charts/notes coverage; accuracy ≥95% recall on seeded issues.**
* **Audit/logging in place for replacements and dictionary changes; no content leaves the secure environment.**
* **User help tooltip and short guide available.**

## (Optional) Dependencies

* **PowerPoint add-in APIs for reading text from shapes, tables, charts, notes, masters.**
* **Spell/grammar service with finance & client dictionaries; user dictionary store.**
* **Fuzzy search library (e.g., n-gram/Levenshtein) with configurable threshold.**
* **Entity/watchlist service for clients, tickers, executives.**
* **Results panel UI + bulk-edit & navigation utilities.**
* **Local processing / sandbox to satisfy compliance (no external transmission).**

## User Story

**As a banker  
 I want a summary list of formatting errors with clickable “jump-to-slide” links  
 So that I can fix problems in the fastest order without scrolling through the entire deck.**

## Business Requirements

* **The plug-in must generate a consolidated error summary panel after running the checker.**
* **Each error entry must include:**
  + **Slide title / identifier**
  + **Error category (font, alignment, numbers, branding, etc.)**
  + **Error count per slide**
* **Each error entry must be clickable, navigating directly to the relevant slide in PowerPoint.**
* **Errors should be ranked for efficiency (e.g., most critical first, or grouped by slide).**
* **Banker must be able to accept/reject automated fixes from the summary list (e.g., fix font mismatch).**
* **Must work across both desktop PowerPoint and web add-in environments.**

## Acceptance Criteria

1. **Error Detection**
   * **Given I run the checker, when formatting issues are found, then a summary list appears.**
2. **Error Categorization**
   * **Each summary entry shows slide number, error type, and count.**
3. **Navigation**
   * **When I click an entry in the list, then PowerPoint navigates directly to the flagged slide.**
4. **Bulk Visibility**
   * **The summary panel shows the total number of errors across the deck.**
5. **Fix Workflow**
   * **When an error has an automated fix, then the summary shows a one-click “Accept / Dismiss” option.**
6. **Performance**
   * **Running the checker and generating the error list must complete in under 5 seconds for a 50-slide deck.**

## Definition of Done

* **Error summary panel displays in plug-in after scan.**
* **Each error is linked to the correct slide and auto-scrolls to the error location.**
* **Automated fix suggestions (where applicable) are available in the panel.**
* **All major error types (fonts, alignment, placeholders, numbers, branding) are supported.**
* **Works in both PowerPoint desktop and Office 365 add-in.**
* **QA validation across 3 sample decks (small, medium, large) confirms accuracy >95%.**
* **Security review completed to ensure no slide content leaves the local environment without permission.**

## Dependencies

* **PowerPoint Add-in API → For navigation between slides.**
* **Formatting Checker Engine → Core logic that detects issues.**
* **UI Panel Framework → To render the summary list in the side pane.**
* **Corporate Templates & Rules DB → Provides baseline rules to validate errors.**
* **Auto-fix Rules Service → Suggests corrective actions (e.g., change font to Roboto 16pt).**