### User Story: Smart Search for Metrics

**As a banker  
 I want to smart-search for metrics (e.g., revenue, EPS, adjusted debt) across the pitchbook  
 So that I can run specific QA checks quickly without manually scanning each slide.**

### Business Requirements

* **The system must allow bankers to enter metric keywords (e.g., “Revenue”, “EPS”, “Adjusted Debt”) into a search bar.**
* **The tool must capture both exact matches and related variations/abbreviations (e.g., EPS vs. Earnings Per Share).**
* **The search should also return numeric values tied to metrics, not just text mentions.**
* **Search results must highlight where the metric appears across all slides (title, body, chart labels, footnotes).**
* **Bankers should be able to filter results by slide number, section, or data source.**
* **Search must work across text boxes, tables, charts, and embedded objects.**

### Acceptance Criteria

1. **Search Coverage**
   * **Given I search for “Revenue,” when the pitchbook contains both “Revenue” in text and numeric “$142.4B” in a chart, then both results are shown.**
2. **Near Matches**
   * **Given I search for “EPS,” when slides use “Earnings Per Share,” then the tool also surfaces those mentions.**
3. **Result Navigation**
   * **Given I click on a search result, then the tool takes me directly to that slide and highlights the matched text/value.**
4. **Performance**
   * **Given a deck of up to 200 slides, when I run a search, then results should return in under 3 seconds.**
5. **Filter/Sort**
   * **Given I search for a metric, when multiple results appear, then I can sort results by slide order or filter by data type (text vs chart vs table).**

### Definition of Done

* **Search successfully indexes all slide objects (text, charts, tables, footnotes).**
* **Handles both exact and semantic matches (near matches, abbreviations).**
* **Allows one-click navigation from results → slide.**
* **Search latency ≤ 3 seconds for 200-slide deck.**
* **QA validated with test cases for at least 10 financial metrics across multiple decks.**

### Dependencies

* **PowerPoint Add-in Framework → to access slide objects and metadata.**
* **Text/Chart Extraction Engine → to read text, tables, and chart labels.**
* **NLP/Entity Recognition Service → to normalize terms (e.g., EPS = Earnings Per Share).**
* **Indexing Service → to enable fast full-deck search.**
* **Permissions Service → to ensure search results only include slides the banker has access to.**