## AUTOMATE THE ROUTINE, FOCUS ON THE RISK: USING EXCEL

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## Agenda

- Data Cleaning
- Essential Formulas
- Tables & Analysis
- Efficiency Tips

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#### Benefits of Excel Tables

- Automatic Expansion: Tables automatically include new rows and columns when you add data.
- Structured References: Formulas use clear names like =SUM(tblSales[Total Sales]) instead of =SUM(G2:G121).
- Built-in Filtering & Sorting: Drop-down arrows appear on headers for quick analysis.
- Consistent Formatting: Tables apply alternating row colors and can be styled with one click.
- Easy Aggregations: Built-in Total Row quickly calculates SUM, AVERAGE, COUNT, etc.
- Dynamic Charts & Pivots: Charts and PivotTables linked to a Table automatically update when data
- **Slicer Compatibility**: Tables support slicers for interactive filtering (like PivotTables).
- Improved Readability: Named Table headers make large datasets easier to navigate.

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### Benefits of Spill Formulas

- •Dynamic results → one formula can return multiple values.
- •Automatic resizing → results expand/contract when data changes.
- •No copying down → eliminates the need to drag formulas or use Ctrl+Shift+Enter.
- •Cleaner formulas → simpler than older array formulas.
- •Works with Tables → structured references adjust as tblSales grows.
- •Supports advanced analysis → combine with UNIQUE, FILTER, SORT, SEQUENCE.
- •Easy referencing → use the # operator to point at all spilled results.



- •Multiple conditions → allows summing values based on more than one criterion (e.g., Region = North *and* Date in January).
- •Dynamic analysis → works with Excel Tables, so totals update automatically when data grows.
- •Replaces helper columns → no need to build extra "flags" or filtered totals.
- •Flexible criteria → supports numbers, text, dates, and wildcards (-.?).
- •Cleaner reporting  $\rightarrow$  one formula can summarize by Department, Category, Region, etc., without a PivotTable.
- •Spill compatible → can be combined with UNIQUE to create dynamic summaries.
- •Faster than manual filters → instantly recalculates totals without reapplying filters.

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#### Benefits of XLOOKUP

- •Replaces VLOOKUP & HLOOKUP  $\rightarrow$  one function works both vertically and horizontally.
- •Lookup in any direction → no more "lookup column must be on the left" limitation.
- •Exact match by default → safer and more accurate than VLOOKUP's default approximate match.
- •Simpler syntax  $\rightarrow$  no need to count column numbers; just reference the return column.
- •Handles missing values gracefully → built-in "if not found" argument (e.g., "Not Found").
- •Flexible match modes → supports exact, next smaller, next larger, or wildcards.
- •Dynamic range friendly  $\rightarrow$  works seamlessly with Tables and spill functions.

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