

✅ Lesson 17: Working with Maps & Geocoding, Formatting & Annotations

Prerequisites Completed:

- Downloaded sales_with_geodata.csv
 - Loaded the data into Power BI
 - Verified columns: Country, Region, City, Sales, Latitude, Longitude, Category
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🗺️ Part 1: Maps & Geocoding

Task 1: Create a Basic Map Showing Sales by Country

Used a default Map visual.

- Location field: Country
 - Size field: Total Sales
 - Result: Bubbles sized by total sales volume appear across countries.
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Task 2: Use Latitude and Longitude for Precise Mapping

Instead of relying on ambiguous location names, I used:

- Latitude: latitude column
 - Longitude: longitude column
 - Size: Total Sales
- Result: Each sale point is accurately pinned on the world map.
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Task 3: Plot Total Sales by City

- Used Map visual again
- Location: City
- Size: Sum of Sales

- Enhanced map accuracy by enabling the Category field (City) as a location hierarchy under the Geography section.
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Task 4: Create a Region-wise Sales Heatmap (Shape Map visual)

- Used the Shape Map visual (Preview feature enabled).
 - Location field: Region
 - Color saturation: Sum of Sales
 - Applied color gradient from light to dark based on sales volume.
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Task 5: Add Map Drill-Down from Country → Region → City

Built a Location hierarchy:

1. Country
2. Region
3. City

Enabled Drill mode in the map to allow interactive navigation from broad to narrow areas.

Part 2: Formatting & Annotations

Task 6: Customize Map Visual – Titles, Colors, and Labels

- Changed Map title to “Global Sales Performance”
 - Applied theme colors to match corporate design
 - Enabled category labels for easy map reading
 - Adjusted bubble transparency and border color
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Task 7: Use Conditional Formatting for Bubble Colors

Applied conditional rules:

- If Sales > 100,000 → Green
- Sales 50,000–100,000 → Orange
- Sales < 50,000 → Red

This gives an instant visual cue on performance by region.

Task 8: Add Annotations to Highlight Key Cities

Created custom text boxes near top-performing cities like New York, Tokyo, and London.

Each annotation includes:

- City name
 - Total sales
 - Brief comment like “Top Market” or “Needs Focus”
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Task 9: Create a Tooltip Page with Detailed Info

- Designed a separate tooltip page
 - Included metrics: City, Region, Total Sales, Customer Count
 - Enabled the tooltip in the map visuals to show rich data when hovering over any bubble or region
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Task 10: Add a Slicer to Filter the Map by Category

Added a Slicer visual linked to the Category column (e.g., Product Category or Card Type).

- Users can interactively filter the map to view specific sales categories like Electronics, Apparel, etc.

- It dynamically updates all visuals on the page, making the dashboard more interactive.
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✅ Final Outcome:

An interactive, layered, and informative geographic dashboard with enhanced formatting, conditional logic, and rich tooltips—ready for business presentations or deeper insights.