

# Visualization Strategy for EDA

Systematic Workflow for Exploratory Data Analysis

1

## Data Loading

Import and understand data structure



2

## Univariate Analysis

Distributions, missing values, outliers



3

## Bivariate Relationships

Correlations, dependencies, patterns



## Multivariate Patterns



### Key Principles

- Systematic pipeline
- Automate repetitive plots
- Use small multiples (facets)
- Document insights iteratively



### Best Practices

- ▶ Start simple, add complexity
- ▶ Maintain visualization journal

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Interactions, clusters, dimensionality



- Compare across categories
- Iterate hypothesis  
→ viz → insight



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## Insights & Hypotheses

Generate actionable insights



**Balance**

Breadth ↔ Depth

Many features ↔ Detail analysis