

Global Data Professional Survey

From Raw Responses to Actionable Intelligence

```
k ? ? k  
k : ? 150-200  
( : ( N/A # ERROR ?  
{ N/A ? # (null) ... !! >  
k ? ... >  
#
```



STATUS: COMPLETE
TOOLS: POWER BI DESKTOP, POWER QUERY EDITOR
REGION: GLOBAL

Project Snapshot

This project transforms a raw, real-time survey of global data professionals—including Data Scientists, Analysts, and Engineers—into a dynamic analytical tool. The final deliverable is a comprehensive dashboard revealing salary hierarchies, work-life balance sentiment, and technical preferences across the global market.



1

CONSOLIDATED DATASET

15+

TRANSFORMATION STEPS

9

INTERACTIVE VISUALS

3+

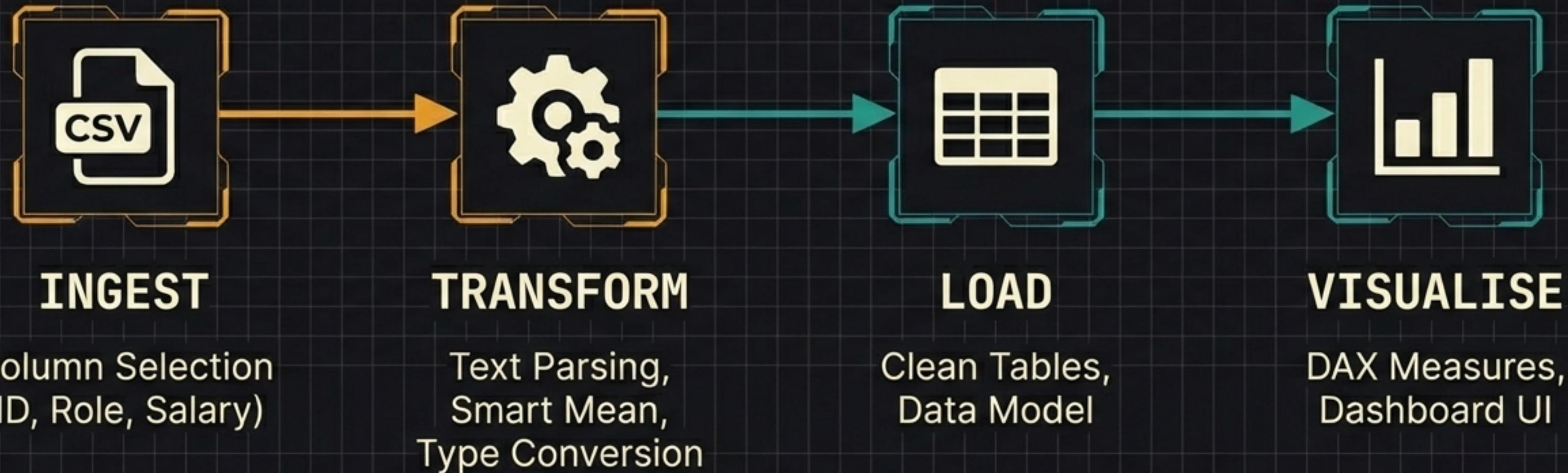
CUSTOM CALCULATIONS

The Challenge: Navigating Unstructured Inputs



The raw survey data presented significant obstacles to immediate analysis. Standardisation of all text and numeric fields was required before any aggregation could occur in Power BI.

The Data Architecture Pipeline



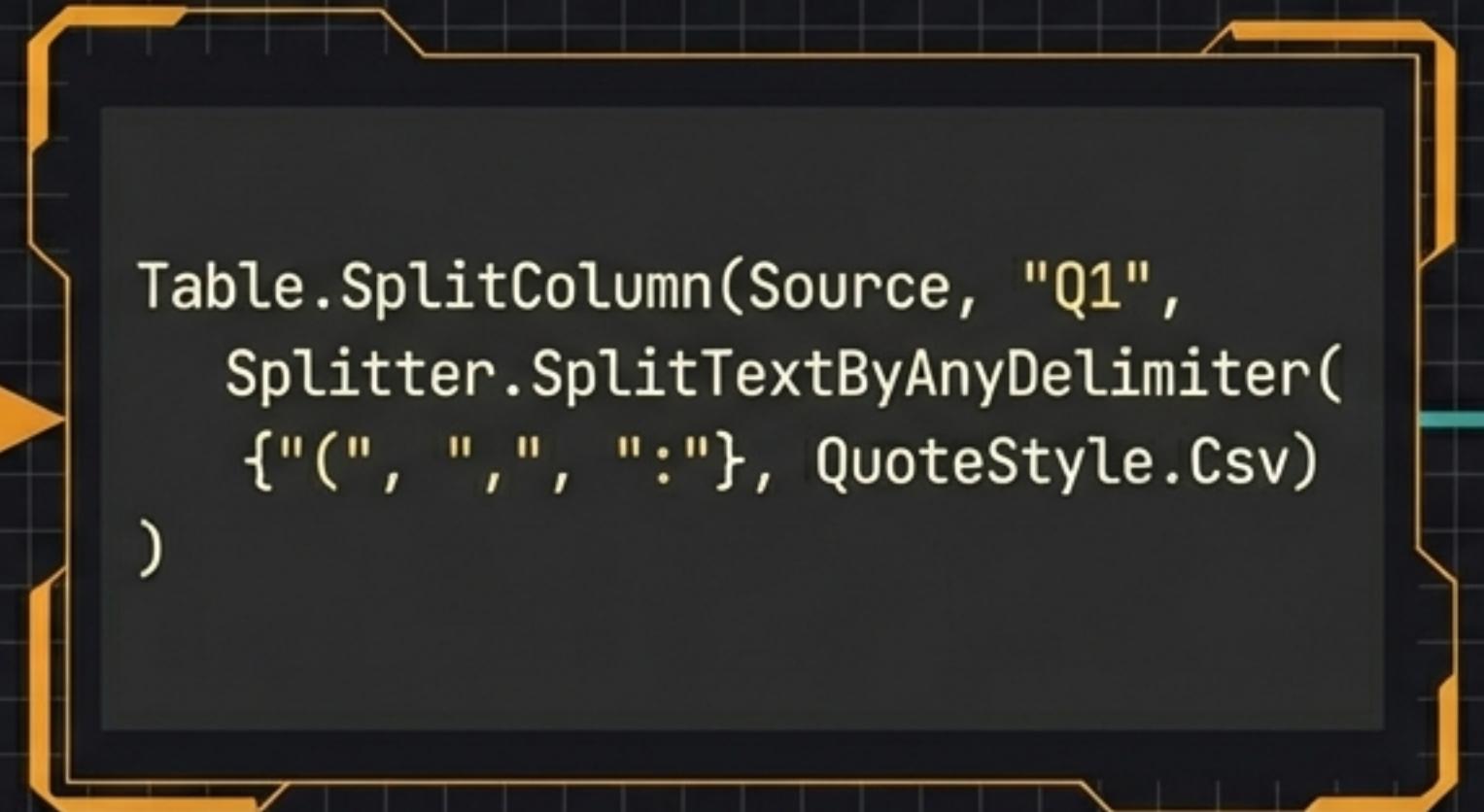
Engineering Clarity: Normalising Job Roles

INPUT [Raw Text]

Data Analyst (Python, SQL:

Data Scientist, R, C++

Data Engineer: Azure



OUTPUT [Clean Category]

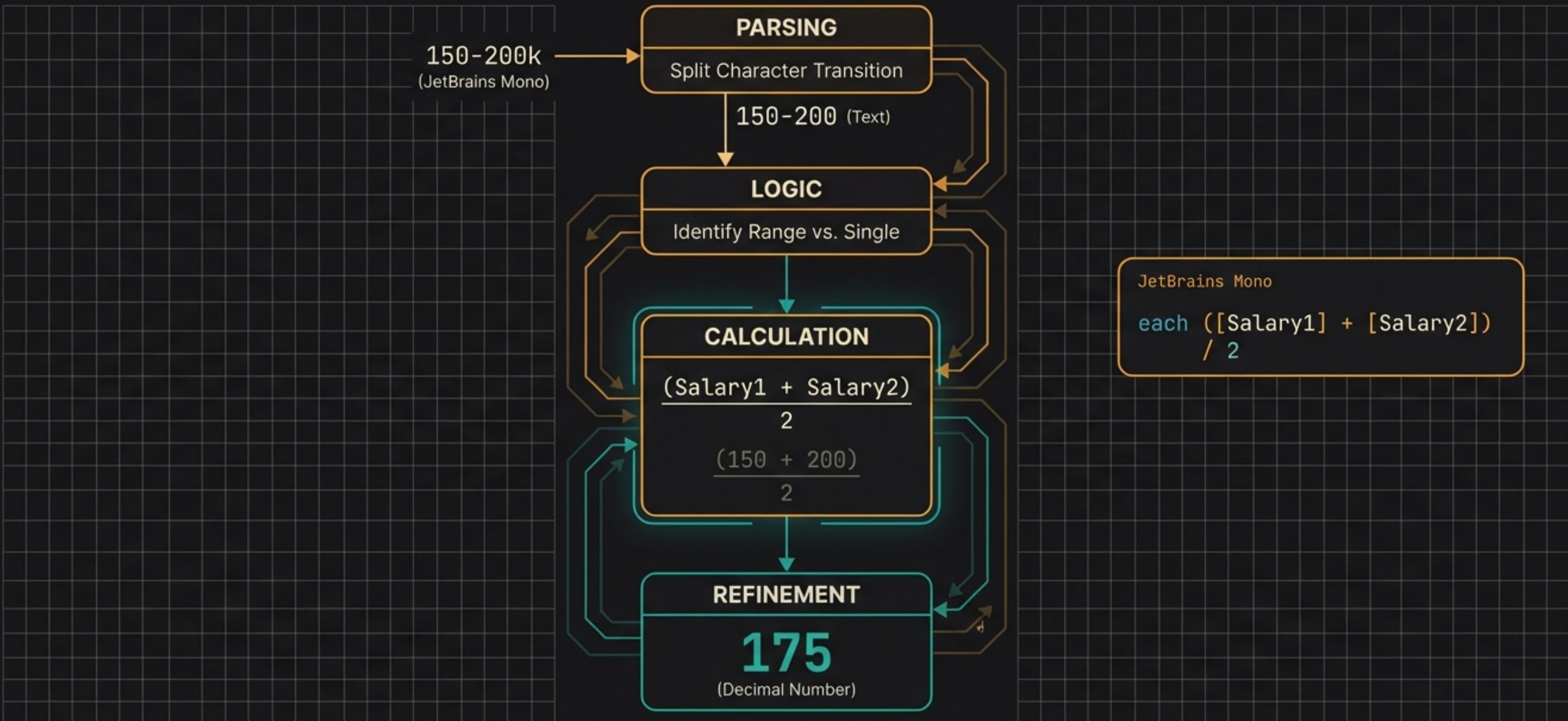
Data Analyst

Data Scientist

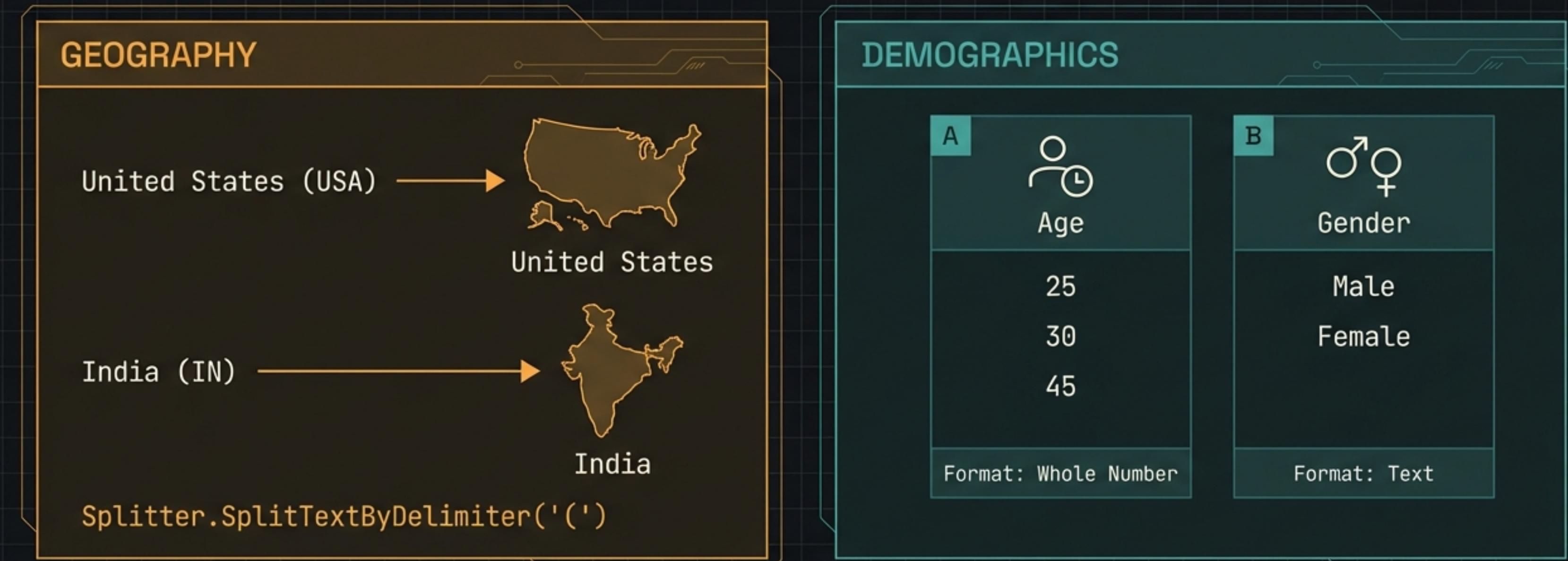
Data Engineer

Logic: Isolate the primary job title by splitting at the first instance of any delimiter.

The Salary Algorithm: Smart Mean Calculation



Standardising Demographics & Geography



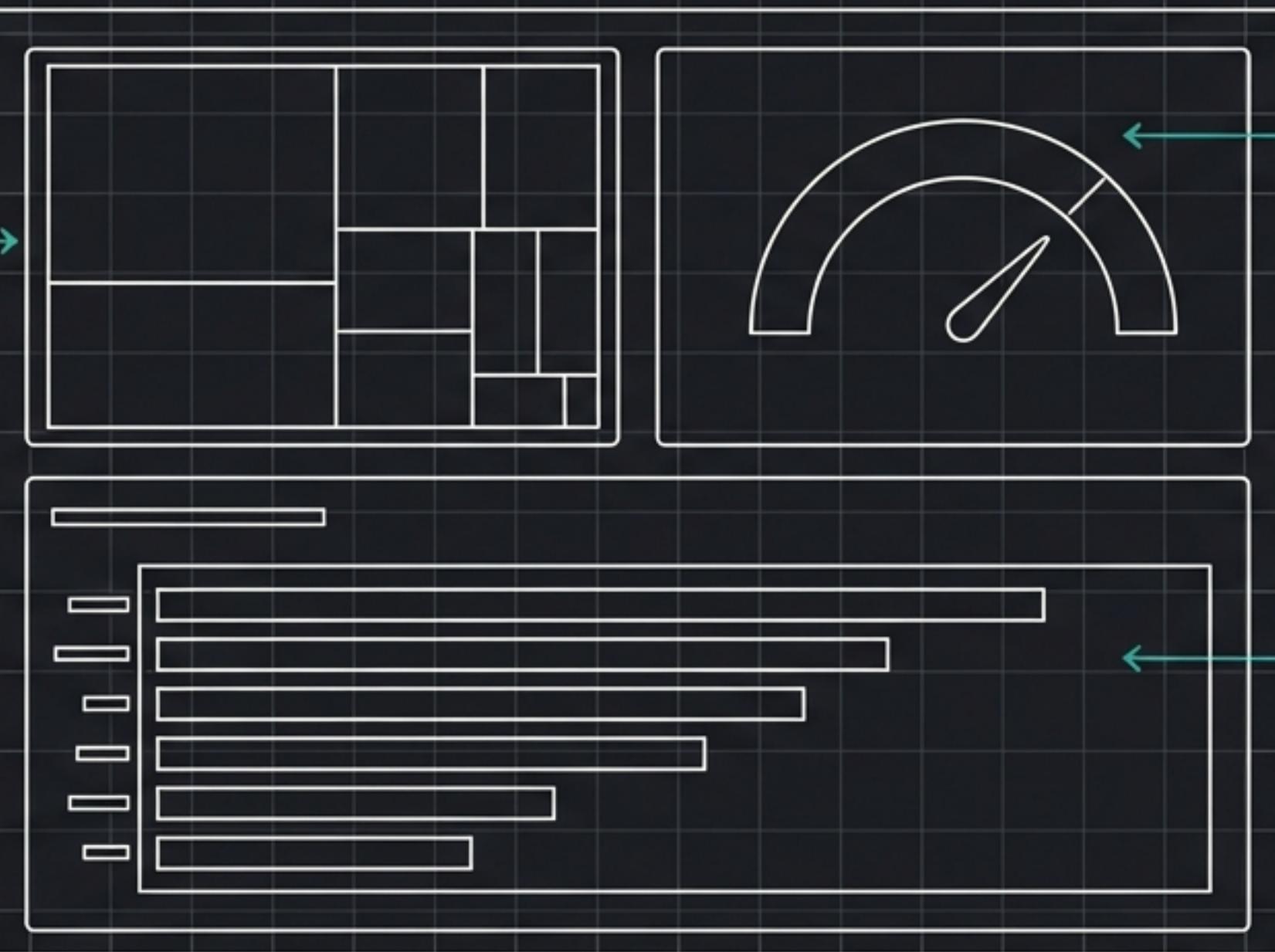
Final preparation step involves stripping regional codes from country names and validating age/gender fields to ensure accurate diversity analysis.

The Dashboard Interface



Visualisation Strategy & Selection

TREEMAP: Visualises relative market size by country (e.g., US dominance).



GAUGE: Benchmarks sentiment (Work/Life) against a max happiness scale.

BAR CHART: Facilitates direct comparison of salary across roles.

Key Insight: The Financial Landscape



Data Scientists and Engineers command the highest salary tiers.

The United States leads in total compensation pool concentration.

SOURCE: CALCULATED 'AVG_INCOME' COLUMN

The Tooling War: Language Preferences

No. 1



Python dominates as the preferred language across almost all data roles, becoming the de facto standard for the industry. SQL and R maintain strong usage in specific analytical sub-sectors.

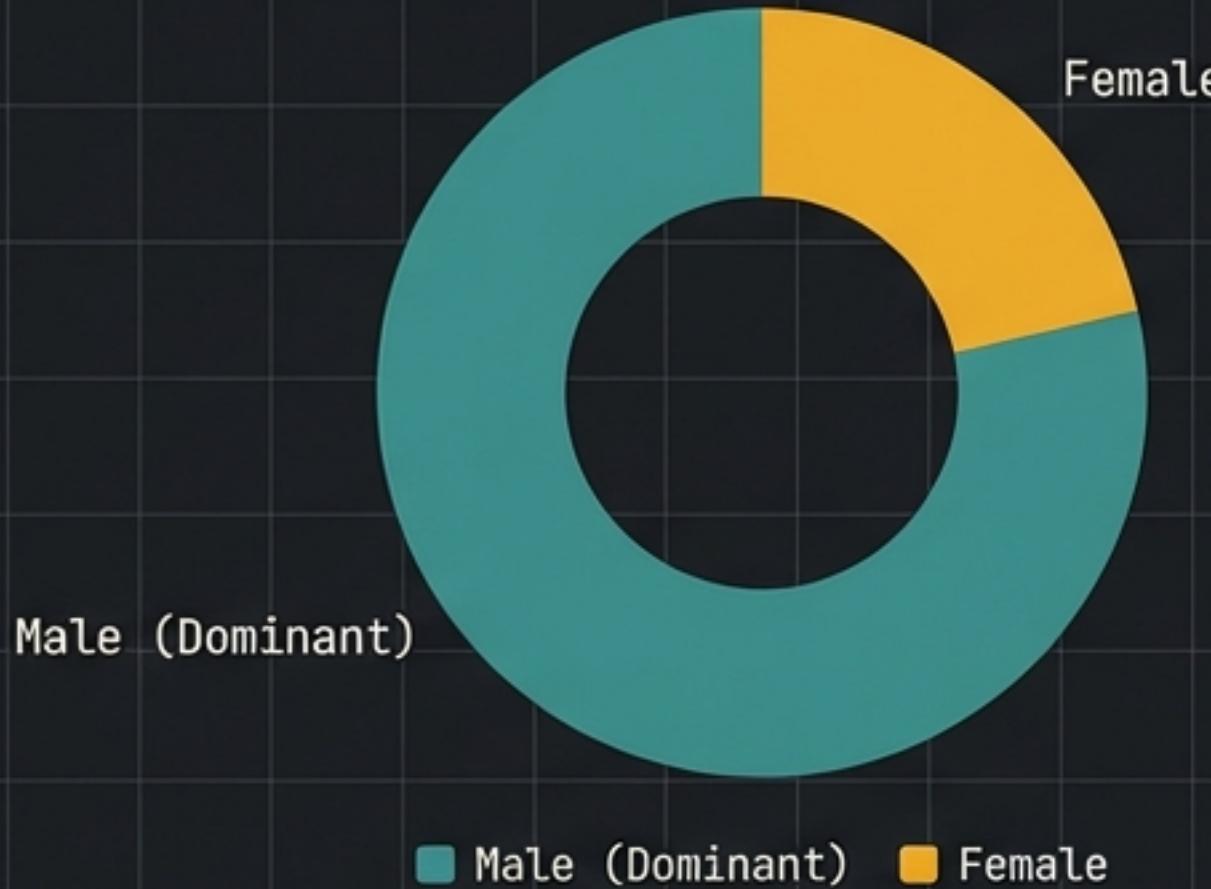
Workforce Sentiment & Demographics

Avg Work/Life Balance Score



Professionals trade satisfaction for higher compensation.

Gender Distribution



Data reveals a correlation between high-salary roles and lower work/life balance scores.

Technical Competencies Demonstrated

Power Query (M)



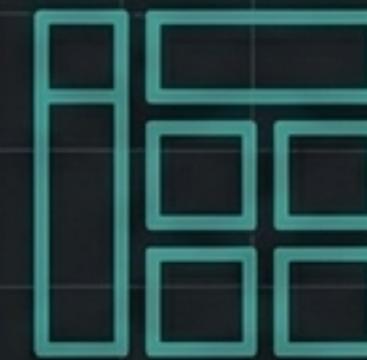
- Text Parsing
- Conditional Logic
- Custom Columns

Analytical Thinking



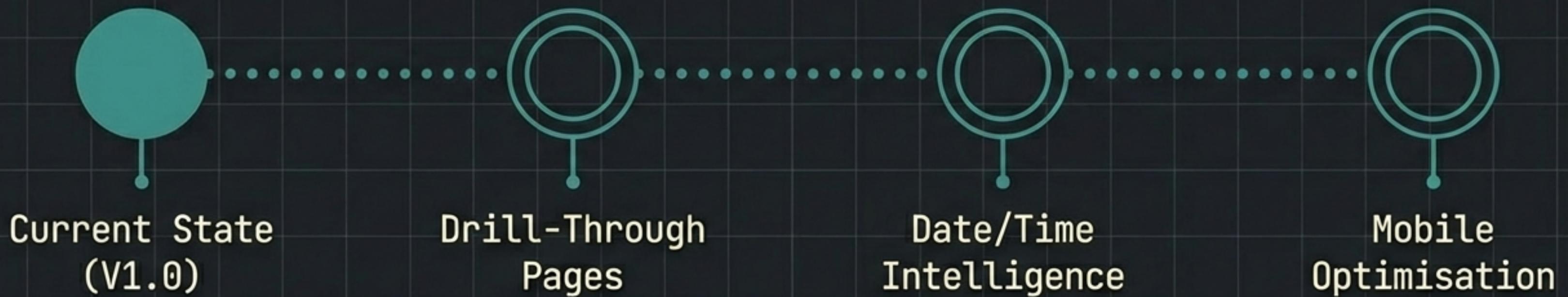
- Statistical Aggregation
- Data Quality Mgmt
- Mean Calculations

Visual Design



- Dashboard Composition
- Interactive Filtering
- User Experience

Roadmap & Future Enhancements



Future iterations will focus on user interactivity (slicers) and longitudinal trend analysis using DAX time-intelligence functions.

Project Status: Complete



Real_Time_Survey_Analysis_Project.pbix

A successful demonstration of full-stack BI capability—transforming inconsistent string data into a strategic asset.

AUTHOR: DATA ANALYST / BI DEVELOPER

TOOLS: POWER BI, POWER QUERY, DAX

FORMAT: 1280 x 720 HD