DDS ANALYTICS TALENT MANAGEMENT REPORT: EMPLOYEE ATTRITION ANALYSIS

Rafia Mirza

AGENDA

Primary goals

Analysis & Findings

Summary

PRIMARY GOALS

- Talent management encompasses workforce planning, employee development, and reducing attrition.

- Predicting employee turnover is the first focus area identified by the executive leadership.

- This report, prepared by our data science team, analyzes existing employee data to identify the top factors contributing to attrition.

- Our evidence-based findings aim to inform strategies for mitigating attrition risks and improving workforce stability.
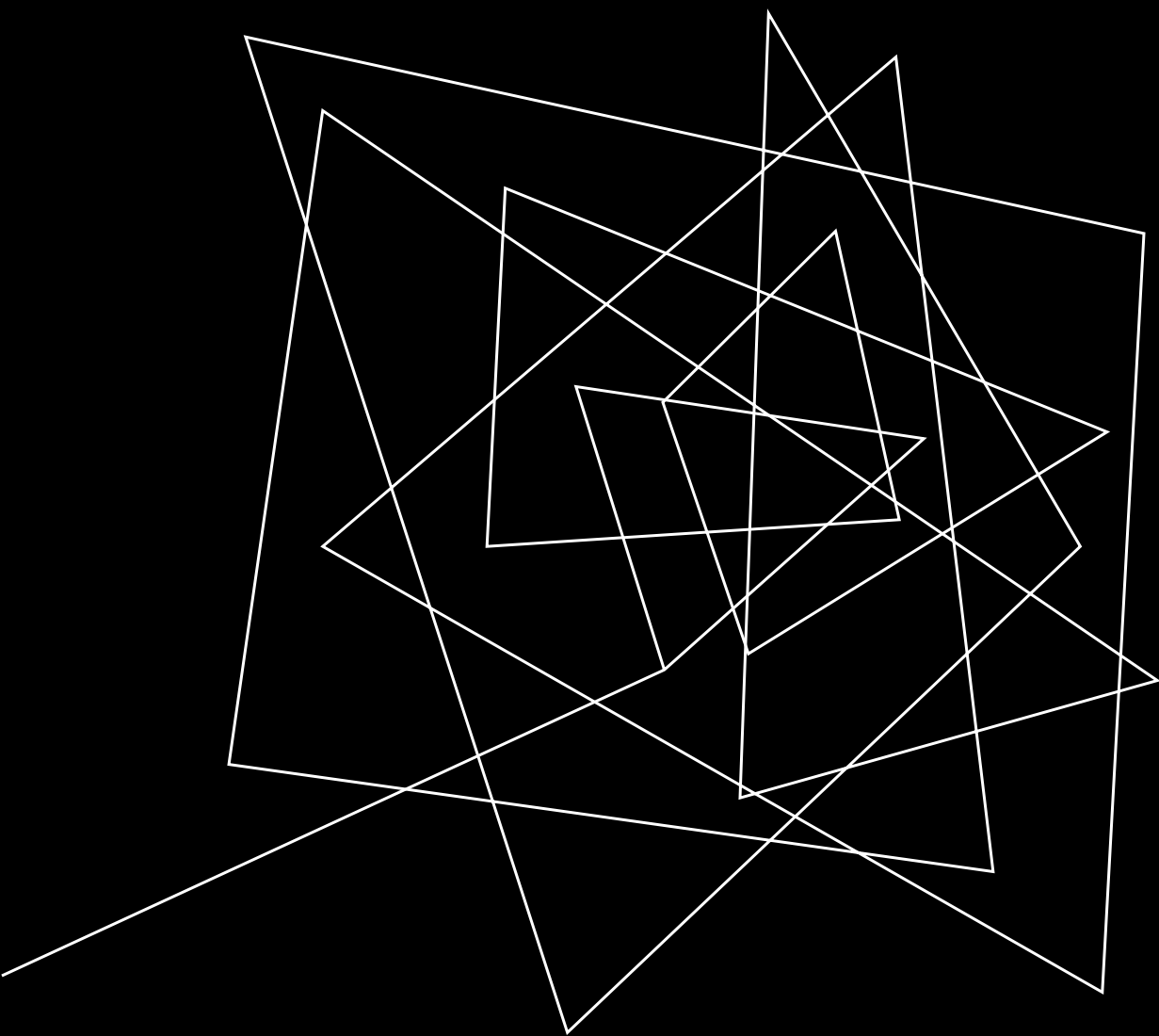
EXPLORATORY
DATA ANALYSIS

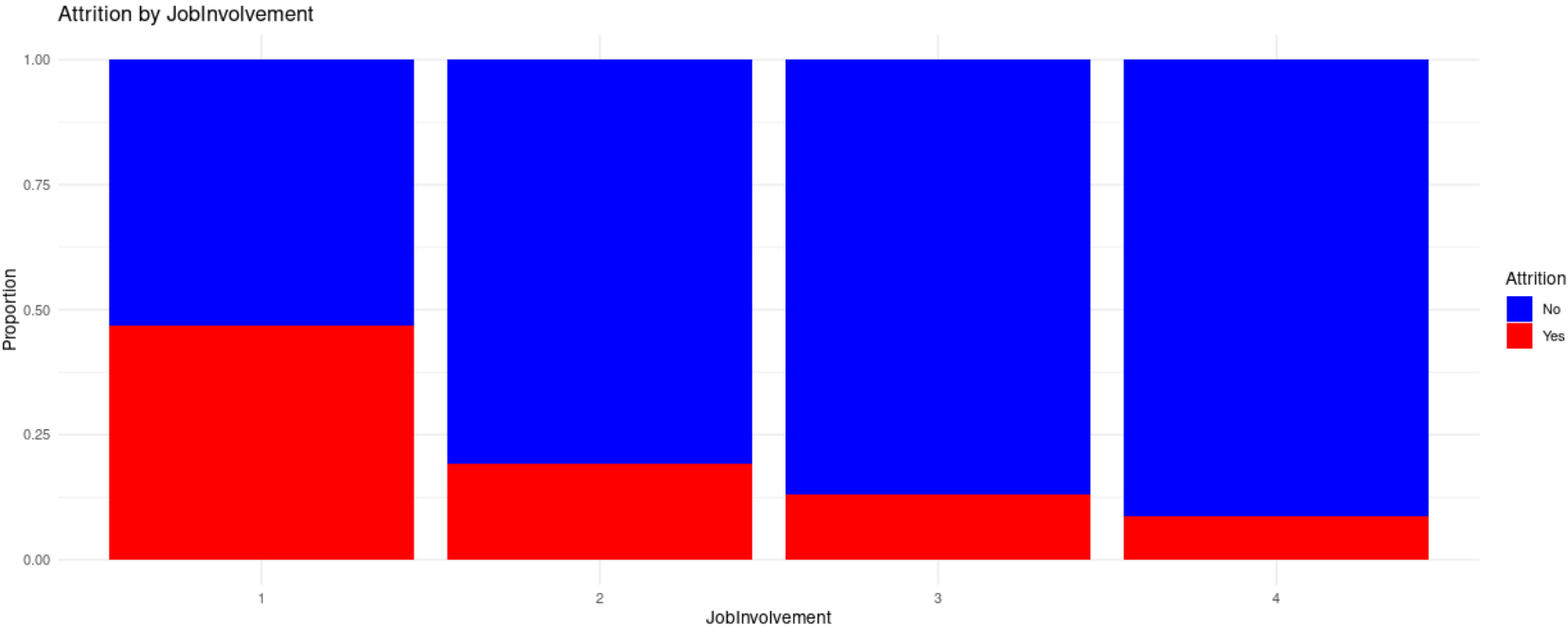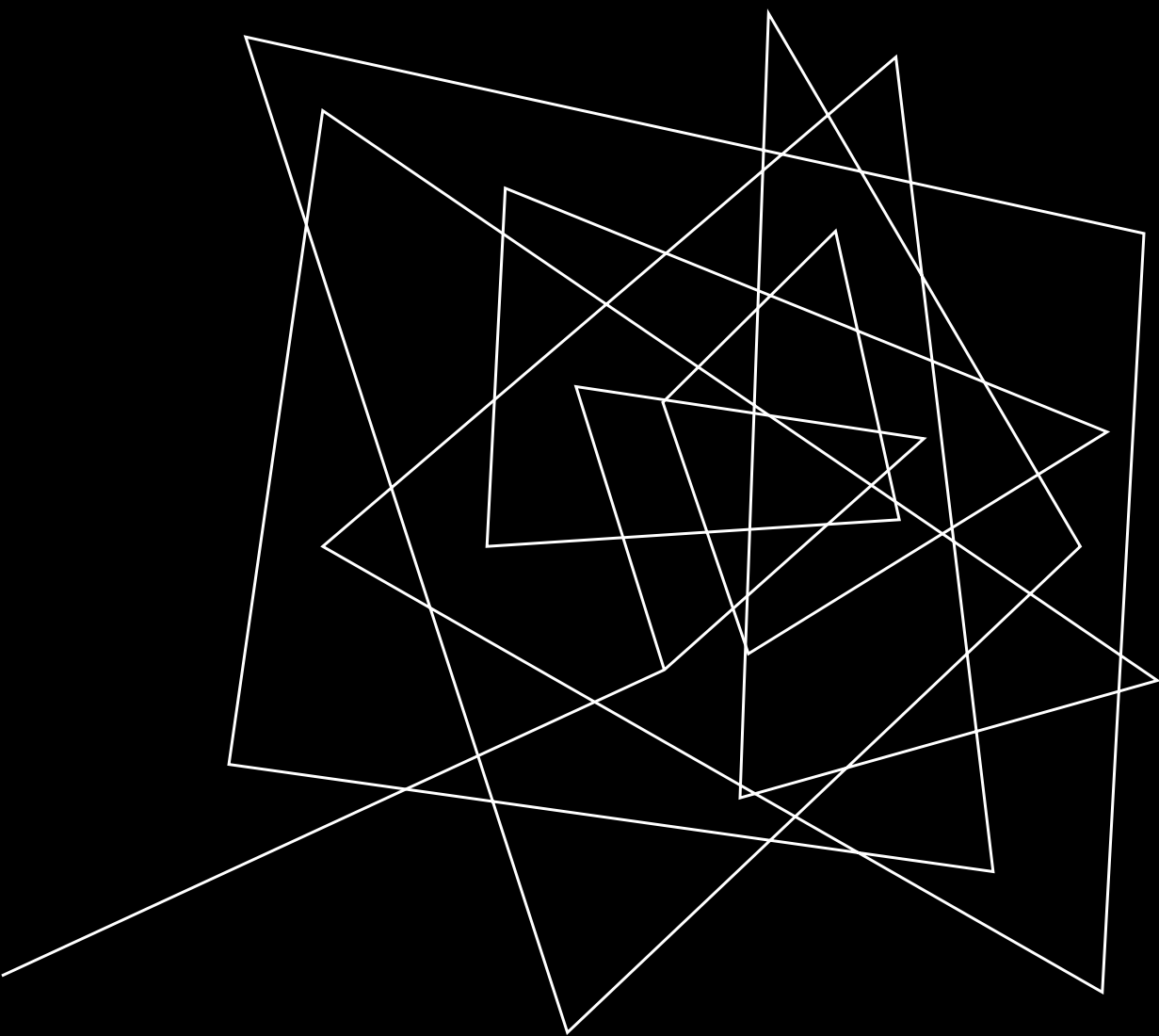Job Satisfaction Across Different Job Roles
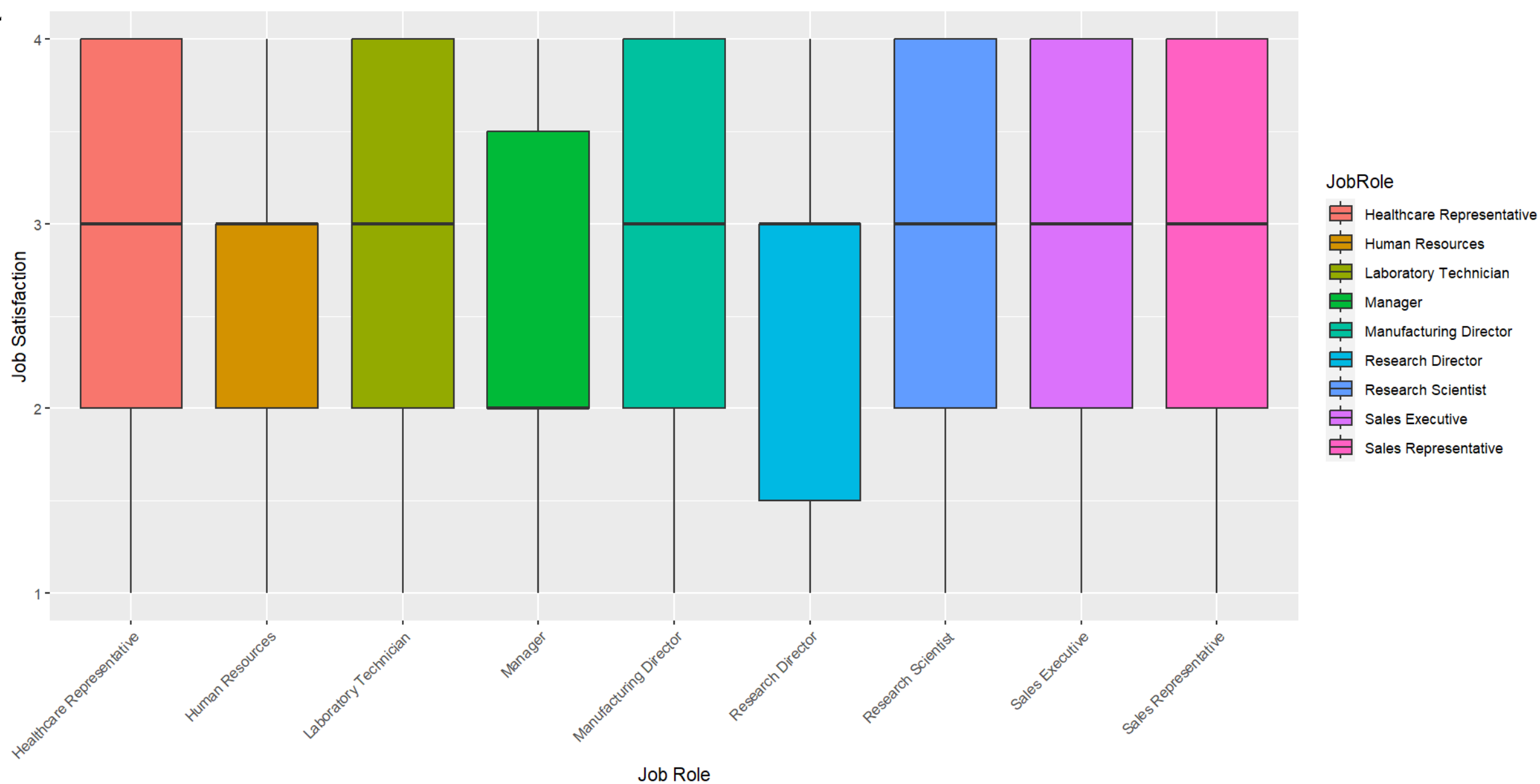
ATTRITION ANALYSIS

DATA SET

LOGISTIC REGRESSION MODEL FOR ATTRITION PREDICTION

Significant Predictors of Attrition

- Greater distance from home
- Working for numerous companies
- Overtime work
- Time Since last promotion

Retention

- Higher job satisfaction levels
- Increased job involvement
- Increased training times

PREDICT ATTRITION?

Original Data

Oversamples data

(to correct Imbalance)

No Yes
584 112

No Yes
584 560

MODEL PERFORMANCE METRICS

logistic regression
model

KNN

NB

Sensitivity : 0.6781

Sensitivity: 0.7808

Sensitivity : 0.1781

Specificity : 0.6429

Specificity: 0.5000

Specificity : 0.9286

(using stepwise selected
variables)

AREAS OF FOCUS

Factors that impact Attrition

- Greater distance from home
- Working for numerous companies
- Overtime work
- Time Since last promotion

Factors that impact Retention

- Higher job satisfaction levels
- Increased job involvement
- Increased training times

SUMMARY

Our analysis shows clear paths for retention strategies, highlighting the need to focus on:

- Enhancing job satisfaction.

- Encouraging positive job involvement.

- Reviewing policies related to travel and overtime.

We also discovered demographic factors and work-life balance elements that play a role in attrition,

THANK YOU

Rafia Mirza

Resources & Contact Information: https://github.com/librarianrafia/CaseStudy2DDS