

Employee Attrition Analysis - Case Study

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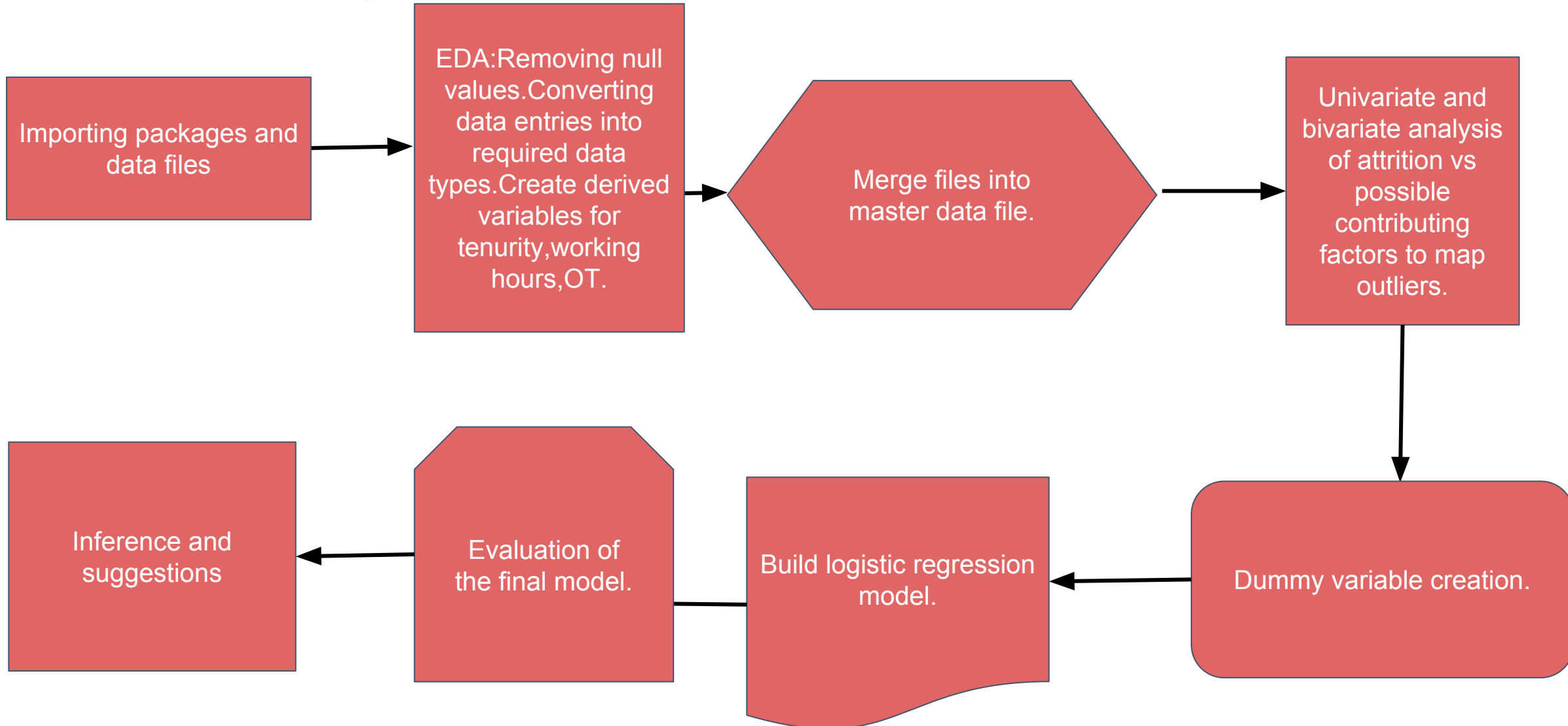
Abstract

Management of company XYZ having large no of employees want to understand what changes they should make to their workplace, in order to get most of their employees to stay.

Business objectives:

- To find the parameters affecting the attrition rate
- To build a logistic model which predicts the probability of attrition
- Provide suggestions to management to minimize the attrition

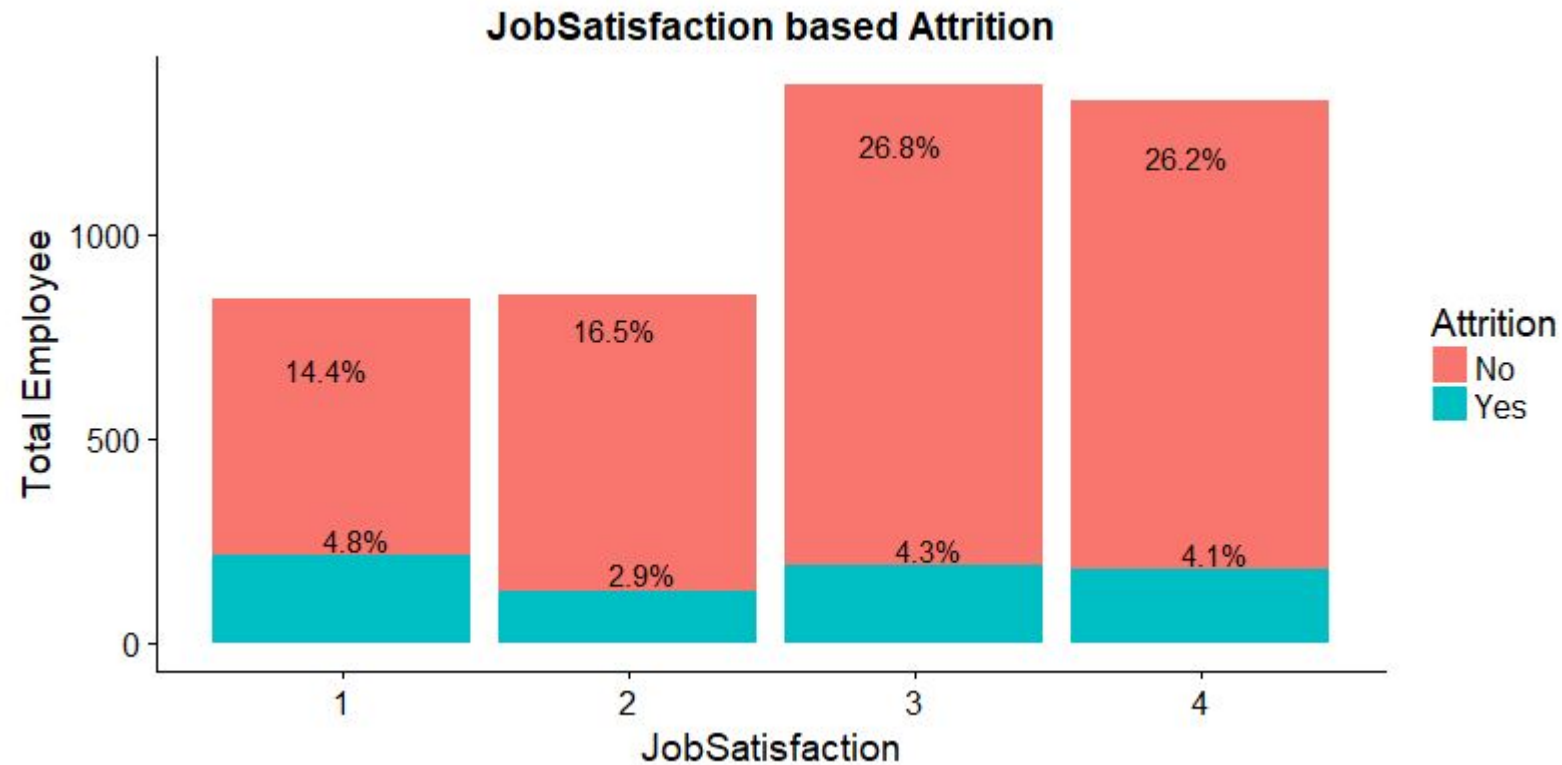
Problem Solving Methodology



1. Attrition for Junior employees is greater than Senior employees



3. Job satisfaction survey isn't a clear indicator of Attrition



Logistic Regression - Model and Predicted data

Models Significant Parameters

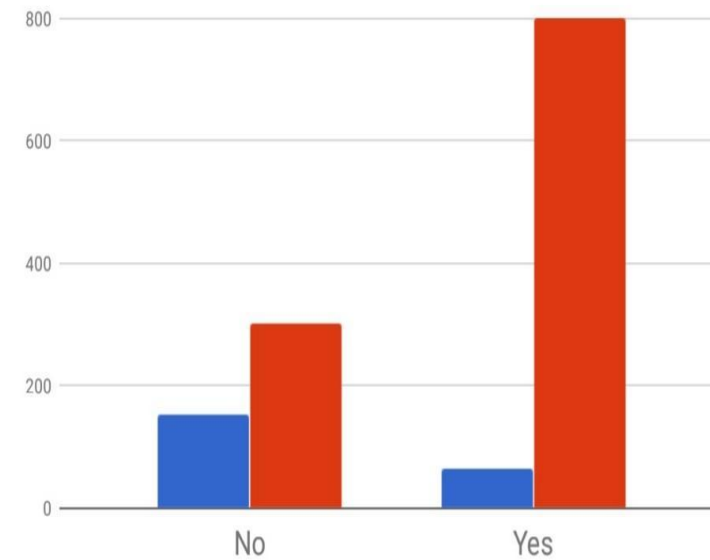
Name	Description
NumCompaniesWorked	Number of companies Employee has worked for
YearsSinceLastPromotion	Years since employee's latest promotion
YearsWithCurrManager	Years the employee has worked with his/her current manager
WorkLifeBalanceBetter	Work life balance survey indicating higher Work life balance
extended_working_hrs	Number of hours the employee has worked beyond designated work hours
JobSatisfactionVery.High	Factor indicating employees with very high Job satisfacction

Models Significant Parameters(contd)

Name	Description
TotalWorkingYears	Total experience of employee in years
MaritalStatusSINGLE	Factor indicating employees who are married.
EnvironmentSatisfactionMedium	Employee having medium satisfaction
EnvironmentSatisfactionHigh	Employee having high satisfaction
EnvironmentSatisfactionVery.High	Employee having very high satisfaction

Actual v/s Predicted Data comparison

Actual Attrition Values	Predicted Attrition Values		
		No	Yes
	No	160	304
	Yes	56	797



Model Analysis and Results

- The model has a 72.67% accuracy.
- It has a 72.39% sensitivity.
- It has a 74.07% specificity.