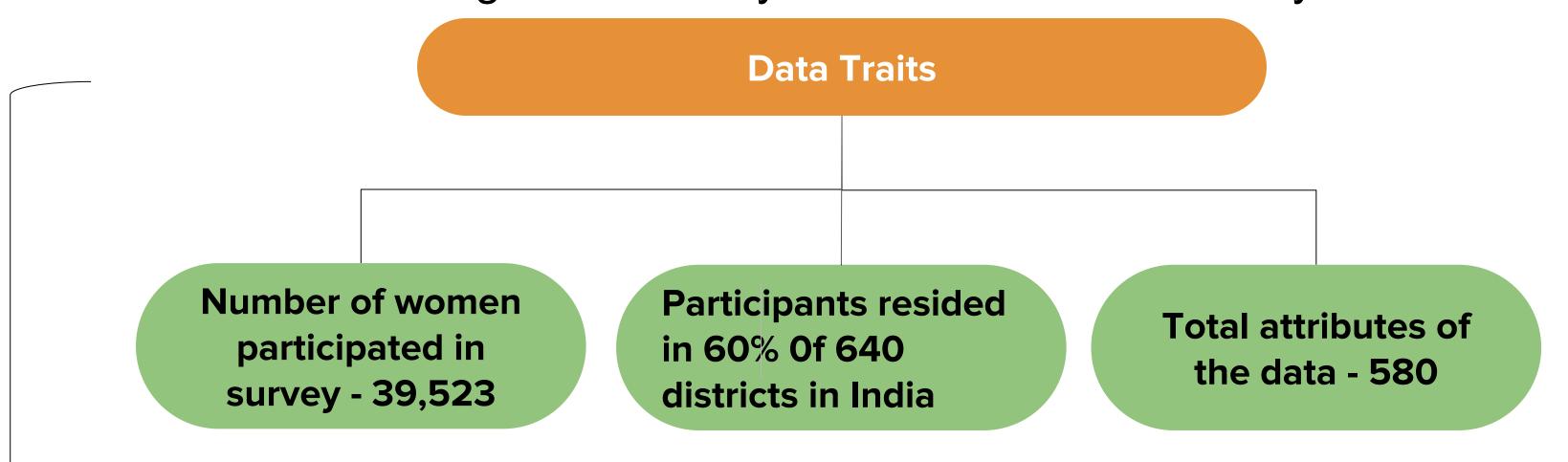
Domestic Violence in India using Supervised Learning Algorithms

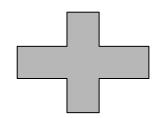
According to the Indian Human Development Survey(IHDS), almost 55% of women in India have been victims of domestic violence.

In June 2018, India was ranked as the most dangerous country in the world for women by CNN



Project Objectives

Identify major factors contributing to domestic violence



Provide Insight to reduce the occurrence of domestic violence

Data Preparation

580 attributes were consolidated to 100 attributes through manual selection to reduce redundancy present in the data.

100 attributes were categorized to 5 groups

Decision making power

Freedom of Choice

Employment

Marital History

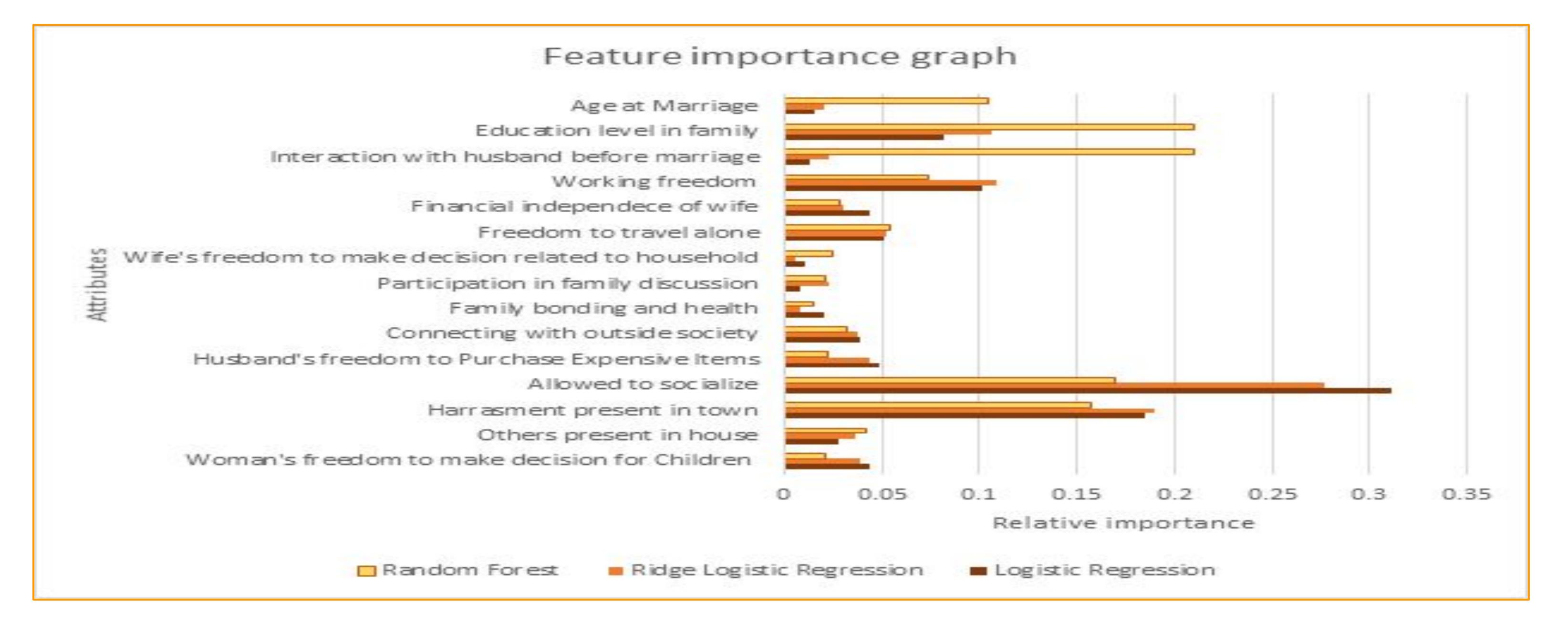
Social Profile

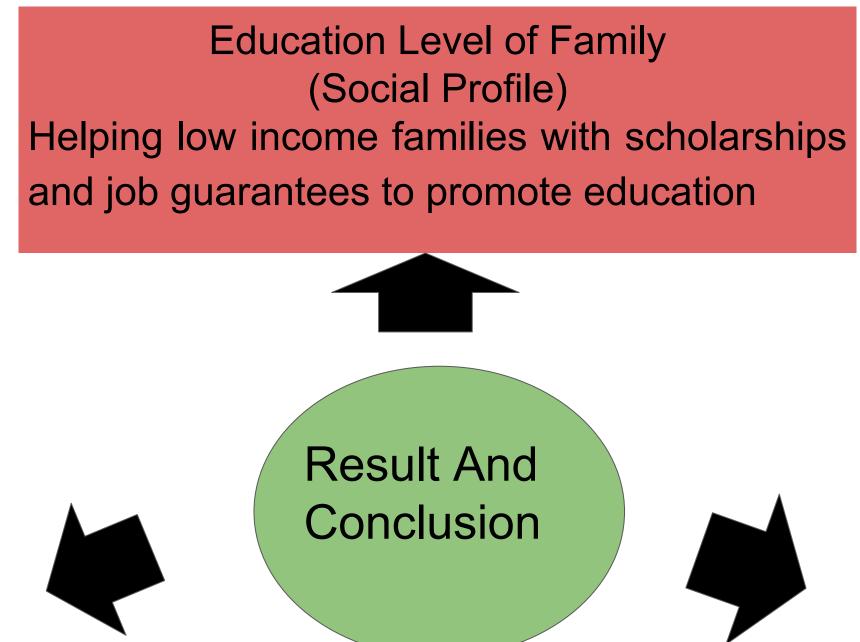
Data Transformation

Performed Principal
Component analysis to identify
independent attributes
Reduced 100 attributes in the
data to top 15 attributes

Data Modelling

Fit Random forest, Logistic
Regression & Ridge Logistic
Regression to identify top factors
that contributed to the domestic
violence and have targeted
solution to reduce the incidence of
domestic violence





Allowed to Socialize (Freedom of Choice)
Encourage socialization through clubs that teach women skills such as sewing, cooking, etc. to build life skills and provide community support to women

Harassment of girl in town
(Social Profile)
Improving women safety and freedom along with effect law enforcement

Final Remarks

- The approach used in solving the problem can be used for similar user analysis.
- Given the sale of information Google has about users the analysis can come up with actionable plan when promotic a Google product.