**Project Name: Attrition Prediction for AR Industry Fresher employees**

Project Goals

Determine active employees that are high risk of attrition

Description

Build a statistical model which gives us the risk score (probability of employee leaving) for employees by capturing important factors attributing to attrition using Human Resource data for current and past employee.

**Input**

* Active and Inactive Employee (Total (692)- Current (287) and Past (405) Employees) from 2015 and 2016 years
* Vertical - 'Accounts Receivable’
* Job Role - Team Member
* Experience Type - Industry Fresher
* Attributes
* Experience in AGS
* Employee Age
* Gender
* Marital Status
* Work Location
* Production Average Last3 Months
* Course Level
* Total Extra Hours Worked
* Function
* Shift
* Transport Mode
* Engagement Index
* Quality Average Last3 Months
* Last 30 Days Leave Count
  + Client
  + Joining Month
  + Job Role
  + Experience Type

Assumptions

* Considered current work related attributes only
* Considered attributes (where missing data was less than 20%) with imputation
* Previous location attributes will not be useful to tell about attrition as dynamics of business is changed significantly within last 2 years (Chennai to Hyderabad).

**Findings**

* Last 30 days leave count is the among the highest contributing variable to the analysis
* People are leaving in early in their career (Newly joined are leaving more compared to AGS veterans)
* Managers are well aware about probable attrition of employee. (Engagement Index (Red) has very high positive effect)
* When other attributes are same employees who joined in July, December, November, October, have less odds of leaving compared to who joined in January
* When other attributes are same compared to Chennai, Hyderabad employees have less odds of leaving

 Important Factors

|  |  |  |  |
| --- | --- | --- | --- |
| **Attribute** | **Level** | **Effect on Attrition** | **Importance** |
| Last 30 Days Leave Count |  | More likely | Very High |
| AGS Experience in Months |  | Less likely | Very High |
| Engagement Index | Red | More likely | Very High |
| Work Location | Hyderabad | Less likely | Very High |
| Joining Month | July | Less likely | Very High |
| Joining Month | December | Less likely | Very High |
| Joining Month | November | Less likely | High |
| Client | RTI | Less likely | High |
| Client | NMBS | More likely | High |
| Client | AGS | More likely | High |
| Joining Month | October | Less likely | High |
| Total Extra Hours Worked |  | More likely | Medium |
| Course Level | Professional | More likely | Medium |
| Function Name | Voice | More likely | Medium |

 Model Results

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Count** | **Current Employee probabilities** | **Employee Leaving probabilities** | **Accuracy**  **%** |
| All Data | 692 | 0.1230 | 0.9127 | 93.49 |