# Analysis on Reasons to Prefer Government Jobs Using Classification Algorithm

P.Vinitha[1], K.Priyadharshini[2], M.Nithya[3], P.Shalini[4]

I M.Sc (CS&IT) , Dept. of Computer Science &Information Technology, Nadar Saraswathi College of Arts& Science,

Theni, Tamilnadu, India[1,2]

Assistant Professor, Dept. of Computer Science &Information Technology, Nadar Saraswathi College of Arts&

Science, Theni, Tamilnadu, India[3,4]

**ABSTRACT:** Analysis on reasons to prefer government jobs using classification algorithm based on the preference of people mindset the preference is based on some criteria and benefits of governments jobs. By those benefits peoples are classified into three classes based on those norms are income, stress free, pride. For most middle class Indians, there has been one perpetual dilemma – whether to go for a private sector job or the government sector job. In last couple of decades private sector jobs came in vogue, before which Government job was the ultimate prize for a job seeker. The education is helpful for employment in bureaucracy and large mature corporation only. So such a shift of focus, and highlighting of entrepreneurial success stories, generation of jobs matching the kinds of education received will definitely make sure see student running behind jobs of different kind and not in the government.

**KEYWORDS:**  Government jobs, pride, stress, income, weka

## I.INTRODUCTION

A few decades before there are very small job opportunities in government jobs but now a day's many people prefer the government jobs even scored distinctions in engineering degree and worked hard for the subjects and finally end with applying for bank PO, railway exams, central government jobs and UPSC EXAM. Many people after completing graduation, they just spend time in home or outside for years and months to prepare and clear these exams. They are capable enough to go beyond that and try new things but people compel to go for civil services, bank officers, and say IT sector will fall it's not guarantee. Main theme of the survey is to analyze the reasons to prefer the government jobs. Some reasons are gathered from the people for survey Questionnaire. They are job security, pay structure, working hours, and promotions, work stress, less hour, holidays, respect, and satisfaction.

## II.PROBLEM DEFINITION AND DESCRIPTION

A Government is an organization in a specific geographic location which is dominant in physical force. Government is necessary to ensure the proper use of force.

Although younger generation has least interest in government jobs but still there is a large crowd who is aspiring for it. There are many disadvantages in government jobs but aspiring for government jobs are mainly in lower middle class and middle class. The dataset and attribute types shown in the table 2.1

| ATTRIBUTES | DATA TYPE |
|------------|-----------|
| Gender | Nominal |
| Pension | Nominal |
| Job_sec | Nominal |
| Pay_stru | Nominal |
| Holidays | Nominal |
| Less work | Nominal |
| Stress free | Nominal |
| Less hour | Nominal |
| Respect | Nominal |
| Satisfact | Nominal |
| Class | Nominal |

**Table2.1 Attributes and datatypes**

**Benefits of Government jobs:**

There are some myths to prefer the government jobs

**Myth 1:**The pay and benefits of a government job always score over those of private jobs.

**Myth 2:**Government jobs are less demanding, have no targets and are 'permanent'.

As growth in population are increasing to large extent, likewise in recent years more and more people are keen over **govt jobs**. The main reason behind is **govt jobs** secure one for the people who prefer them. Salary factor and many other benefits are most important one in govt jobs. Most of us think over to move into a good job with best income. Its stated by many that govt jobs said to be a good field. **Govt jobs** are basically divided into two divisions such as:

**Central Government Jobs**: There are many Central government jobs departments such as central soil conservation department, **Railways,** income tax department, and many other departments such as executive and judiciary etc

**State Government Jobs**: State Government Jobs in India has financial institution, educational institution, banking, judiciary and many other departments such as Forest and Animal husbandry etc.

Central government employees gets a lots of benefits in terms of loan facilities, gratuity, medical facilities, bonus and provident fund. State government employee is governed by different rules and regulations in terms of fixed pay scale by various departments. Central government employee's salary might be less but there are many benefits described as follows:

**Main cause of government jobs are**:

- Monthly Basic Salary + Dearness Allowances + House rent
- Gratuity-15 day's salary for one year.
- Bonus every year.
- Retirement Benefits include provident fund, gratuity, salary arrears, insurance if any etc.

**Pension benefits of Central government and State Government Employees**

- Employees gets half of his salary as pension after their retirement
- Wife gets pension after the employee death
- If a child is handicapped then after the death of employee, pension will also be given to the child.

## III.METHODOLOGY

Detailed transaction information in the OLTP and legacy system is usually not suitable for data mining. For data mining to be effective, much careful work is needed in defining the aims of network of data mining the in selection, cleaning, transformation and separate storage of data that is suitable for data mining.

A typical data mining process is likely to include the following steps:

- Requirement analysis

- Data selection and collection
- Cleaning, mining exploration and validation.
- Implementing, evaluating and validation
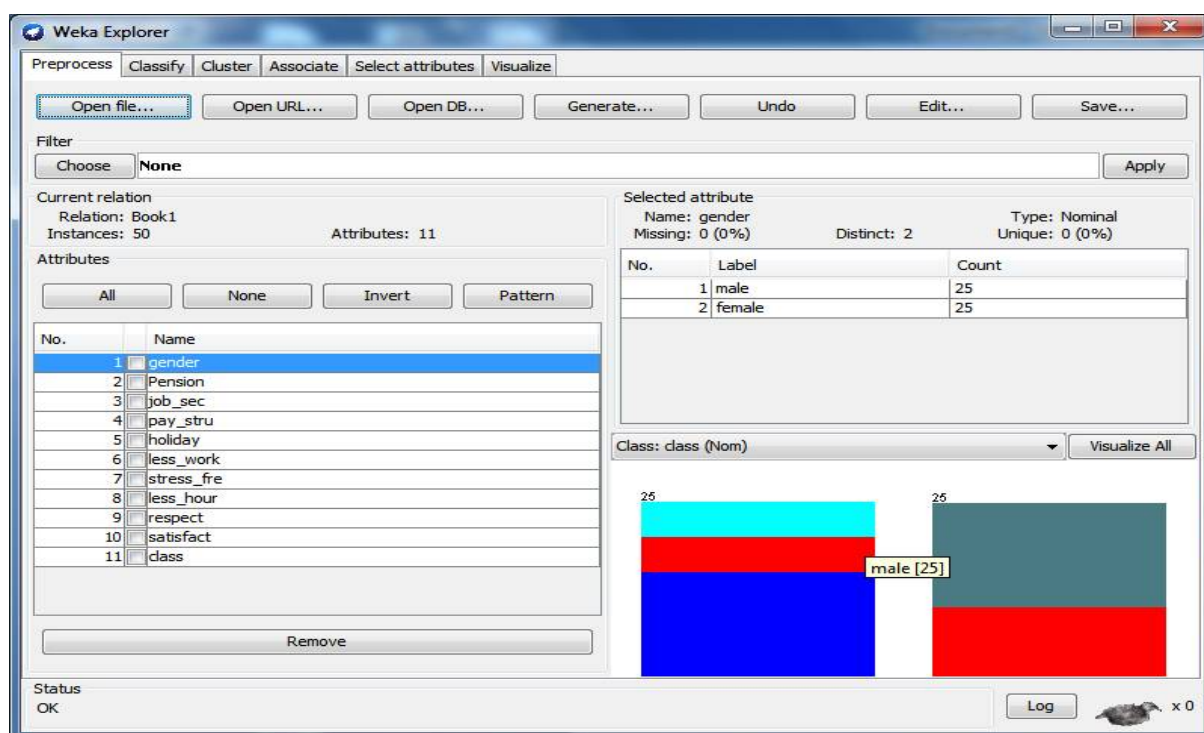- Monitoring
- Result visualization

The classification algorithm to evaluate the predicted data and then generated the reports for results visualization and exploration. It may be more than one technique is available for given data mining task.

Decision tree J48 is the implementation of algorithm ID3 (Iterative Dichotomies 3) developed by the WEKA project team. R includes this nice work into package RWeka.

J48 classifier is a simple C4.5 decision tree for classification. It creates a binary tree. The Decision tree approach is most useful in classification process. Once the tree is built, it is applied to each tuple in the database and results in the classification for that tuple.

## IV. RESULT AND DISCUSSION

The survey from people shows the preference of government jobs are classified into 3 classes. They are income, stress free, pride. The datasets are fed into Excel sheet and save as CSV format and the loaded into weka environment. After preprocessing, in classification J48 algorithm is chosen to show the decision tree and for any reason they mostly prefer government jobs.
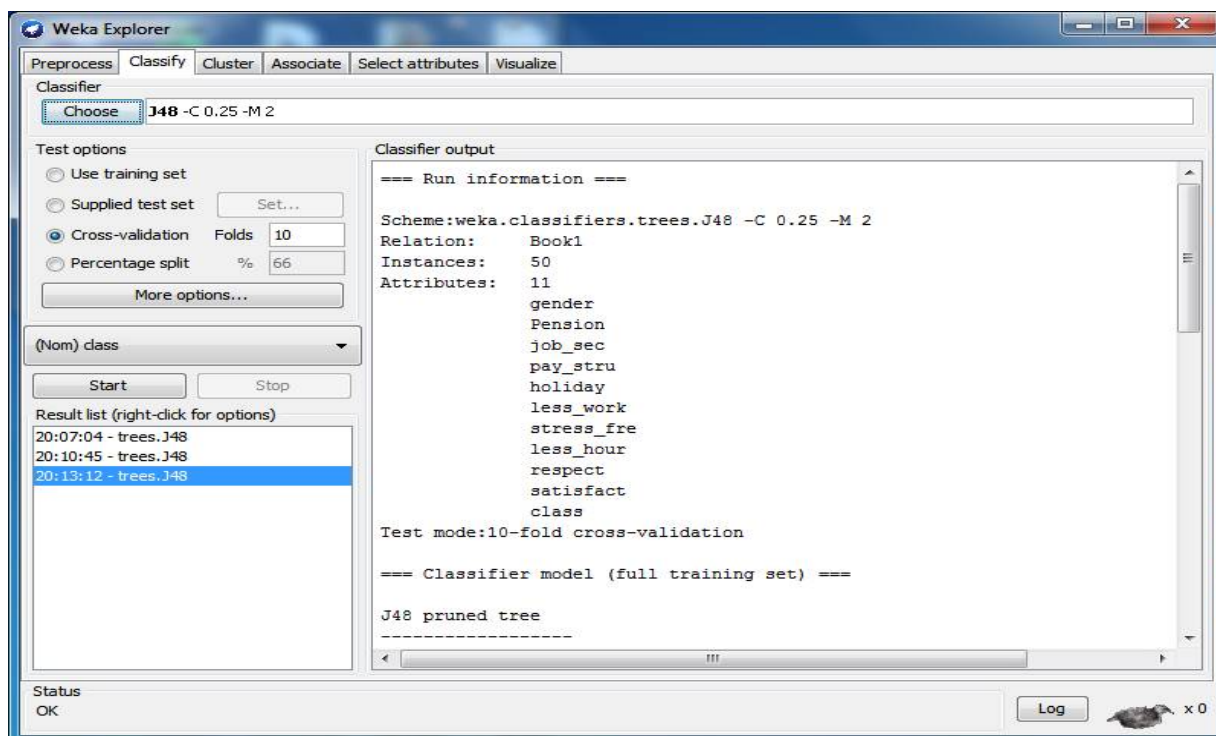
**Output Classifier**
=== Run information ===
Scheme:weka.classifiers.trees.J48 -C 0.25 -M 2
Relation:     Book1
Instances:    50
Attributes:   11
            gender
            Pension
            job_sec
            pay_stru
            holiday
            less_work
            stress_fre
            less_hour
            respect
            satisfact
            class
Test mode:10-fold cross-validation
=== Classifier model (full training set) ===
J48 pruned tree
------------------
job_sec <= 0
|  less_work <= 0
|  |  gender = male: Pride (5.0)
|  |  gender = female: pride (15.0)
|  less_work > 0: stressfree (15.0)
job_sec > 0: income (15.0)

Number of Leaves :      4

Size of the tree :  7
Time taken to build model: 0 seconds
=== Stratified cross-validation ===
=== Summary ===
Correctly Classified Instances        49          98    %
Incorrectly Classified Instances      1           2    %
Kappa statistic                   0.9724
Mean absolute error               0.01
Root mean squared error           0.1
Relative absolute error           2.7528 %
Root relative squared error       23.4278 %
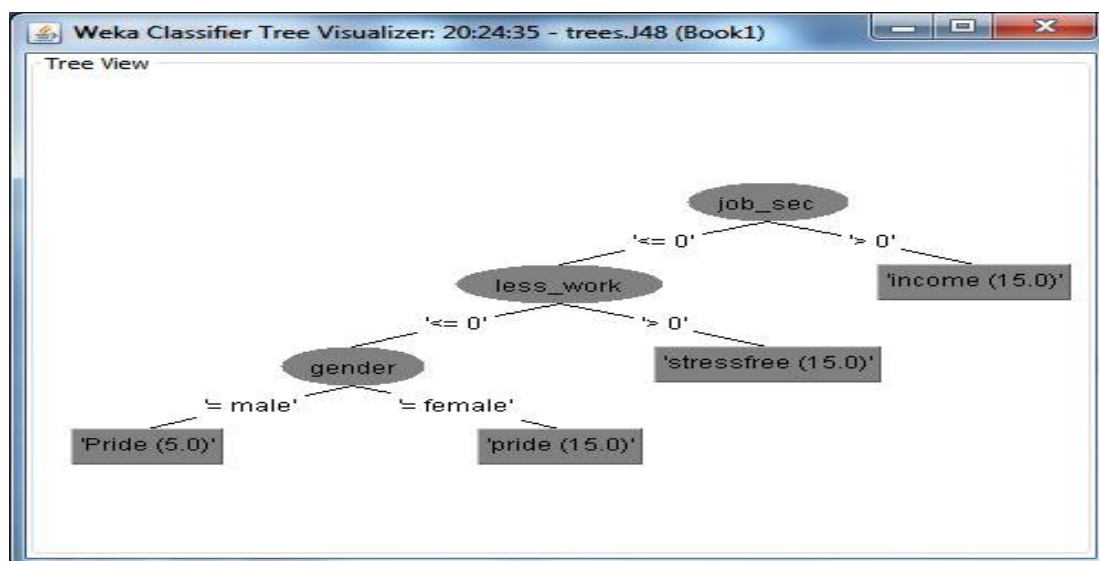Total Number of Instances         50
=== Detailed Accuracy By Class ===

| | TP Rate | FP Rate | Precision | Recall | F-Measure | ROC Area | Class |
|---|---|---|---|---|---|---|---|
| | 1 | 0 | 1 | 1 | 1 | 1 | income |
| | 0.933 | 0 | 1 | 0.933 | 0.966 | 0.967 | stressfree |
| | 1 | 0.022 | 0.833 | 1 | 0.909 | 0.989 | Pride |
| | 1 | 0 | 1 | 1 | 1 | 1 | pride |
| Weighted Avg. | 0.98 | 0.002 | 0.983 | 0.98 | 0.981 | 0.989 | |

=== Confusion Matrix ===
 a  b  c  d   <-- classified as
 15  0  0  0 |  a = income
 0 14  1  0 |  b = stressfree
 0  0  5  0 |  c = Pride
      0     0  0 15 |  d = pride



## V.CONCLUSION

In this paper discussed female and male were prefer a government job. We use a classification method in J48 algorithm for calculating the percentage of people's opinion. The people were answered for certain questions. If they answered "yes" the mark is "1" otherwise "0". In this method classified a three classes, such as income, stress-free,

pride. According to this method the people were gave a answer for their opinion. From their opinion we generate marks (1/0) and create the data set. According to this mark we calculate the percentage by J48 algorithm. Finally the pride percentage is greater than stress-free and income percentage .the pride is 20.0%, stress-free is 15.0% and income is 15.0%.

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