

5 Steps

Find the long term employees!

1. Gather survey data and exit interview data to identify the employees that have stayed longer than 5 years and those that have left prior to 5 years.
2. Using the data, first visualize the distribution of these key attributes for the employees that left and the employees that stayed. Since the data is survey data in many cases, consider a random indicator to down select significant variables. (Figure 1)
3. An example shown in the bottom right (Figure 2) is a distribution by job satisfaction scale.
4. Within the data set, begin to divide the employees into clusters by common attributes such as age, marital status, employee satisfaction, overtime worked, job level, etc... (Cluster Figure 3)
5. Further interrogate the features that matter (Figure 3, 4) and create the criteria for the basic employee data combined with the desired skill sets.

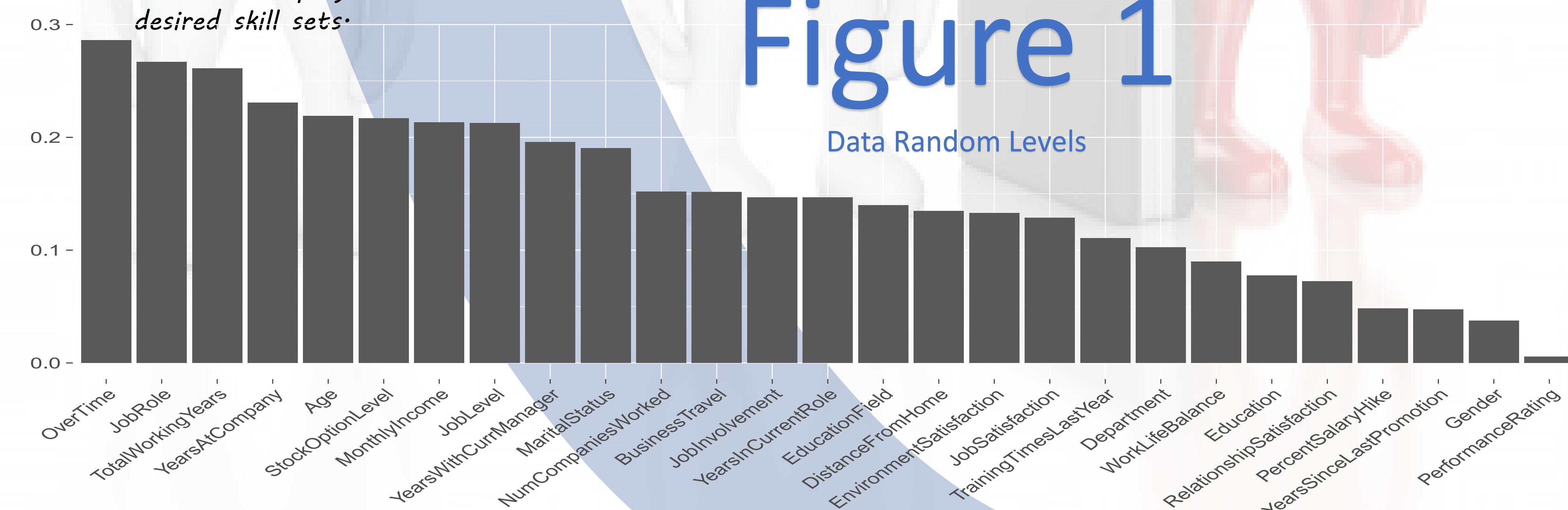


Figure 1

Data Random Levels

Based on Association rules of a large company data set, it is easy to see that marital status and job satisfaction are very important factors relating to attrition under five years. (Figure 5)

Figure 5

MaritalStatus=3
JobSatisfaction=1

Employees by Attrition

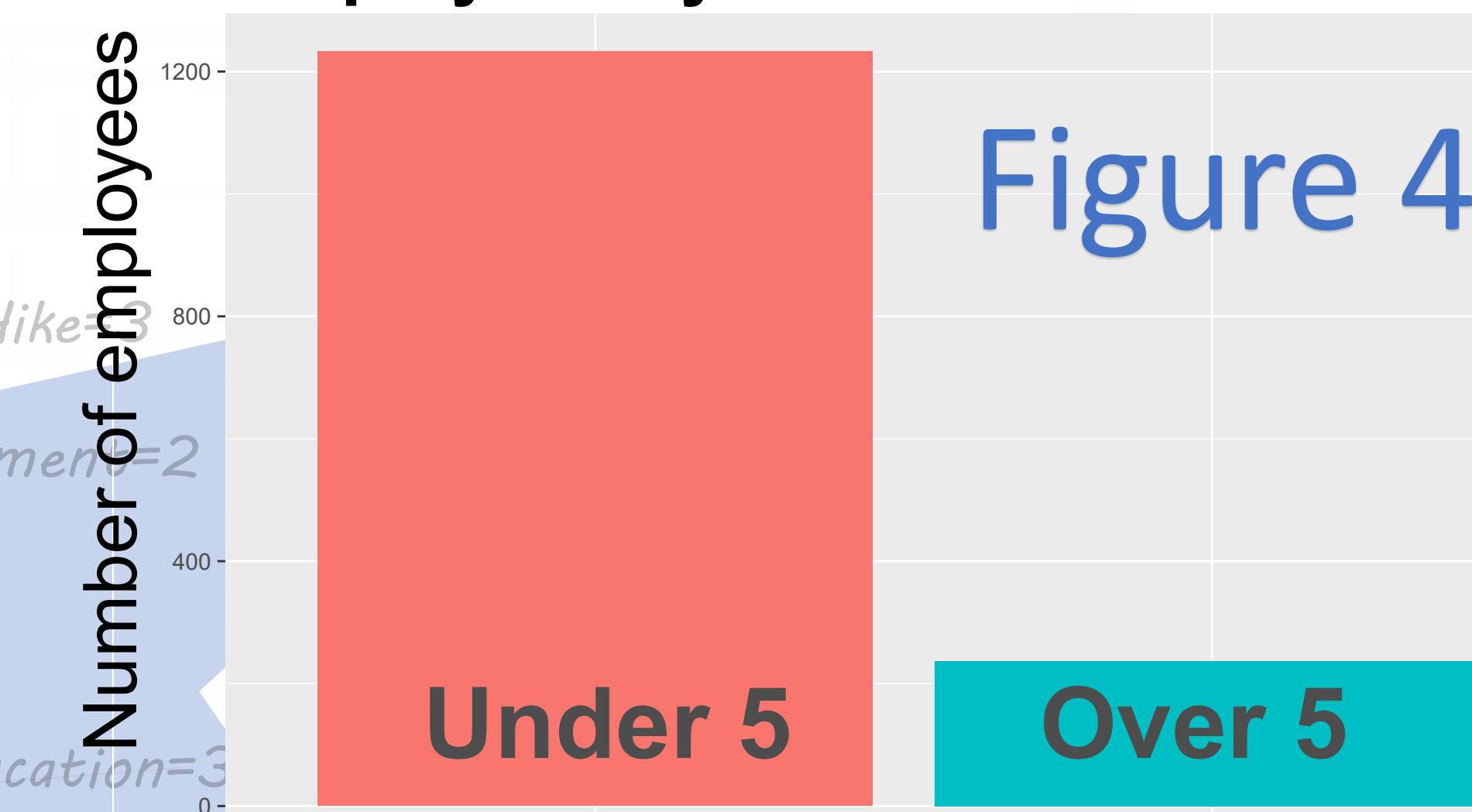
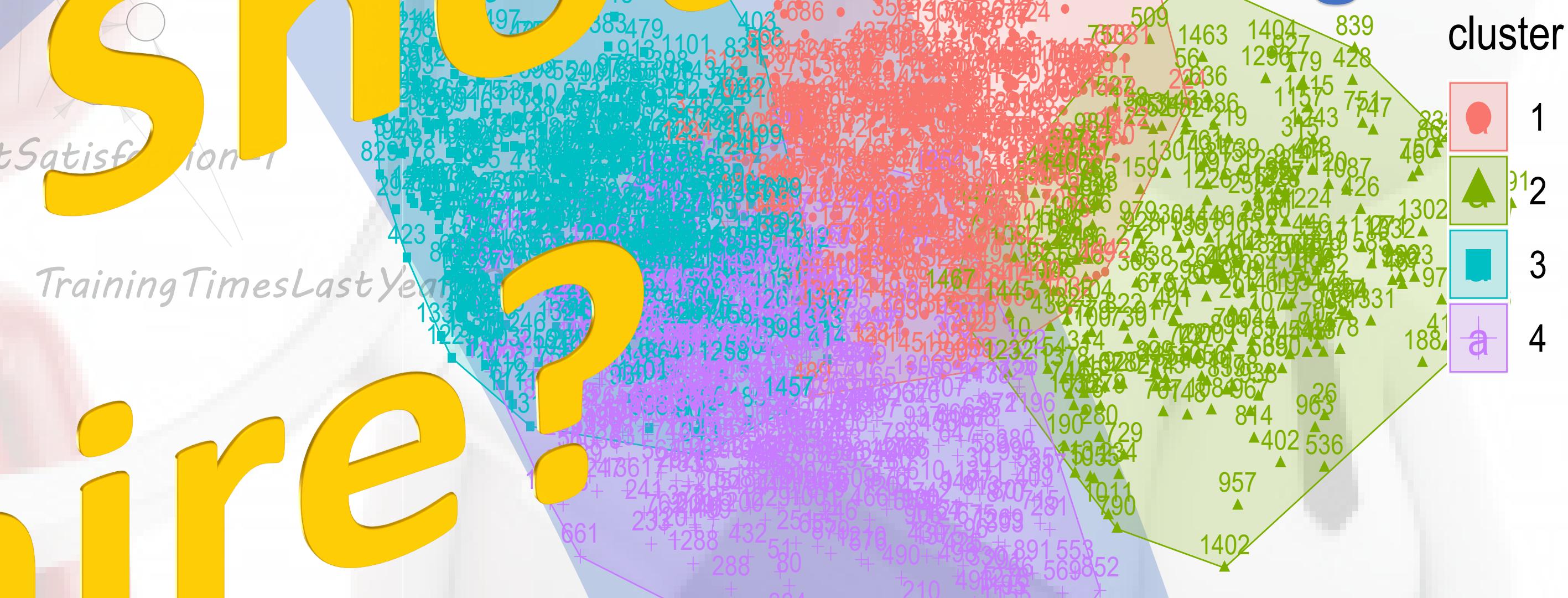


Figure 4

who should I hire?

Figure 3



An extremely valuable way to identify employee similarities is to run a clustering analysis. If a group can be identified that has a high attrition percentage, the decision to hire might be different.

Employees by Job Satisfaction



Figure 2

Job Satisfaction Scale of Employees Over 5