

Employee Engagement Analysis(May 2017)

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Abstract—For a business to be successful, it is important that employees and employer work hand in hand. The effect in the work of employees is directly proportional to the sales of product and growth of company. In order to avoid the downfall of the company, employer should be well aware of what is going on in his/her organization, how well engaged and well satisfied the employees are with their work and environment within the organization. In order to do so, analytix has been developed. It keeps track of the timely surveys conducted in an organization and does analysis of the data with the help of well displayed graphs. These graphs will help the head of the businesses to know if there are any problems his/her employees are facing and the changes that need to be done in order to solve them as employee satisfaction is very important to reach customer satisfaction goals.

I. INTRODUCTION

For any company to function well and reach its timely objectives, it has to make sure that its employees are well-dedicated, capable and trustworthy. Just having sufficient funds or stability is not enough in this competitive world, it is important to grow each day by some percent, it is necessary to strive to achieve something big each day for a organization to be at certain position in business world. In order to do so, employees play vital role as in they can be a reason for company's success or also downfall. So, it becomes essential to have a track of engagement of employees and their work. Making employees feel that they are valued will make them feel respected and thus will work dedicatedly. Also they will always remain loyal and thrust-worthy if their performance is appreciated and their aspect to see things and work on different projects is taken into account. By this they will feel motivated and work enthusiastically for the benefit of the company or the organization. So, in order to keep tab on level of engagement of its workers in a company and to do its analysis, we have developed Analytix. The analysis of such large amount of data is a tedious task which we simplify by developing Analytix. Analytix is basically developed for analysis of large chunk of data and represent it in a simple user understandable format. We developed it with the help of open source tools and resources available to simplify the dataset and convert it into a simplified graphical format.

II. WHY? AND ITS IMPACTS

When analyzed certain scenarios where the company was

not reaching its desired goals and was continuously facing some problems, it was found that its employees were not happy and were having one or other issue with the company due to which the quality of their work and their dedication degraded and along with it the whole business gets affected. In order to measure the engagement of employees, certain tools and surveys containing questionnaires which can depict it are conducted. These surveys mostly contains questions regarding the quality of work, team work, their manager, their surroundings, whether company meets their expectations, life work balance, company incentives and other such questions which affects or relates to employees. Some of these may describe the level of engagement in a company as a percentage or on a rating scale for example 1 to 5. Due to this, a comparison also can be drawn between different departments of a company. The results of these surveys may portray various scenarios in an organization based on questions, for example, some may depict the attitude of their employees towards the work, some may show the requirement of equipment or lack of resources to complete the job, and some may show the satisfaction/dissatisfaction of employees towards their department and other such scenarios.

By analyzing these surveys, one can have a clear view or understanding of their worker's point of view or the level to which they are satisfied or not with their work. Based on this surveys, the company can rectify the mistakes done or solve the problems to the earliest and also they learn about what is going on in the minds of their employees and can work on it if there are any issues between them. These type of surveys indirectly connects the employees to their company head.

As a result of such analysis, issues can be solved at the earliest due to which organization goals can be met timely. This helps employees to work creatively as they can explore in their field with the timely resources and support provided by the company and this brings innovation. The workers work loyally as they get rewards and respect, they get attached to the business and their work emotionally and they thrive to give their best. This brings positive attitude towards work, ethics and morals in an organization and they work whole heartedly and can face challenges with excitement and enthusiasm. All these together drives towards achieving success.

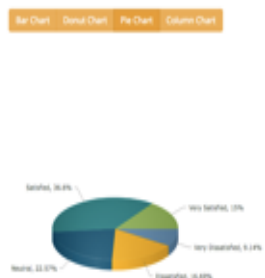
III. How?

In Analytix, we have worked upon the analyzing of the data that was collected during the survey conducted by a company. We requested a local company to give access to their survey database to which they agreed and we did some analysis on this real time data collected in their last survey. Their survey consists of questions based on work life balance, employee supervisor relation, employee satisfaction and career growth. Employees were asked to rate these questions on the basis of agree, strongly agree, disagree, strongly disagree and neutral. The database is of 420k plus federal employees and is of 90Mb with is very complex to display in a simple form and understand. With the help of our Analytix application, we converted this complex form of data into simple user understandable format and created charts. We used different charts like pie charts, bar graph and doughnut chart for easy understanding. By observing the graph, it is easy to understand the results of the survey and one can find out how many employees are satisfied with their work?, how many are struggling to achieve work life balance?, how many are happy with their department and career growth? So, it becomes easy to know the view points of worker and can make efforts to change them so that the employees feel valued and appreciated for their efforts and hardwork.

Following are the few graphical scenarios generated by Analytix which portrays the analysis of the survey database :

Employee Satisfaction :

Employee Satisfaction Survey



The above chart shows the output of the employee satisfaction survey. It portrays how many of them are happy with their work, how many are ok or how many are dissatisfied. It gives the ratio in the form of various charts. In this we have shown pie chart.

Life/Work Balance :

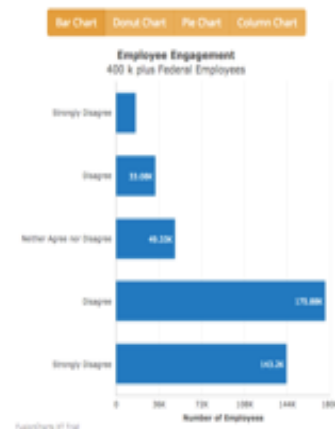
Life/Work Balance Survey



The above chart shows the output of the employee's life/work balance satisfaction survey. It portrays how many of them are able to manage the work along with their personal life. Here, it is shown in form of bar-graph.

Career Growth :

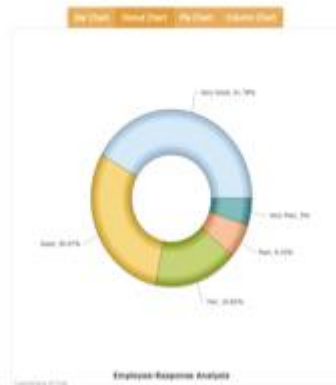
Career Growth Survey



The above chart shows the output of the employee's career growth satisfaction survey. It portrays how many of them are able to learn something new and are well satisfied with the career growth opportunities given by the company so that they can take necessary steps to improve it.

Employee Supervision Relation :

Employee/Supervisor Relation Survey



The above chart shows the output of the employee/supervision relation survey. It portrays how many of them are happy with their immediate manager or with their department.

IV. TOOLS USED

A local company volunteered to share its survey database for our project. The database is of 90Mb which consists of 420k plus federal employees. It was .csv file which we converted to .json and then stored in mongodb database with the help of python. We used node.js to connect to sever and we are running Analytix on it. Handlerbars is a template engine used with it, we can separate the generation of HTML from the rest of our javascript and write cleaner code. The front end is developed with the help of html, css, bootstrap, javascript, fusion charts and jquery while the back-end is developed with the help of node.js.

V. CONCLUSION

Analytix simplifies the complex data and converts it into simple charts forms so that a layman can understand it. With the help of it, the employee engagement analysis can be done in much better and easy way. It helps the organization to develop strong and healthy relationship with its employees which helps any business to succeed in long run and achieve short term timely goals. It helps of develop a healthy environment in a company due to which employees feel respected and valued. It is indirectly a direct way for communication between different levels in an organization.

REFERENCES

<http://webarchive.nationalarchives.gov.uk/20090609003228/http://www.berr.gov.uk/files/file52215.pdf>