

# **Employee Appreciation Based On Customer**

## **Satisfaction Using IBM Cognitive Services**

### **1 INTRODUCTION**

#### **1.1 Overview**

There's a direct link between employee satisfaction and customer satisfaction. Happy employees equal happy customers. Unhappy employees lead to unhappy customers. Employees are the driving factor behind customer satisfaction. Employee interactions set the tone for a positive or negative customer experience. When employees aren't happy at work, their interactions with customers can, and almost always will, suffer. Over the course of time, this can have serious repercussions for a business.

The main objective of this guided project is to appreciate the employee work based on analysis of customer feedback. We are designing an application where the HR/ user can upload the feedback report of all the employees. The analysis of each employee report is displayed on the Web application in the form of Bar charts

#### **1.2 Purpose**

The way you treat your employees is the way they treat your customers According to a recent article, creating an employee recognition culture can increase employee retention by up to 31%. Employee recognition is the process of showing appreciation for an employee's achievements, actions, and contributions. In big companies (Amazon/Swiggy/Uber ) appreciation is given to the employees based

on the customer feedback or satisfaction (chat process/ voice process). Analyzing all the feedback of each customer towards an employee work manually is a tedious job.

One of the easiest ways to enhance employee experience is to ask for and welcome customers' feedback. After all, they're the ones who are directly interacting with employees. So it is necessary to appreciate employees work. Employees can be your biggest asset when it comes to customer satisfaction.

## **2 LITERATURE SURVEY**

### **2.1 Existing problem**

Companies need to start putting the same effort into taking care of their employees as they do taking care of their customers. If even a fraction of a customer experience budget was spent on employee experience, there would be a huge return on investment.

The place where this becomes the most critical is any business where employees are directly interacting with customers, such as retail or food service. Historically underpaid and overworked, employees in these jobs are tasked with spending their entire shifts serving customers. They're the ones being yelled at when the register doesn't accept their coupon or an item is out of stock. They're the ones who spend 30 minutes with a customer only to have them decide to buy their items online. It can be a thankless job, and it's only made worse when the employees are treated like pawns in a game of chess. Analyzing all the feedback of each customer towards an employee work manually is a tedious job.

### **2.2 Proposed solution**

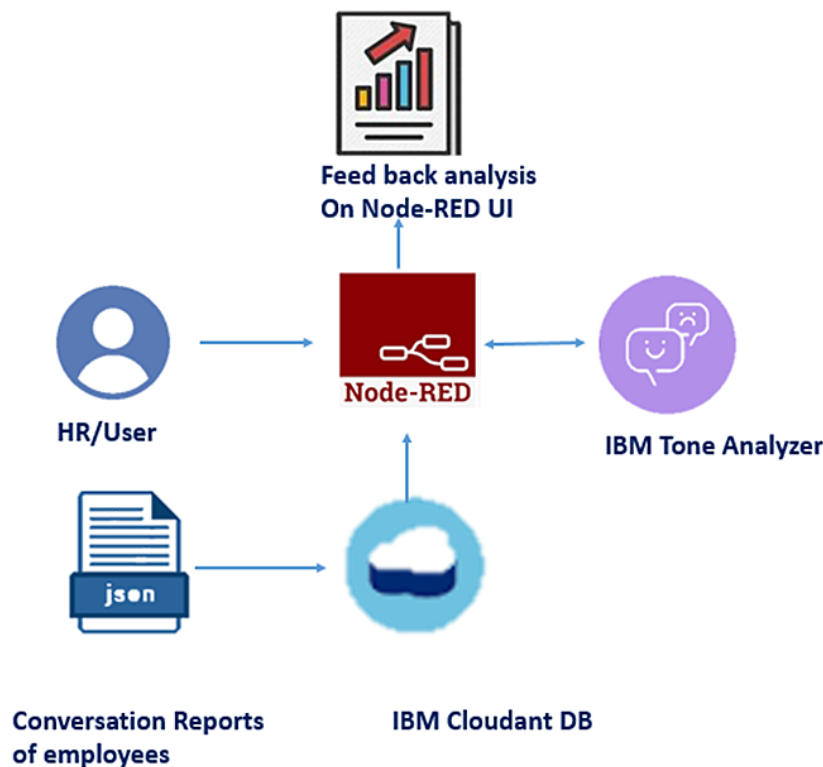
It's time to shift the mindset from employees working just to work, to acknowledging that they're valuable contributors to a company's success. Employees need to understand how important their role is and how their work fits into the bigger picture. They need to feel like their voices are being heard and they

have respect from their managers. Most importantly, they need to be able to come to work and know that the next eight hours won't be pure torture for them.

The solution to this problem is to appreciate the employee work based on analysis of customer feedback. This is the application where the User / Hr interacts with the web page build. He fetches the feedback data of employees from Cloudant Db. The fetched data is analyzed by the tone analyzer. The analysis of feedbacks are showcased on UI in the form of graphs

### 3 THEORITICAL ANALYSIS

#### 3.1 Block diagram Diagrammatic overview of the project.



## 3.2 Hardware / Software designing

### HARDWARE REQUIREMENTS:

Processor : Intel I3  
RAM : 4.00 GB  
Input device : keyboard, mouse  
Input device : Monitor  
Operating system : Windows

### Software REQUIREMENTS:

Node-RED  
Tone Analyser  
Cloudant DB

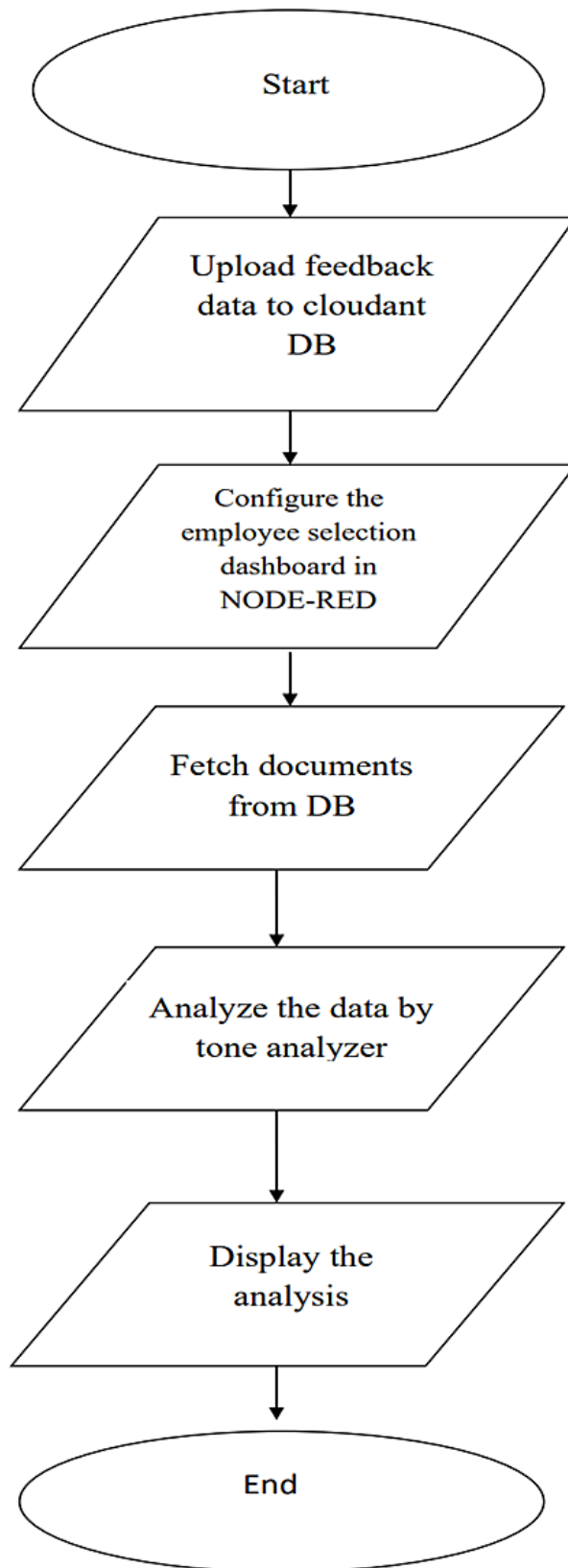
## 4 EXPERIMENTAL INVESTIGATION

The HR/ user can upload the feedback report of all the employees. The analysis of each employee report is displayed on the Web application in the form of Bar charts. The data set properties are 6 attributes representing for each employees. The information that we get from the data set are feedbacks of each employee..The different attributes used for sentiment analysis are

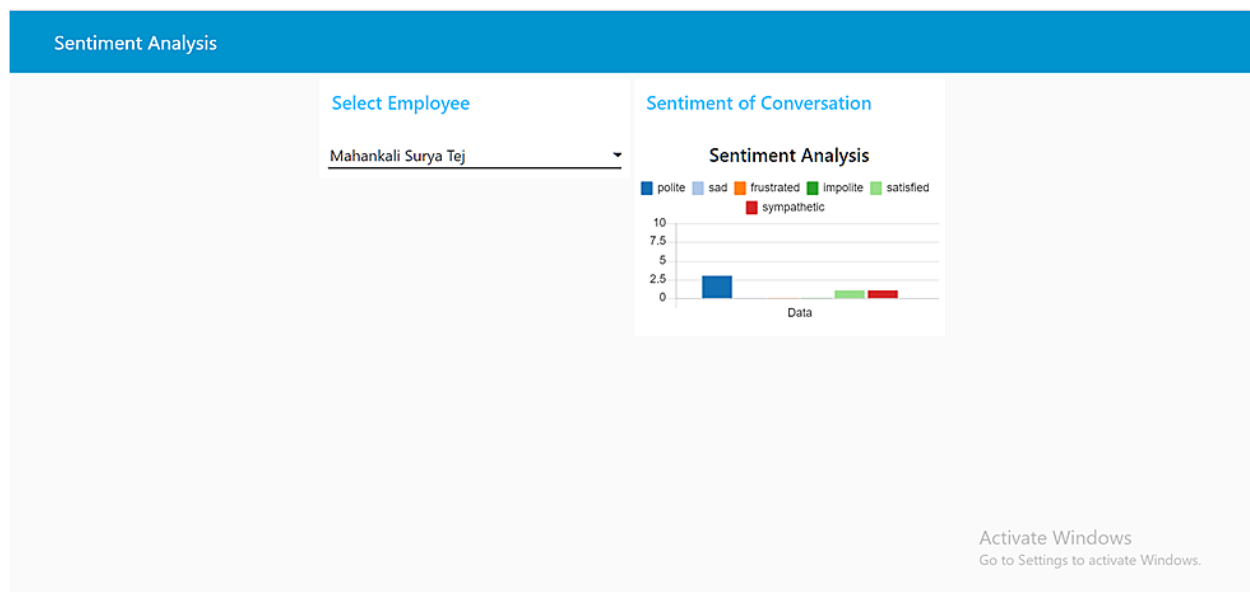
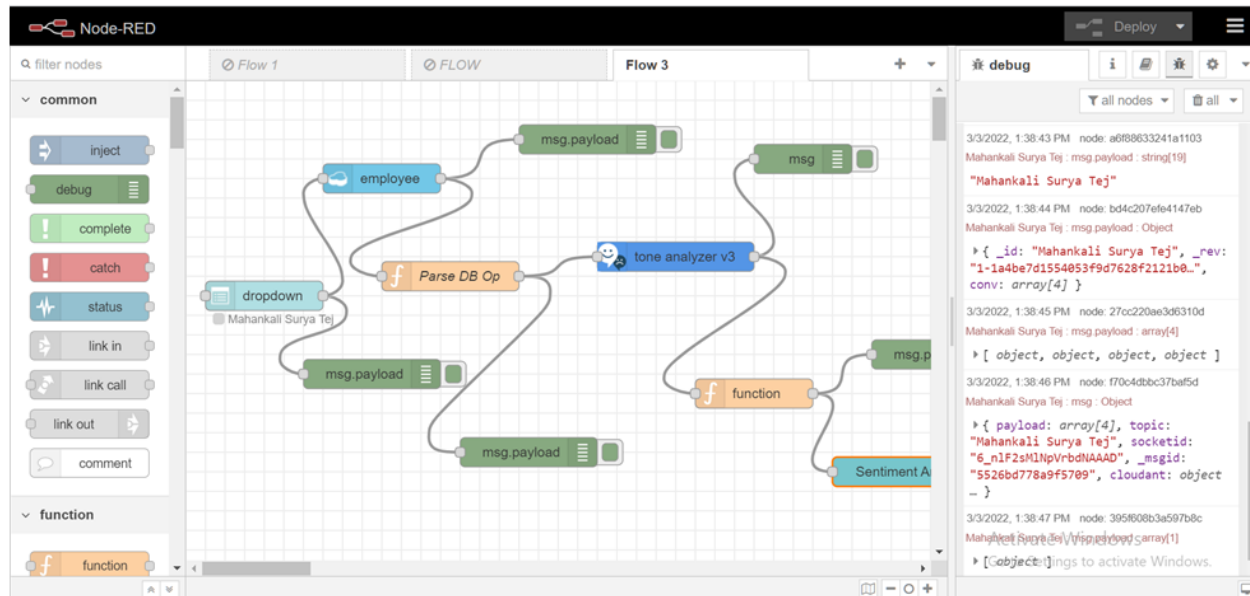
- Sad
- Polite
- Frustrated

- Impolite
- Satisfied
- Sympathetic

## **5 FLOWCHART**



## 6 RESULT



## **7 ADVANTAGES & DISADVANTAGES**

### **Advantages**

- Less man power.
- Saves time.
- Cost effective.
- efficient
- Speed of evaluation about employees.
- No need to write the entire code.
- Easy analysis of customer feedback using Tone Analyzer service.
- By using the user-friendly cloud NLP software Tone analyzer it easy to analyze emotion and tone in employees conversation with the customers and predict employees behavior based on their way of speaking .
- Node-Red supports browser-based flow editing.
- The various flows created in Node-RED are stored using JSON, which can be easily imported and exported for sharing with others.

### **Disadvantages**



- Difference in technology and hardware standards.
- The result of the application depend upon the accuracy of algorithm

## **8 APPLICATIONS**

- Big companies (Amazon/Swiggy/Uber )
- Multinational companies.
- Hospitals.
- Educational institutions.
- Banking
- Financial institutions

## **9 CONCLUSION**

This proposed system uses the IBM services such as Node-RED, Tone Analyser, Cloudant DB .By using the user-friendly cloud NLP software Tone analyzer it easy to analyze emotion and tone in employees conversation with the customers and predict employees behavior based on their way of speaking .Node-Red supports browser-based flow editing.The various flows created in Node-RED are stored using JSON, which can be easily imported and exported for sharing with others. So for the purpose of employee appreciation doing all the evaluation activities about employees manually is a tedious job.with the help of the proposed system it can analysis each feedback report and displayed on the Web application in the form of Bar charts.

## **10 FUTURE SCOPE**

In older days employee appreciation is done by collecting the feedbacks from the customer and evaluated it manually and understand how each employee is behaves to its customers and showing appreciation for an employee's achievements. but in large companies it is a difficult task to analyze all the employees behavior manually. This application will ease this problem by the using the IBM services which helps to analyze emotion and tone in employees conversation with the customers and predict employees behavior based on their way of speaking. This application can be used in hospital, educational institutions, banking, financial institutions to understand how the employees are communicating with the customer and the organizations can provide appreciation for an employee's achievements, actions, and contributions. With the help of this proposed system it can analyze the feedback from customers and can create an employee recognition culture in easy and accurate manner