MAKERERE UNIVERSITY

COLLEGE OF COMPUTING AND   INFORMATION SCIENCES

DEPARTMENT OF NETWORKS

BACHELOR OF SCIENCE IN SOFTWARE ENGINEERING (YEAR 2)

RECESS TERM 2 (BSE 2301)

CONCEPT PAPER FOR:

CHAT ANALYSIS APPLICATION FOR NEW VISION

PROJECT MEMBERS [GROUP 3]

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Wordpress Blog: https://group3rdevelopers.wordpress.com

Github Repository: https://github.com/DallingtonAsin/Group3-Recess-2018.git

BACKGROUND

INTRODUCTION

Chat analysis application is based on New vision client-operative chat sentiment analysis with R. Having collected the data set, every data sample is scrutinized and different visualization models are created to draw more understanding of the information exchanged between the clients and operatives of New Vision.

The chat analysis application consists of numerous partners who include New Vision as the corporate stakeholder from which data is collected from, clients and project members.

One of the major reasons as to why the project partners are interested in participating in this project is to enable New Vision in making quick and accurate decisions based on the information obtained from the analyzed data set.

PURPOSE

Analyzing the data set using R will enable us in obtaining accurate information or meaningful data beyond human observation. This will enable New Vision company in making better and smart decisions based on the information obtained from the analyzed data set.

PROJECT DESCRIPTION

Goal:

To draw positive or negative sentiments from the information exchanged between clients and operatives from which important decisions can be made for development of the organization (New

Vision).

OBJECTIVES

Main Objectives

To develop a data analysis application for reviewing, analyzing and visualizing data for New

Vision.

Specific objectives

- ❖ To analyze and visualize chat content from the customers with an aim of displaying the common meaningful words within the chats that may guide the New Vision customer support department in determining the most common complaints from their customers.
- ❖ To analyze and visualize the emotional reaction of the customers towards services offered by New Vision.
- ❖ To visualize the most hard working or active operator among company operators, this will guide the department in performing employee morale boosting.
- ❖ To provide better decision making tools that will be used by the New Vision corporate staff in making constructive decisions towards their customer service delivery for example the application will output bar graphs and pie charts that will simplify analysis of data with in uploaded file.

Methodology/Project activities

❖ **Get data.**

The initial activity is to obtain the raw data (data sets) to be analyzed from the New Vision company.

❖ **Preprocessing**

This involves transforming and preparing text data by eliminating unnecessary words and removing slag kind of any language used in the chat.

❖ **Generating visualization models.**

The project involves creating visualized data using models like world cloud, histogram, scatter plots, bar plots from the data sets.

❖ **Result Interpretation**

This basically involves interpretation of the results obtained and turning them into the desired knowledge that can be used to perform important decisions.

Project Time line

The whole project is estimated to take 1 months and 2 weeks. Documentation which involves designing of the concept paper, System Requirements Specification,system design document and project report which is estimated to take about 4 weeks.

 Implementation of the project is estimated to take about 1 month.

BENEFITS

❖ **Adjust the marketing strategy.**

The project aims at analyzing how individuals feel about New Vision products and this can actually enable the marketing team of the company in adjusting the marketing strategy depending on information summarized and analyzed.

❖ **Improve customer service.**

The project also highlights the negative discussions which New Vision operatives can attend to, in order to keep customers satisfied and loyal to their brands.

❖ **Crisis management.**

Analyzing clients' opinions can eliminate risks of company crisis because it is possible that crisis can stem from failure to have constant monitoring.

❖ **Improve products' quality**

By getting to know and understand customers' opinions about products or services provided by New vision, then the company can align the quality and features of their products or services with the tastes of their customers.

❖ **Sales Revenue.**

Analyzing and responding to clients' negative responses can be the tool to boost sales revenue of New Vision because through sentiment analysis, improved product or service delivery, and customer service can be achieved.

❖ **Employee Motivation.**

Analyzing the data set will enable the New Vision company to identify the right employee to be awarded based on his or her hard work.

BUDGET

Documentation ($6.95)

The project's documentation is estimated to cost $6.95. Documentation involves printing out manual concept paper, system requirements specification, design document and project report.

Travel of project members ($13.5)

These costs will facilitate transport of project members where they meet at a common place to discuss issues concerning project development.

CONTACT INFORMATION

For any information regarding concerns about this project and most importantly need to make funding requests, you can reach out to the authorized project member at +256774014727/+256700477421 and at email asingwire50dallington@gmail.com.