Codebook for Taxi Trips Dataset

# Data Overview

## Credentials

This data set can be downloaded from Kaggle data sets.

NYC taxi timings + NYC weather report data link: https://www.kaggle.com/purna007/intermidiate-data

## Business goal

This data was collected to answer the question:

Why are our best and most experienced employees leaving prematurely?

## Data description

This data set is a data frame of 10 variables over 15000 rows. Each row represents an employee that works in the company.

There are no missing values in the data.

# Variables description

|  |  |  |  |
| --- | --- | --- | --- |
| Variable Name | Description | Type | Possible values |
| satisfaction\_level | Level of satisfaction (0-1) | Numeric | 0-1, 1 is high |
| last\_evaluation | Time since last performance evaluation (in Years) | Numeric | 0-1, 1 is high |
| number\_project | Number of projects completed while at work | Integer | 2, 3, 4, 5, 6, 7 |
| average\_montly\_hours | Average monthly hours at workplace | Integer | positive |
| time\_spend\_company | Number of years spent in the company | Integer | positive |
| Work\_accident | Whether the employee had a workplace accident | Integer | 1 = had an accident 0 = no accident |
| left | Whether the employee left the workplace or not (1 or 0) Factor | Integer | 1 = left 0 = works |
| promotion\_last\_5years | Whether the employee was promoted in the last five years | Integer | 1 = promoted 0 = not promoted |
| sales | Department in which they work for | Factor | 10 departments |
| salary | Relative level of salary (high) | Factor | High, low, medium |

Data set: Taxi trips https://www.kaggle.com/purna007/intermidiate-data

Owner: PurnaRaoMallepaddi | Kaggle.com

1) How does the average travel duration affected by amount of precipitation?

2) How does the average travel distance affected by the amount of precipitation?

3) How is the trip duration affected by average temperatures?

4) What is the ideal distance of travel to maximise the amount of passengers per hour in rush hour?

Who needs to review this data?

Taxi drivers - predicting when demand for services will go up, thus raising prices.

taxi company managers - predicting when demand for services will go up, thus adjusting taxi number on shift and prices.

Taxi passangers - getting a clearer picture on price, taxi's near their location, and adjustment to commute time.

Article:

Tsapakis I., Cheng T. & Bolbol A. (April 2013). Impact of weather conditions on macroscopic urban travel times. Journal of Transport Geography, Volume28, pp. 204-211.

https://www.sciencedirect.com/science/article/pii/S0966692312002694

Main onclutions from the article:

The researchers found that the impact of rain and snow is a function of their intensity. the range of travel time increase due to light, moderate and heavy rain/snow.

The researchers also found that emperature had negligible effects on travel time.