

# Performance Analysis

## INTRODUCTION

You work as a data analyst in Telecom Company. During week, you receive several ad-hoc requests from marketing and CRM department about the performance of tariffs for different KPIs for different time periods. So you decide to prepare dynamic dashboards conveying all required insights.

Take a time to think about the best ways to visualize each request and keep in mind that dashboards should have optimal number of charts. Apply design elements (color, label, titles, tooltips, sorting, filter, parameter etc.) to make dashboards user friendly.

## DATA

You are provided with one excel workbook of daily revenues and number of subscribers for different tariffs. Data manipulation methods like joining different sheets and simple calculations might be required to complete analysis..

### Consideration:

For each row (each day and tariff):

Average Revenue Per Subscriber = Total Revenue/ Number of Subscribers

Average Voice Revenue Per Subscriber = Total Voice Revenue/ Number of Voice Subscribers

Average Data Revenue Per Subscriber = Total Data Revenue/ Number of Data Subscribers

Average On-net Revenue Per Subscriber = Total On-net Revenue/ Number of On-net Subscribers

Average Off-net Revenue Per Subscriber = Total Off-net Revenue/ Number of Off-net Subscribers



## Weekly KPI performance Analysis

KPI List: Total Revenue, Minutes of Usage, On-net Minutes of Usage, Off-net Minutes of Usage, MB of usage)

**Build Weekly KPI performance Analysis dashboard by following instructions.**

1. USE KPI list as Parameter.
2. Weekly time plot of each KPI
3. List top 5 tariffs for each KPI in the last week and growth rate for each of them.
4. Performance of each KPI in the last week
5. KPI growth in the last week. If it's negative write "ALARM!!! 'KPI' decreased % in the last week.",  
if it's positive write "Good news!!! 'KPI' increased % in the last week."

## Daily Revenue Performance Analysis

**Build Daily Revenue performance Analysis dashboard by including following analysis.**

1. Total revenue
2. Revenue proportion of each tariff
3. Compare tariffs on daily basis for :
  1. average revenue per subscriber
  2. average voice revenue per subscriber
  3. average data revenue per subscriber
  4. average on-net revenue per subscriber
  5. average off-net revenue per subscriber
4. Visualize cluster of tariffs for the voice and data revenue. Add daily timeline of voice and data revenue for that tariff as tooltip.
5. Portion of data revenue in the total revenue for each tariff

**After creating dashboard, answer following questions:**

1. Which tariff has the highest revenue on January, 2019?
2. Which tariff has the highest data revenue growth in last month?
3. For which tariff data revenue is higher than other types of revenue?