Prediction of the price for next gen mobile phone

**ABSTRACT:**

There are a lot of people who want to have the latest device(Mobile phone) every year. But a very common problem is the budget. If there is no idea what kind of budget is needed for the upcoming product, thus, it is hard to choose a budget.

We want to implement a system, where we will predict the price of the next model of a mobile phone series. It will help a lot of people to have a more solid financial preparation for the upcoming device.

For our dataset we will collect the following information about all the previous models:

1. The production cost of the device(e.g. Display, camera, chips, memory, processor etc).
2. Original market price(actual market price of the device where it is manufactured).
3. Our local market price.

We will use naive Bayes theorem to define the prices of the upcoming model of the series. Our goal is to find at least 80% accuracy.

**Introduction:**

Price prediction is one of the examples related to forecasting tasks and is a project based on data science. Price prediction analyzes data and predicts the cost of new products. There was a possibility to use various techniques of machine learning and deep learning to predict the price of new mobile phone models, but the lack of data is one of the biggest problems in this case. So we created a data set containing 34 mobile phones from Samsung and Apple. For Samsung we used only the Galaxy S and Note series. We used only very expensive devices as their exact values were relatively easy to find, but we want to extend it and add as many models as we can to get better results. We tried to get the local price in our country during the releasing date of these devices. To collect data we had to search in different online shops and also we visited local markets to get the price. In the dataset, there are 12 features containing categorical and numerical values. Here the company name, series name, and model number are categorical and the rest of them are numerical. We will try to use a multimodal approach to predict the price.