**INTRODUCTION:**

This project presents one example of how the inflation can be predicted by using the vast number of online prices displayed on the web.

The basic procedure used in most countries to collect inflation data has remained roughly the same for decades. A large number of people working for national statistical offices visit hundreds of stores on a monthly or bimonthly basis to collect prices for a preselected basket of goods and services. The micro data are then processed and used to construct consumer price indexes and other related indicators. This process is expensive, complex, and often too slow for some users of the data.

Online data collection is cheap, fast, and accurate, making it an ideal complement to traditional methods of collecting prices, particularly in categories of goods that are well-represented online.

Applications of predictive data analytics include Price prediction. Businesses such as hotel chains, airlines and online retailers need to constantly adjust their prices in order to maximise returns based on factors such as seasonal changes, shifting customer demand and occurrence of special events. Predictive analysis models can be trained to predict optimal prices based on historical sales records. The purpose of this project is to allow businesses to use these predictions as an input into their pricing strategy decisions.

**OBJECTIVES**

1. Conduct study on multivariate signal analysis and related issues.

2. To perform pre-processing to improve signal quality.

3. To perform prediction using classification/regression techniques.

4. To evaluate obtained results by cross validation and perform quantitative metric comparison with similar methods.

**CONCLUSION AND FUTURE WORK**

We have constructed an online price index using food and beverage data from a prominent online marketplace and the official weights used to calculate CPI in India. We show that the online index is capable of tracking the level as well as the dynamics of CPI. Results show that even at a more disaggregated level, despite some discrepancies, the online index does well in capturing the warp and the woof of the price movements of the product subgroups. This article is not meant to be a definitive exercise on the validation of online prices but is aimed at placing this idea as an important one in the context of policymaking in India. We hope more rigorous empirical exercises will be conducted to validate online price data in the future.