PROJECT
PROPSAL

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S7 CSE B

TOPIC:

GDP OF INDIA FORCASTING USING **MACHINE LEARING**

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ABSTRACT

Gross domestic product (GDP) is the single standard indicator used across the globe to indicate the health of a nation's economy: one single number that represents the monetary value of all the finished goods and services produced within a country's borders in a specific period. GDP may be easy to define but it is complex to calculate, and different countries employ different methods.

In India, the rate of GDP is fixed on the basis of average enhancement or decline in the production in agriculture, manufacturing and service sector. If we say that there is a 2% increase in GDP of India, then it implies that the economy of India is growing at the rate of 2%. But often, in these statistics the inflation rate is not included. In India*, the GDP is* calculated in every three months and the figures *of GDP* depend on production rate of major economic sectors.

We pursue a new approach to forecasting by employing a number of machine learning algorithms, a method that is data driven, and imposing limited restrictions on the nature of the true relationship between input and output variables. We apply the available Machine learning

algorithms on raw data of advanced and emerging economies of India and find the best of these algorithms which can outperform traditional statistical models, thereby offering a relevant addition to the field of economic forecasting

INTRODUCTON

Forecasting macroeconomic variables is key to developing a view on a country's economic outlook. Most traditional forecasting models rely on fitting data to a pre-specified relationship between input and output variables, thereby assuming a specific functional and stochastic process underlying that process.

GDP is an indicator of a society's standard of living, but it is only a rough indicator because it does not directly account for leisure, environmental quality, levels of health and education, activities conducted outside the market, changes in inequality of income, increases in variety, increases in technology, or the—positive or negative—value that society may place on certain types of output.

GDP includes what is spent on environmental protection, healthcare, and education, but it does not include actual levels of environmental cleanliness, health, and learning. GDP includes the cost of buying pollution-control equipment, but it does not address whether the air and water are actually cleaner or dirtier. GDP includes spending on medical care, but it does not address whether life expectancy or infant mortality have risen or fallen. Similarly, GDP counts spending on education, but it does not address directly how much of the population can read, write, or do basic mathematics. Overall we can say that GDP plays an immense role in the developing country like India.

EXISTING SYSTEM

There has been an increasing amount of research on using large data sets to measure or predict macroeconomic indicators. The theoretical literature is adapting existing or developing new statistical and econometric methods for the analysis of large data sets with a large number of explanatory variables. Many of the Indian data scientists are working together to find effective Machine learning model which gives accurate results.

There are so many effective algorithms used today, some of the algorithms gives effective results but not as much accurate. XG Boost, Light GDM, Decision Trees are effective algorithms used for GDP prediction. Deep learning techniques can also be used.

PROPOSED SYSTEM

The main aim of this project was to create a ML model that would help in predicting the expected GDP of each state of India with minimum margin of error for any given year in the future such as 2020 and beyond. This is very beneficial since by this data we could predict he growth of different states of the country and it will be able to predict how the GDP must be used in an effective way for the benefit of the state.
We will analyze the latest dataset from https://niti.gov.in/ . We will train the data and validate the data and uses various effective Machine Learning Algorithms which produce more accurate results.
For sometimes, we will try to use some deep learning techniques for accurate results.
The major objective is to provide effective ML model which produces accurate result than the existing system.

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