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Title: -Crude Oil Price Prediction-

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Report:

There are five main problems identified based on investigations made on previous studies. Firstly, data used in the previous predictions are majority employed from together in the market.

The crude oil price market volatiles from the contributions made by other factors.

A good prediction is the one that can comprehends and correlates between the factors.

Secondly, there are scarce numbers of research that implement the verification.

Besides the global crude oil price, other popular factors that being used are the demand and supply.

Although, demand and supply of oil plays vital role to the market volatile offered by the trend.

There are also other factors that contributed to the trend and gave impact to the market.

Therefore, by embracing appropriate key factors and later correlate them to the trend.

Thirdly, time-series data are mainly used for prediction.

Nevertheless, data pre-processing and data representation process are made.

These two processes are important to cleanse and reduce errors and noises in the data.

Later, these will help to organise the process of prediction, make it more accurate.

Without these processes, the prediction tool will be less reliable.

Fourthly, the crude oil price movement was the popular topic studied previously.

Predicting the movement of the price only is not sufficient to characterize the market.

A prediction on the movement together with the price itself will tender more accurate.

Sincerely, the practicability of the previous study is still dubious as the market is volatile.

Still, there are opportunities for improvement in the future as the advancement of technology.

the empirical result from the simulation is presented and discussed.

To begin, time series and normalised data are trained, tested and compared.

The best result with the smallest absolute error value from this learning process.

From the simulation, we discovered the best learning data were derived from the actual data.

This simulation shares promising 2.2690 of RMSE value, 0.00896 for its NMSE value.

The prediction result for March, 2004 until February, 2009 is presented.

This figure extensively shows narrow span between the actual and predicted values.

This accurateness not only implies to the trend but also to its discrete values.

Therefore, it proves and validates the selection of variables chosen for the model.

In addition, a parallel and positive movement existed between the actual selected in HC model.

Hence we have developed a model to predict the future crude oil prices us the web page.

