DATA MINING TECHNIQUE WITH CLUSTER ANAYSIS USE K-MEANS ALGORITHM FOR LQ45 INDEX ON INDONESIA STOCK EXCHANGE

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ABSTRACT

▸ This study aims to apply data mining techniques with cluster analysis on stock data registered in LQ45 in Indonesia Stock Exchange.

▸ The cluster analysis used in this method is k-means algorithm, the data in this research is taken from Indonesia Stock Exchange.

▸ The cluster analysis in this study analyzed the characteristics of data volumes and stock values, while the results in this study were presented in the form of cluster members visually.

▸ Therefore, this cluster analysis in this research can be used for quick and efficient identifier for each member of LQ45 index cluster based on share value for each cluster and its volume.

▸ The identification results can be used by beginner-level investors that begun to be interested in stock investments to help make informed decisions about stock trading on desired cluster groups.

EXISTING SYSTEM

- Currently, it is common for professional stockbrokers to try to extract relationships from different stocks by analyzing past trading graphs thoroughly.

- In addition, more available stock system software predictions can be used by stock investors to help them generate fast stock market forecasts.

- Stocks or shares, in this study we do not distinguish stocks and shares, is the relationship of ownership between the company and shareholders.

- There are two types of stock in the classification of shares in general, namely 1) preferred stock and 2) ordinary shares.

- Preferred stock is a stock that has a special right in the company (for example: distribution of previously received corporate profits rather than other shareholders) whereas ordinary shares are shares that have no more rights than the general right to obtain the profit in accordance with the profit-sharing schedule which held in the Annual General Meeting of Shareholders (AGMS).

PROPOSED SYSTEM

- The cluster analysis used in this method is k-means algorithm, the data in this research is taken from Indonesia Stock Exchange.

- The cluster analysis in this study analyzed the characteristics of data volumes and stock values, while the results in this study were presented in the form of cluster members visually.

CONTD..

- investing stocks, first, buying and store these shares so the benefit came from the profit distribution of dividends (dividends) and second, stock buying and selling back, the benefit will come from the deviation between the sale and purchase value (capital gain).

- Purchase of shares in general can be done in two ways, purchased when the stock will rise and start when Initial Public Offering (IPO) and purchased through the secondary market or through the stock market.

ADVANTAGE

- Data Exploration is a preliminary examination of the data to determine its main characteristics and determine the best approach for extracting meaningful information.

- The main purpose is to encourage in deciding the most appropriate pre-processing and data analysis techniquesTo overcome the pre-processing mistakes, there are several processes to be taken, such as cleaning, integration, transformation, reduction of news reports.

- This shows the missing value filling, combines the report by relevance and consolidates the data by replacing the original information using the news aggregator.

- Once the stored data is processed in pre-processing data stored in the data repository. The data repository contains data that has been cleared

HARDWARE REQUIREMENTS

- Processor   –   Pentium –III
- Speed   –   1.1 Ghz
- RAM   –   256 MB(min)
- Hard Disk   –   20 GB
- Floppy Drive   –   1.44 MB
- Key Board   –   Standard Windows
                                      Keyboard
- Mouse   –   Two or Three Button
                                      Mouse
- Monitor   –   SVGA

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SOFTWARE REQUIREMENTS

- Operating System   :   Windows 8
- Front End   :   Java /DOTNET
- Database   :   Mysql/HEIDISQL

CONCLUSION

- Using cluster analysis in this study result with the ability to provide information quickly and efficiently for potential novice investors on the distribution map of Liquid 45 shares or bluechip stocks in Indonesia Stock Exchange.

- The cluster analysis of 45 blue chip stocks in the Indonesia Stock Exchange provides useful and quick information visually to see the map of 45 blue chip stocks divided into four parts according to the needs in stock price attributes and share transaction value so as to provide information quickly and accurate to quickly become the target of stock investors' decisions.

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