A STUDY ON AI BASED STOCK EXCHANGE WITH THE ERODE TERMINAL AREA

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ABSTRACT

The application of Artificial Intelligence (AI) to financial investment is a research area that has attracted extensive research attention since the 1990s, when there was an accelerated technological development and popularization of the personal computer. Since then, countless approaches have been proposed to deal with the problem of price prediction in the stock market. In this, data analysis the data is gathered and interpreted by the means of primary source and it clearly shows that how the respondents of erode terminal area members are contributed for the advance level development in the Indian stock exchange where the development is contributed by the AI. In this, the data are collected from the respondents of 115 members for making the data analysis process and also to resolve more frequently asked queries in the AI based stock exchange in India.

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INTRODUCTION

Artificial intelligence (AI) is already making your life easier, whether it's through face recognition on your phone, helpful online shopping suggestions, finding you the perfect job, a curetted play list as per your taste, or helping you navigate through complex and volatile traffic with Google maps. AI has a significant impact on your life, knowingly or unknowingly.

Those AI is also creating new revolutions in the field of commerce like predicting the price level in stock exchange and also maintaining the virtual reality in the mode of online purchase. The stock market is complex it can be hard to understand how stock prices move up and down and even harder to predict future movements. So the artificial intelligence now is moving to predict the future price of the stocks and to make the investor to make the investment at the right period of time.

1.1 STATEMENT OF THE PROBLEM

Every trader is like to obtain the maximum level of profit from trading of the share but they are unable to obtain their profit because of their inadequate knowledge and improper analysis of the stock market level. Where this study shows how the trader can obtain their maximum level of profit in stock market with the less period of time and minimum level of knowledge in the shares. In the new evolving world of business the trader should have an adequate knowledge and enhanced level of experience in trading sector. Therefore the problem of the study is “A STUDY ON AI- BASED STOCK TRADING IN ERODE TERMINAL

AREA".

1.2 LIMITATION OF THE STUDY

- This research is conducted on a sample size, so it might be possible that the information given by such respondents may not match with the replay of total share trader in erode terminal area.
- The study was restricted only to the share traders by using Artificial Intelligence

1.3 OBJECTIVES OF STUDY

- To make stock market forecast simple and straight forward
- To give valuable experiences to new investor to comprehend market rapidly.
- To diminish the time expected to make forecast by giving various data analysis at an one point
- To make the stock market investment process simple
- To increase the accuracy of price prediction.

1.4 RESEARCH METHODOLOGY

Since the study is about the artificial intelligence the first detail study is conducted about the function of artificial intelligence in the field of stock market and later on the functioning of share market and finally combining the both factor of AI and stock market with the help of algorithms in the field of era.

Based on the topic objectives were set and arrived at the opinion on the respond of 100 respondents were designed with the question of 20 and the response is collected from the recent users in the field of AI based stock market. For this data collection, Random convenient sampling method was adopted. For this project the terminal area of research is Erode.

1.5 DATA COLLECTION METHODS

Market research requires two types of data i.e. primary data and secondary data. Primary data has been used abundantly for the study. Well-structured questions were prepared & the survey was undertaken. Feedback for the display has been taken by asking questions& observation has also done to gather primary information.

There is also a use of secondary data, collected from the various journals, books, and

websites and from the online publications.

- Primary data- Field Survey
- Secondary data- Books, Websites, and online publications
- Area of research – Erode
- Research approach- Survey Method.

REVIEWS BY AUTHORS

Peachavanish (2019) [1] proposes a clustering method to identify a group of stocks with the best trend and momentum characteristics at a given time, and therefore are most likely to outperform the marketduring a short time period. The author conducted an experiment on five-year historical price data of stocks listed on the Stock Exchange of Thailand (SET) and reported that the proposed methodcan outperform the market in the long run.

Stock price prediction based on time series of relevant variables and behavioral patterns

(Khan 2020) [2] Helps determine prediction efficiency. One of the essential requirements for anyone related to economic environments is to correctly predict market price changes and make correct decisions basedon those predictions. Stock-market predictions have been a prevalent research topic for many years.

[1]"AN EMPIRICAL STUDY OF MACHINE LEARNING ALGORITHMS FOR STOCK DAILY TRADING STRATEGY," 14 april2019.

[2] "STOCK MARKET PREDICTION USING MACHINE LEARNING CLASSIFIERS AND SOCIAL MEDIA, news," Journal of Ambient Intelligence and Humanized Computing, p. 3433–3456, 14 january 2020.

HISTORY OF AI- BASED STOCK MARKET IN INDIA

In India's case, the first program on AI in India was conducted as early as the 1960s by Professor H.N. Mahabala at the Indian Institute of Technology (IIT), Kanpur. However, research in AI took off in 1986 when the Government of India launched the Knowledge-Based Computing Systems (KBCS) program in conjunction with the United Nations Development Program as part of its Indian Fifth Generation Computer Systems (FGCS) research program.

Indian scientists have undertaken several projects since then, such as the project on Machine Translation for Indian Languages by IIT Kanpur; Optical Character Recognition project by ISI Kolkata; flight-scheduling expert system, Sarani, developed by CDAC (CENTRE FOR DEVELOPMENT OF ADVANCED COMPUTING TECHNOLOGY), Mumbai; a speech synthesis system developed for Indian railways by TIFR; an image-processing facility developed by IISc using AI and vision techniques.

DATA ANALYSIS AND INTERPRETATION

TABLE 4.1

AGE OF THE RESPONDENTS

Age	No. of Respondents	Percentage %
Below 20 years	32	28%
21 - 30 years	36	31%
31 - 40 years	39	34%
Above 40 years	8	7%
Total	115	100%

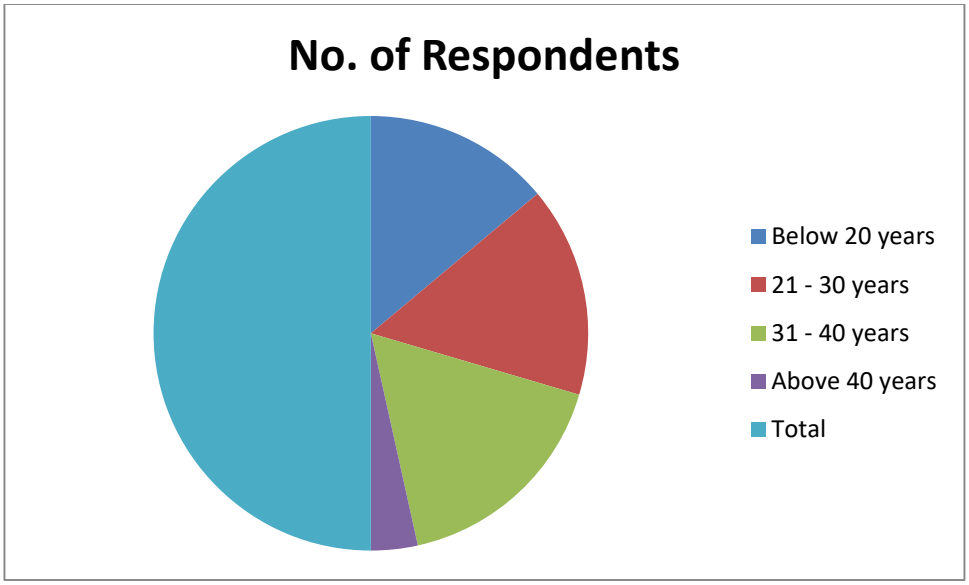
(SOURCE: PRIMARY DATA)

INTERPRETATION

This set of data is which is collected and used in the place of erode terminal area and this data is completely collected and used for the only purpose of educational field. This data is not applicable for the consideration of whole India .where this survey is collected from different age group people for to make easy understanding in the following **CHART 4.1** and also to create the survey on the basis of accurate rate of chart.

CHART 4.1

AGE OF THE RESPONDENTS



In the content of the table and chart the following set of data are analyzed as four category in the means of below 20 years people are in one set of variable where 28 %(or) 32 respondents arecategorized. And in another set of variable the age of 21-30 years people are responded in the 31%(or) 36 people. In the third category 31-40 years people are contributed with the highest responds of 34% (or) with the people of 39. In the final category people are contributed with the percentage of 7% (or) with the 8 people of above 40 years.

TABLE4.4

4.4 GENDER OF RESPONDENTS

GENDER	NO. OF RESPONDENTS	PERCENTAGE %
Male	71	61.7
Female	44	38.3
TOTAL	**115**	**100**

(SOURCE: PRIMARY DATA)

INTERPRETATION

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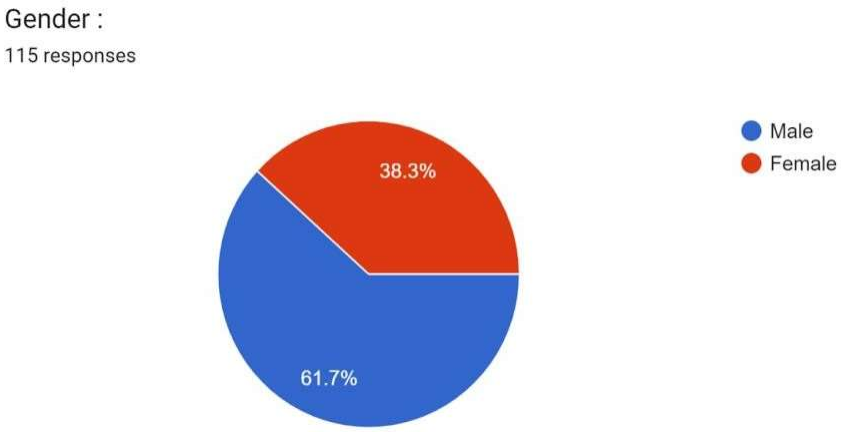
CHART 4.4

GENDER OF RESPONDENTS



In the above table and chart the data are classified into two different categories in that the responses of first category are classified as male members with the percentage of 61.7(or) with the members of 71 and in the final category the total members of females are 44(or) it can be mentioned as the percentage of 38.3 out of 100 percentage.

TABLE 4.10

KNOWLEDGE ABOUT THE STOCK EXCHANGE OF THE RESPONDENTS

KNOWLEDGE OF THE RESPONDENTS	NO.OF RESPONDENTS	PERCENTAGE %
Expert level	14	12.2
Middle level	45	39.1
Basic level	56	48.7
TOTAL	**115**	**100**

(SOURCE: PRIMARY DATA)

INTERPRETATION

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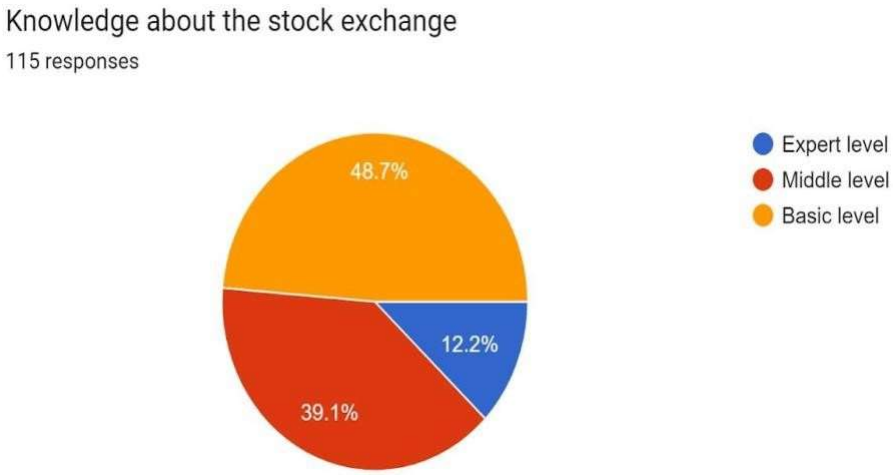
CHART 4.10

KNOWLEDGE ABOUT THE STOCK EXCHANGE OF THE RESPONDENTS



From the above table and chart the data state the knowledge of the respondents in the classification of three different types, in that first set of data is classified as expert level in that the respondents received from the people are 14 whereas the percentage of 12.2 and in the second set data are middle level of knowledge with the 45 responses and in the final set of data are classified as basic level in that data the number of responses received are 56 with the percentage of 48.7.

TABLE 4.11

PERIOD OF INVESTMENT IN STOCK MARKET

PERIOD OF INVESTMENT	NO.OF RESPONDENTS	PERCETNAGE
Every month	18	15.7
Every four month	25	21.7
Twice in a year	18	15.7
Once in a year	13	11.3
More than a year	41	35.7
TOTAL	**115**	**100**

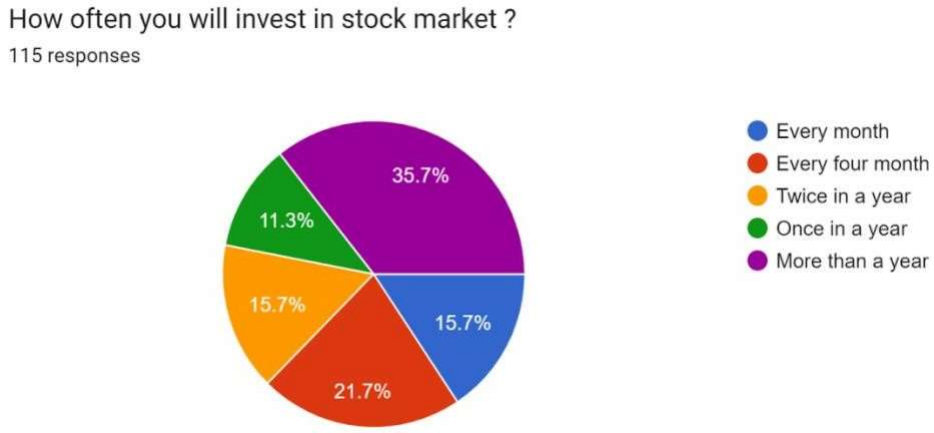
(SOURCE: PRIMARY DATA)

INTERPRETATION

This set of data is which is collected and used in the place of erode terminal area and this data is completely collected and used for the only purpose of educational field. This data is not applicable for the consideration of whole India .where this survey is collected from different age group people for to make easy understanding in the following **CHART 4.11** and also to create the survey on the basis of accurate rate of chart.

CHART 4.11

PERIOD OF INVESTMENT IN STOCK MARKET



In the above table and chart shows that how the people are making the investment in the stock market on the basis period of time and that the data are classified into five different categories and in the first of variable is making investment in every month of period in that case the responses received from it was 18 members with the percentage of 15.7 and in the second set of variable the traders making investment at every month of period where as responses received is 25 members (or) at the percentage of 21.7 and in other set of variable the traders making the investment of twice in a year with the responses from 18 members at the percentage of 15.7 and the respondents who are making investment once in a year was 13 members at the percentage of 11.3 and finally the traders who are investing more than a year are at the rate of 35.7 with the responses of 41 members.

TABLE 4.14

BELIEVENCE OF STOCK PRICE PREDICTION IN AI BASED STOCK MARKET

PREDICTION OF STOCK PRICE	NO.OF RESPONDENTS	PERCENTAGE 100%
Yes	83	72.2
No t	32	27.8
TOTAL	**115**	**100**

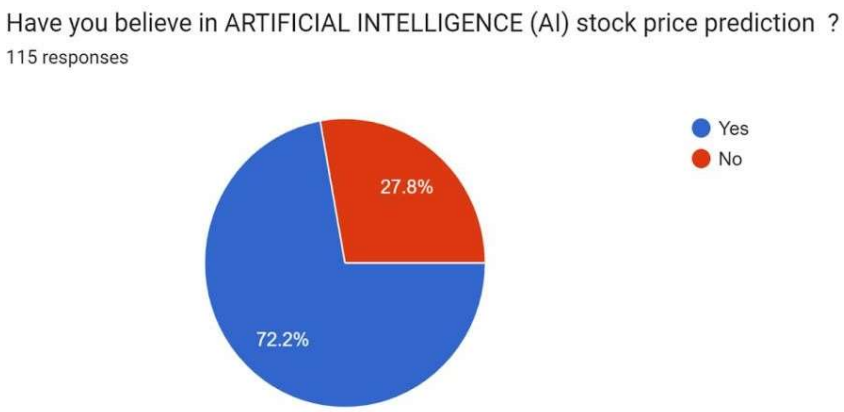
(SOURCE: PRIMARY DATA)

INTERPRETATION

This set of data is which is collected and used in the place of erode terminal area and this data is completely collected and used for the only purpose of educational field. This data is not applicable for the consideration of whole India .where this survey is collected from different age group people for to make easy understanding in the following **CHART 4.14** and also to create the survey on the basis of accurate rate of chart.

CHART 4.14

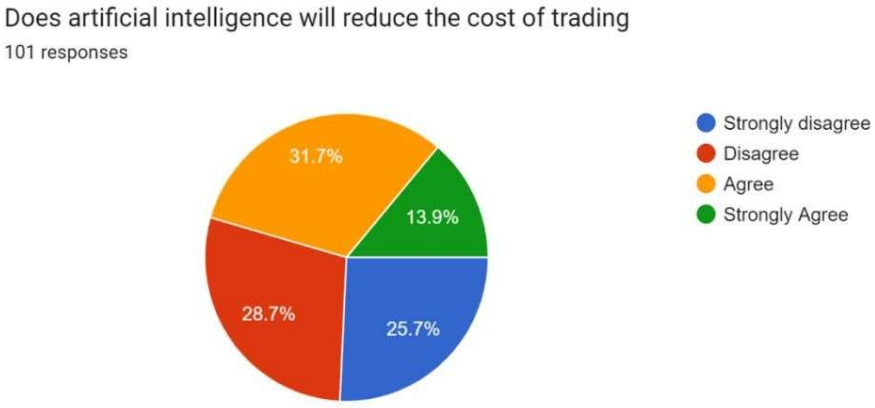
BELIEVE OF STOCK PRICE PREDICTION IN AI BASED STOCK MARKET



In the survey of above data we are able to gather the information about AI based stock market in that, the response price prediction of stocks in the market are accurate or it will not we arepleased to gather it as in the form of yes with response of 83 or with the percentage of 72.2 and in other of no is with the response of 32 members at the percentage of 27.8.

CHART 4.21

REDUCTION IN THE COST OF TRADING



In the above table and the chart is stated that the respondents are responded according to theirbelieve in reduction of cost of the trading charges in the stock exchange , those responses are responded in five four different ways in the means of strongly disagreeing to the reduction in the cost of stocks with the response of 26 members or at the percentage of 25.7 and in the second set of variable is respondents are responded with the member of 29 or at the percentage of 28.7 for disagreeing in reduction of cost and in the third variable of data is responded with the responses of 32 members for agreeing in reduction of cost or at the percentage of 31.7 and in the final set of variable the members are respondent with the responses of 14 or at the percentage of 13.9 for strongly agreeing to the reduction in the cost.

CONCLUSION

This project helps me to gain knowledge and experience in the field of India's advance developed factor in stock exchange and I hope that this will help me in the future referential study onstock exchange. This above study provides me a guide and preferential thoughts of respondents and also this study provides me the behavioral responses of the respondents in the stock exchange. In thisstudy various factors involved in trading a share are analyzed. With this great development in Indianstock exchange, AI is going to increase a number of traders in the Indian stock market and also we hope that this curious study will also plays a important role in India's development.