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Predictive Stock Market Trends With Artificial Intellignece And Time Series Analysis With Respect To Fmcg, Gold And Banking **Sectors**

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Abstract:

Recognizing the complexity and dynamism inherent in the stock market. accurate predication of future stock prices becomes crucial for the investing community. This facilitates the formulation of effective trading strategies, potentially leading to significant gains. This research paper aims to examine and forecast future stock prices in the FMCG, Banking and Gold sectors. This involves utilizing predicative models like artificial intelligence and time series analysis, essential for informed decision-making within the dynamic landscape of financial markets.

Key words: Contemporary trends, Artificial intelligence, Time series, FMCG, Banking, Gold sectors, trading strategies

INTRODUCTION:

Predicting stock request trends with AI and time series analysis design. The use of artificial intelligence and time series analysis to read unborn stock request trends has gained significant fashionability. The stock request is a complex and dynamic terrain. The successful predicting of any request unborn indicator or a stocks unborn price will be more useful to the investing community to design optimal trading strategies and could yield significant gains. ¹This donation aims to investigate the benefits and challenges associated with employing artificial intelligence and time series analysis for predicting stock requests.

One of the most crucial skills in the finance industry is stock trading. A range of analysis styles, including as abecedarian analysis, specialized analysis, quantitative analysis, and so on, have been created by professional dealers. Similar analytical approaches employ a variety of sources, such as news and price data, but they all strive to predict the future stock values of the company. So that traders can make well-informed decisions.

The stock request plays a crucial role in financial frugality as it enables companies to secure capital, granting investors the opportunity to acquire ownership shares in a company.

The realm of stock applications is continually evolving through advancements. Given the fluctuations, investors must strategize carefully to maximize profits.

The investors in the stock request always find a fashion that can guarantee easy benefiting by prediction the stock trends and minimize the threat of investing. This motivates the experimenters in the sphere field to develop new soothsaying models. Absolutely, stock prices are often analyzed using time series models, leveraging historical data to identify patterns and trends. This allows for predications and informed decision-making in financial markets based on the understanding of past price movements.

This research paper will focus on forecasting long-term stock prices by utilizing time series data associated with general stock prices.

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NEED OF THE STUDY:

The stock request is largely unpredictable and changeable, making it pivotal for investors to have accurate prognostications for informed decision- taking.AI algorithms excel at leveraging extensive datasets, discerning intricate patterns that may be challenging for humans to comprehend. Time series analysis ways can capture the time-dependent nature of stock request data, similar as trends, seasonality, and cyclicality. The combination of AI and time series analysis enables investors to formulate informed strategies, manage risks, and potentially capitalize on emerging opportunities in the dynamic financial landscape.

STUDY OBJECTIVES:

- To assess the stock price of banking FMCG, BANKING and GOLD sectors.
- To predict stock price for future of banking FMCG, BANKING and GOLD sectors by using the AI tool.
- ✤ To recommend best sector to the investor for taking the investment decision.

SCOPE

Forecasting the stock price range, volatility, threat, price, trends, peer stock comparison, and global market comparison will be accompanied by utilizing FMCG, banking, and gold stock prices in conjunction with NSE prices. The amalgamation of these datasets and the application of various algorithms aim to enhance the precision of predictions.

REVIEW OF LITERATURE:

It's material to review the accessible literature connected to the time series modelling and AI algorithms. The initial set of papers focuses on predicting stock requests, primarily employing artificial neural networks- a class of computation models inspired by natural neural networks. These networks consist of layers, beginning with an input layer and concluding with an FIR layer. Signal transmission occurs thorough interconnected nodes, adjusting weights as the network learns from input data to minimize prediction errors and enhance performance. The subsequent section outlines each artificial neural network study, hiligliting its distinctive approach, focus and findings.

In the year 2017, Chong, Han and Park analyzed the data of 38 companies, come under the list of Korean KOSPI stock. He has done the investigation on KOSPI stocks in between the period of January 4, 2010 to December 30, 2014 and observed that deep neural networks can prize fresh information from the residuals of the auto regressive model and ameliorate prophetic performance.

In the year 2013, Chavan and Patil studied on ANN stock request prediction by the way of

survey of different model input parameters from nine published papers and amongst the best input parameter that produce the better prediction of stock. Basing on the investigation they came to know that ML ways make use of particular variables rather of abecedarian variables for aspecialized stock price predication, though microeconomic variables are significantly used to predict stock request indicator values.

Wood and Jasic, in the year 2004 developed an artificial neural network to predict diurnal stock request indicator returns using data using data from several global stock request. Their study focused on trying to support profitable trading. For investigating the their study they have used the diurnal ending values of standard and poor of 500 indicator, the German DAX indicator, the Japanese TOPIX and predicted the performance for the neural network is estimated against a standard direct autoagressive model and predicting the enhancement is verified when applied to the S &P and DAX indicators.

Kenny and Meyler (1998) have developed Arima time series prognosticating model for prognosticating the affectation in Ireland. In their study, they've concentrated on maximizing the power of soothsaying by minimizing cast crimes.

RANGSON AND TIDIA (2006) have conducted a study with an ideal to find an applicable Arima model for soothsaying three types of oil painting win price by considering the minimalmean absolute chance error.

The **AUTHOR (BANERJEED)** (1) has tried to develop a model that helps read the unborn Indian stock request values, grounded on the once information collected on the yearly ending stock indicators. Using ARIMA model he has prognosticated the unborn stock indicators whichhave strong performance on the frugality of India.

John Mc. Carthy description aligns with the commonly accepted definition of Artificial Intellegnece. AI involves the design and development of intellengent machines, including computer programs, capable of displaying traits associated with human intelligence, such as problem-solving and language skills. Ie encompasses the study of intelligent agents in the field of computer science.

Conceptual back ground:

Various attempts have been made to use machine learning to predict stock prices. These endeavors differ in their focus, which can be categorized in terms of data features considered, choice of algorithms and the time frames for predications.

1. The targeting price change can be near -term means that lower than a nanosecond, short-term and long- term.

2. Certainly, the set of stocks can be narrowed down based on specific criteria. This could involve limiting the selection to fewer than 10 particular stocks, focusing on stocks within a specific industry or sector or considering the entirely of available stocks. The choice depends on the investment strategy or analysis goals.

3. The workshop highlights the diverse predictors used in stock price predication, ranging from global news and economic trends to company-specific characteristics and pure time-series data of stock prices. Notably, progress has been made in forecasting near-term and long-term price changes. However, the focus of this design is on the challenging aspect of short-term predication for general stocks, utilizing solely timeseries data. Many existing models concentrate on company-specific information, posting difficulty for the general public to access and often limiting effectiveness in short-term predictions. The decision to address the sphere with the least accurate predictions, particularly in short-term scenarios, reflects a strategic choice. Additionally, the workshop notes the need for caution regarding papers claiming superior results, as some may use problematic criteria that provide limited practical guidance for trading despite impressive visuals.

The approach of incorporating sophisticated models to pre-process time-series data before applying machine learning models is unique and appears to yield better results compared

to simply parsing the raw data. Combining physical specialized pointers with machine learning algorithms sets your research apart, especially in the context of short-term stock price prediction. It's noteworthy that your method outperformed existing papers in this specific problem domain. This emphasizes the importance of advanced data processing techniques in enhancing the accuracy of stock price prediction models.

Research Methodology:

Stock request prediction seems like a complicated problem because there are colorful factors that are still left unaddressed and don't feel to be statistical at first. But to our deliverance there are colorful AI algorithms by using which we could efficiently prognosticate current trends in the stock request by using the references from the former data.

Then the dataset that we're going to use has been collected from Yahoo finance. This data prognosticated the stock prices at some intervals of time for each day in a time. In order to pretend and dissect only one company's data was taken in to regard.

RESEARCH DESIGN keeping in view of the below listed objects of the study, opting the stylish AI algorithm model (AI application) and predicting the time series using the named model.

SOURCES OF DATA the data needed for the present study is secondary in nature and has collected from an online source, investment. Com, Yahoo. Com

Accurating the results of FMCG sector, BANKING sector, GOLD sector.

SAMPLE DESIGN

It isn't possible to prognosticating the long- term stock request price, So by using AI & Timeseries analysis it's easy to prognosticate the data of-



LIMITATIONS

- AI models heavily calculate on literal data, which may not directly represent unborn request conditions.
- Ai algorithms can be susceptible to overfitting, where the model becomes too technical to literal data and performs inadequately on new data.
- Stock request trends can be affected by external events, similar as profitable heads or geopolitical events, which aren't captured by time series analysis.







Time series analysis may struggle to capture unforeseen request shifts or outliers that diverge from literal patterns.

STATEMENT OF THE PROBLEM:

Developing an intelligent system presents numerous challenges. Simple AI relies on conditional responses to anticipated stimuli, but true intelligence requires understanding the input's relation to the context. Achieving this imitation involves interdisciplinary collaboration across AI subfields, including psychology and linguistics. Mortal machine commerce faces complications due to the intricate nature of human interactions.

DATA ANALYSIS

FMCG SECTOR		BANKING	SECTOR	GOLD SECTOR		
Date	Stock Price	Date	Stock Price	Date	Stock Price	
May 01, 2023	48,186.15	May 01, 2023	44,128.15	May 01, 2023	1,982.10	

Table:1 Data and its Stock price of FMCG, BANKING and GOLD Sectors

	47.014.10		42 222 00		
Apr 01, 2023	47,814.10	Apr 01, 2023	43,233.90	Apr 01, 2023	2,018.30
Mar 01, 2023	45,904.90	Mar 01, 2023	40,608.65	Mar 01, 2023	2,004.10
Feb 01, 2023	44,940.45	Feb 01, 2023	40,269.05	Feb 01, 2023	1,853.20
Jan 01, 2023	44,456.90	Jan 01, 2023	40,655.05	Jan 01, 2023	1,962.20
Dec 01, 2022	44,171.45	Dec 01, 2022	42,986.45	Dec 01, 2022	1,842.20
Nov 01, 2022	45,536.55	Nov 01, 2022	43,231.00	Nov 01, 2022	1,775.10
Oct 01, 2022	44,296.30	Oct 01, 2022	41,307.90	Oct 01, 2022	1,654.90
Sep 01, 2022	44,405.65	Sep 01, 2022	38,631.95	Sep 01, 2022	1,684.90
Aug 01, 2022	43.821.15	Aug 01, 2022	39,536.75	Aug 01, 2022	1,726.20
Jul 01, 2022	42,487.40	Jul 01, 2022	37,491.40	Jul 01, 2022	1,781.80
Jun 01, 2022	37,664.55	Jun 01, 2022	33,425.10	Jun 01, 2022	1,816.30
May 01, 2022	38,713.45	May 01, 2022	35,487.40	May 01, 2022	1,856.30
Apr 01, 2022	38,204.15	Apr 01, 2022	36,088.15	Apr 01, 2022	1,918.60
Mar 01, 2022	36,287.75	Mar 01, 2022	36,373.60	Mar 01, 2022	1,959.50
Feb 01, 2022	35,515.40	Feb 01, 2022	36,205.30	Feb 01, 2022	1,904.00
Jan 01, 2022	36,467.25	Jan 01, 2022	37,975.35	Jan 01, 2022	1,799.20
Dec 01, 2021	37,579.95	Dec 01, 2021	35,481.70	Dec 01, 2021	1,831.00
Nov 01, 2021	37,386.95	Nov 01, 2021	35,695.30	Nov 01, 2021	1,778.30
Oct 01, 2021	38,222.10	Oct 01, 2021	39,115.60	Oct 01, 2021	1,785.90
Sep 01, 2021	40,426.55	Sep 01, 2021	37,425.10	Sep 01, 2021	1,758.50
Aug 01, 2021	39,529.70	Aug 01, 2021	36,424.60	Aug 01, 2021	1,818.10
Jul 01, 2021	36,051.90	Jul 01, 2021	34,584.35	Jul 01, 2021	1,817.20
Jun 01, 2021	36,093.20	Jun 01, 2021	34,772.20	Jun 01, 2021	1,773.50
May 01, 2021	34,890.50	May 01, 2021	35,526.65	May 01, 2021	1,906.90

Apr	33,623.45	Apr 01,	32,781.80	Apr 01,	1,769.80
01, 2021		2021		2021	
Mar 01, 2021	34,931.70	Mar 01, 2021	33,303.90	Mar 01, 2021	1,717.50
Feb 01, 2021	32,443.15	Feb 01, 2021	34,803.60	Feb 01, 2021	1,731.60
Jan 01, 2021	33,121.05	Jan 01, 2021	30,565.50	Jan 01, 2021	1,852.70
Dec 01, 2020	34,177.10	Dec 01,	31,264.05	Dec 01,	1,899.60

		2020		2020	
Nov 01, 2020	31,718.80	Nov 01, 2020	29,609.05	Nov 01, 2020	1,784.80
Oct 01, 2020	29,428.45	Oct 01, 2020	23,900.90	Oct 01, 2020	1,887.20
Sep 01, 2020	29,841.75	Sep 01, 2020	21,451.80	Sep 01, 2020	1,902.60
Aug 01, 2020	30,595.15	Aug 01, 2020	23,754.35	Aug 01, 2020	1,978.60
Jul 01, 2020	30,872.45	Jul 01, 2020	21,640.05	Jul 01, 2020	1,985.90
Jun 01, 2020	30,063.25	Jun 01, 2020	21,370.15	Jun 01, 2020	1,810.00
May 01, 2020	29,296.95	May 01, 2020	19,297.25	May 01, 2020	1,760.70
Apr 01, 2020	28,669.30	Apr 01, 2020	21,534.50	Apr 01, 2020	1,701.00
Mar 01, 2020	27,319.20	Mar 01, 2020	19,144.00	Mar 01, 2020	1,596.60
Feb 01, 2020	29,310.25	Feb 01, 2020	29,147.15	Feb 01, 2020	1,571.80
Jan 01, 2020	30,775.30	Jan 01, 2020	30,833.60	Jan 01, 2020	1,593.80
Dec 01, 2019	30,121.50	Dec 01, 2019	32,161.65	Dec 01, 2019	1,529.30
Nov 01, 2019	30,975.50	Nov 01, 2019	31,946.10	Nov 01, 2019	1,478.10
Oct 01, 2019	32,319.75	Oct 01, 2019	30,066.25	Oct 01, 2019	1,521.80
Sep 01, 2019	31,134.50	Sep 01, 2019	29,103.15	Sep 01, 2019	1,479.60
Aug 01, 2019	29,257.35	Aug 01, 2019	27,427.85	Aug 01, 2019	1,529.40
Jul 01, 2019	29,065.95	Jul 01, 2019	28,876.00	Jul 01, 2019	1,437.80
Jun 01, 2019	29,546.05	Jun 01, 2019	31,105.20	Jun 01, 2019	1,419.60
May 01, 2019	29,850.40	May 01, 2019	31,375.40	May 01, 2019	1,316.90
Apr 01, 2019	30,336.90	Apr 01, 2019	29,764.80	Apr 01, 2019	1,291.70
Mar 01, 2019	30,321.40	Mar 01, 2019	30,426.80	Mar 01, 2019	1,304.50
Feb 01, 2019	29,262.85	Feb 01, 2019	26,789.90	Feb 01, 2019	1,322.70
Jan 01, 2019	29,800.55	Jan 01, 2019	27,295.45	Jan 01, 2019	1,331.60
Dec 01, 2018	30,516.65	Dec 01, 2018	27,160.20	Dec 01, 2018	1,287.70
Nov 01, 2018	30,126.25	Nov 01, 2018	26,862.95	Nov 01, 2018	1,231.80

	28,547.10		25,15	53.25			1 220 90	\ \	
Oct 01,		Oct 01,			Oct 01	,	1,220.80)	
2018		2018			2018				
Sep 01,	29,757.70	Sep 01,	25,1	19.85	Sep 01	,	1,201.90)	
2018		2018			2018				
Aug 01,	32,911.55	Aug 01,	28,00	51.75	Aug 0	l,	1 206 70	`	
2018		2018			2018		1,200.70	,	
Jul 01, 2018	31,007.25	Jul 01, 2018	327,70	54.15	Jul 01,	2018	1,233.60)	
			•						I
Jun	28,966.00	Jun 01, 1	2018	26,364	.20	Jun 0	1, 2018	1,26	50.20
01, 2018									
May 01,	28,814.30	May 01,		26,956	5.20	May	01,	1 2	10.90
2018		2018				2018		1,5	10.00
Apr 01, 2018	3 28,772.75	Apr 01,	2018	25,531	.60	Apr (01, 2018	1,32	25.30
Mar 01,	26,127.40	Mar 01,		24,263	3.35	Mar ()1,	1.20	22.20
2018		2018				2018		1,3:	55.50
Feb 01, 2018	3 26,513.70	Feb 01,	2018	24,263	3.35	Feb (01, 2018	1,32	23.70
Jan 01, 2018	27.127.30	Jan 01. 3	2018	27.379	0.45	Jan ()	1.2018	1.33	39.00

Table:2AVERAGE PRICES OF FMCG, BANKING and GOLD sectors:

AVERAGE PRICE OF FMCG SECTOR		AVERAGI BANKING	E PRICE OF SECTOR	AVERAG GOLD SE	AVERAGE PRICE OF GOLD SECTOR		
Years	Stock Price	Years	Stock Price	Years	Stock Price		
2018	29,099.00	2018	26,240.03	2018	1,272.90		
2019	30,166.06	2019	29,694.88	2019	1,413.58		
2020	30,172.33	2020	24,412.24	2020	1,789.38		
2021	36,191.68	2021	35,040.03	2021	1,795.08		
2022	40,630.92	2022	38,228.36	2022	1,809.92		
2023	46,260.50	2023	41,778.96	2023	1,963.98		

RESULTCHART CODE FOR FMCG SECTOR:

<div id="chart_div"></div>

Powered by LiveChatAI

<script type="text/javascript"

src="https://www.gstatic.com/charts/loader.js"></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></scr

<script type="text/javascript"> google.charts.load('current',

{'packages':['corechart']});google.charts.setOnLoadCallback(drawChart);

function drawChart() {

```
var data = google.visualization.arrayToDataTable([['Year', 'FMCG Sector Prices'],
    ['2018', 29099.00],
    ['2019', 30166.06],
    ['2020', 30172.33],
    ['2021', 36191.68],
    ['2022', 40630.92],
    ['2022', 40630.92],
    ['2023', 46260.50]
  ]);
var options = {
    titles 'EMCCC Sector Prices Over Verse' sumsTupo 'function'
```

```
title: 'FMCG Sector Prices Over Years',curveType: 'function',
legend: { position: 'bottom' }
};
```

```
var chart = new
google.visualization.LineChart(document.getElementById('chart_div'));
```

chart.draw(data, options);
}
</script>

CHART CODE FOR BANKING SECTOR:

```
<div id="chart_div"></div>
```

```
<a style="font-size:12px;color:#BDBDBD" href="https://livechatai.com/">Powered by
LiveChatAI</a>
<script type="text/javascript" src="https://www.gstatic.com/charts/loader.js"></script>
<script type="text/javascript" src="https://www.gstatic.com/charts/loader.js"></script>
<script type="text/javascript"> google.charts.load('current', {'packages':['corechart']});
google.charts.setOnLoadCallback(drawChart);
function drawChart() {
```

var data = google.visualization.arrayToDataTable([['Year', 'Price'], ['2018', 26240.03], ['2019', 29694.88], ['2020', 24412.24], ['2021', 35040.03], ['2022', 38228.36], ['2023', 41778.96]]);

```
var options = {
title: 'Banking Sector Performance',
hAxis: {title: 'Year', titleTextStyle: {color: '#333'}},vAxis: {minValue: 0, title: 'Price'},
chartArea: {width: '50%', height: '70%'}
};
```

```
var chart = new
google.visualization.LineChart(document.getElementById('chart_div'));
chart.draw(data, options);
}
</script>
```

CHART CODE FOR GOLD SECTOR:

```
<div id="chart div"></div>
   <a style="font-size:12px;color:#BDBDBD" href="https://livechatai.com/">Powered by
  LiveChatAI</a>
   <script type="text/javascript" src="https://www.gstatic.com/charts/loader.js"></script>
        type="text/javascript"> google.charts.load('current', {'packages':['corechart']});
<script
  google.charts.setOnLoadCallback(drawChart);
  function drawChart() {
 var data = google.visualization.arrayToDataTable([['Year', 'GOLD Sector Price'],
  ['2018', 1272.90],
  ['2019', 1413.58],
  ['2020', 1789.38],
  ['2021', 1795.08],
  ['2022', 1809.92],
  ['2023', 1963.98]
  1);
  var options = {
  title: 'GOLD Sector Price Over Years', curveType: 'function',
  legend: { position: 'bottom' }
  }:
       var chart = new
  google.visualization.LineChart(document.getElementById('chart_div'));
```

chart.draw(data, options);
}
</script>

GRAPH:1

SECTOR WISE GRAPHICAL REPRESENTATION

SECTOR WISE GRAPHICAL REPRESENTATION



INTERPRETATION FOR FMCG SECTOR:

The Fast Moving Consumer Goods (FMCG) sector witnessed robustgrowth in 2023(46.3k). The growth of this sector is driven by a number of factors, including increasing consumer spending power, changing life styles, and rising disposable income levels. It is also one of the most attractive sector for investors as it has high growth potential with lowcompetition. From 2018 to 2019 it was increased from 29.1k to 30.2k. From 2019 to 2020 there is no changes in stock price it remains constant. From 2020 to 2021 it was increased from 30.2kto 36.2k. From 2021 to 2022 it was increased from 36.2k to 40.6k. Every year-by-year it was increasing stock price.

INTERPRETATION FOR BANKING SECTOR:

Banking sectors stock price have increased recently because there is an increased demand for loans from businesses and individuals alike. But in 2020 it was decreasedvery badly. Investing in bank stocks can offer long-term opportunities, yet suitability varies among investors. Positioned in the middle of the risk spectrum, these stocks may be recessionprone and sensitive to interest rate changes. Careful consideration of individual risk tolerance and market conditions is advised before including bank stocks in an investment portfolio. In 2018 the banking sector stock price is 26.2k. From 2018 to 2019 there is slight difference in increasing (26.2k to 29.7k). From 2019 to 2020 the stock price has decreased (29.7k to 24.4k) because under performance in the sector compared to their bench mark. From 2020 to 2021 the stock price has been increased (24.4k to 35k). From 2021 to 2022

there is a slight increasing of stock price (35k to 38.2k). From 2022 to 2023 the stock price have been increased (38.2k to 41.8k).

INTERPRETATION FOR GOLD SECTOR:

GOLD sector stock prices are increasing robustly year -by-year because it is the safe heaven for investors during turbulent times. The stock price exhibited an increase from 1.27k in 2018 to 1.41k in 2019, followed by another increase from 1.41k in 2019 to 1.79k in 2020. From2021 to 2022 there is no changes in stock price (1.8k). From2022 to 2023 the stock price is increased (1.81k to 1.96k).

Graph:2 GRAPHICAL REPRESENTATION OF AVERAGE PRICING FOR THREE SECTORS:



INTERPRETATION:

In all three sectors (FMCG, BANKING, GOLD) stock prices increasing year by year. Highest stock prices are for the FMCG sector. Because each and every person depends on FMCG sector.

FMCG SECTOR AVERAGE PRICE - 35,420.08 BANKING SECTOR AVERAGE PRICE - 32,565.75GOLD SECTOR AVERAGE PRICE - 1,674.14

FINDINGS:

- There are many sectors which are increasing their stock price day-by-day and attracting investors to invest in their sectors. Amongst the best are FMCG, GOLD and Banking Sectors.
- Positive market trends and favorable consumer behavior can lead to increased sales, revenue growth and subsequently, a rise in FMCG sector, BANKING sector, GOLD sector.

- Investors find appeal in FMCG stocks due to their stability and consistent demand.
- Investors find appeal in GOLD for its role as a hedge against inflation and volatility.
- Investors find appeal in Banking sector stocks for potential dividends and growth tied to economic expansion. These sectors offer diversification benefits and cater to different investment objectives, attracting investors seeking a balanced and resilient portfolio.
- The best stock among gold, banking and FMCG depends on the investor's financial goals, risks tolerance and the overall investment strategy. Each sector serves different purposes- gold as a hedge, banking for dividend and growth, FMCG for stability. A well-diversified portfolio might include a mix of these sectors to balance risk and return based on the investor's preferences.

SUGGESTIONS:

- There are lot of benefits for the investors to invest in the FMCG, BANKING, GOLD sectors. Investing in the FMCG, banking and Gold sectors offers investors diversification, stability and potential for returns. FMCG provides resilience during economic shifts, banking offers exposure to financial markets, and gold serves as a hedge against inflation and uncertainty.
- Consider investing in diverse sectors like FMCG, Banking and Gold as their stock prices have shown consistent annual increases, providing a well-rounded investment approach.
- Investors often consider investing in the fast-moving consumer goods (FMCG) sector due to its reputation for stability and a consistent demand for their products.
- Investors can benefit from banking sector stocks by capitalizing on potential dividends, capital appreciation and the sector's sensitivity to economic growth. Banks often distribute dividends, providing a stedy income stream. Moreover, as the economy expands, the banking sector tends to thrive, contributing to stock price appreciation. Additionally, strategic investments in well-managed banks can offer long-term value as they navigate various economic conditions.
- Gold is considered a prudent investment for investors due to its role as a hedge against inflation and market volatility. It tends to retain its value during economic uncertainties, providing a store of value. As a tangible asset, gold can act as a safe haven, offering stability when other investment may be affected by market fluctuations. Including gold in a diversified portfolio helps manage risk and enhances overall financial resilience for investors.

References:

Jingyi Shen & M.Imair Shafiq "Short term stock market price trend prediction using a comprehensive deep learning system" 28th August 2020, Journal of Big data 7, Article No:66, Springer

Stock Market Price Trend Predication Using Time Series Forecasting Prabhat Patnaik 27july 2022, Analytics vidhyaPredicting stock prices using Machine Learning by Katherine 19th December 2023, MLOps Blog- Guide to building ML platform

Ritika Chopra,Gagan Deep Sharma, University School of Management Studies,Guru Gobind Indraprastah University, Dearaka Sector 16-C,New Delhi 110078,India.

Application of Artificial Intelligence in Stock Market Forecasitn: A Critique, Review and Research Agenda, J. Risk Financial Manag, 16 October 2021 / Accepted: 18 October 2021 / Published: 4 November 2021

https://livechatai.com/line-graph-maker

file:///C:/Users/ramas/Downloads/AI%20(2).pdf

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orporating%20social%20and%20news%20(1).pdf

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Order_Information_of_Time_Series%20(1).pdf

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