Patter Effects Labs. Pvt. Ltd. No. 42, Third floor, R.K. Colony, JP Nagar 2nd Phase, Bangalore – 560078 Karnataka Corporate Identification Number (CIN): U74999KA2017PTC103264, ROC Bangalore



CERTIFICATE

This is to certify that **Ms. Vinutha** student from Acharya Institute of Technology, Bangalore, has done her project titled "Study on Technical Analysis of Selected Stocks of NSE Fifty" in our company "Pattern Effects Labs Private Limited" from January 15th 2018 to March 24th 2018.

We have noticed that, during the period, she has shown keen interest in her assignments and was also regular in attendance.

For Pattern E BANGALORE Harshitha S Human Resource,

Pattern Effects Labs Pvt. Ltd. Bangalore, India



Date: 15/05/2018

CERTIFICATE

This is to certify that Ms. Vinutha J bearing USN 1AZ16MBA77 is a bonafide student of Master of Business Administration course of the Institute 2016-18 batch, affiliated to Visvesvaraya Technological University, Belgaum. Project report on "A Study on Technical Analysis of Selected stocks of Nifty Fifty" Bangalore is prepared by her under the guidance of Dr. Virupaksha Goud G, in partial fulfillment of the requirements for the award of the degree of Master of Business Administration, Visvesvaraya Technological University, Belgaum, Karnataka.

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Signature of Internal Guide

Signature of HOD Head of the Department Department of MBA Acharya Institute of Technoloc./ Coldevanahlli, Bangalore-560 10./

29Merl

Šignature of Principal PRINCIPAL ACHARYA INSTITUTE OF TECHNOLOGY SOLDEVANAHALLI, BENGALURU 560 107

DECLARATION

I, VINUTHA J bearing USN 1AZ16MBA77 hereby declare that the project report with reference to "A Study on Technical Analysis of Selected Stocks of NSE Nifty Fifty" prepared by me under the guidance of Dr. Virupaksha Goud Faculty, MBA, Acharya Institute Of Technology and external assistance by Ms. Harshitha H.R. at Pattern Effects Labs Pvt Ltd.

I also declare that this project work is towards the partial fulfillment of the university regulations for the award of degree of Masters of Business Administration by Visvesvaraya Technological University, Belgaum.

I have undergone project for a period of ten weeks. I further declare that this report is based on the original study undertaken by me and has not been submitted for the award of any degree/diploma from any other university/Institution.

Place: Bangalore Date: 15/05/2018

HARP

Signature of the student

ACKNOWLEDGEMENT

I deem it a privilege to thank our Principal Dr. Sharanabasava C Pilli, Dr. Mahesh, Dean Academics and our HOD Dr. Nijaguna for having given me the opportunity to do the project, which has been a very valuable learning experience.

I am truly grateful to my internal research Guide Dr. Virupakasha Goud, MBA, Acharya Institute Of Technology and external guide Harshitha H.R. at Pattern Effects Labs Pvt Ltd Bangalore, , for their research guidance, encouragement and opportunities provided.

I wish to thank all the respondents from the firms who spent their valuable time in discussing with me and giving valuable data by filling up the questionnaire.

My sincere and heartfelt thanks to all my teachers at the department of MBA, Acharya Institute Of Technology for their valuable support and guidance.

Last, but not least, I want to express my deep appreciation to my parents for their unstinted support.

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TABLE OF CONTENT

Chapter no	Titles	Page no		
	Executive summary	1		
Chapter 1	Introduction	2-15		
1.1	Introduction			
1.2	Industry profile			
1.3	Company profile			
1.3.1	Promoters			
1.3.2	Vision mission and Quality policy			
1.3.3	Service provided			
1.3.4	Area of operations			
1.3.5	Infrastructure facility			
1.4	Competitors			
1.5	SWOT analysis			
1.6	Future growth and prospectus			
Chapter 2	Conceptual Background & Literature Review	16-36		
2.1	Theoretical Background of the study			
2.2	Literature Review			
Chapter 3	Research Design	37-40		
3.1	Statement of the problem			
3.2	Need of the study			
3.3	Objectives			
3.4	Scope of the Study			
3.5	Research methodology			
3.6	Limitations			
3.7	Chapter Scheme			
Chapter 4	Analysis and Interpretation	41-53		
Chapter 5	Summary of Findings, Conclusions & suggestion	54-57		
5.1	Findings			
5.2	Conclusions			
5.3	Suggestions			
	Bibliography	58-59		

LIST OF TABLES

Table no	Titles
2.1	Example of SMA Calculation
2.2	Example of RSI Calculation
5.4.1	Technical tools result of Tata Motors
5.4.2	Technical tools result of Bharti Airtel
5.4.3	Technical tools result of Cipla
5.4.4	Technical tools result of Tata Steel
5.4.5	Technical tools result of Wipro

LIST OF GRAPHS

Figure no	Titles				
2.1	Candle stick chart pattern				
2.2	Line chart pattern				
2.3	Support and Resistance chart pattern				
2.4	Cup and Handle chart pattern				
2.5	Double Bottom chart pattern				
2.6	Double Top chart pattern				
2.7	Falling wages chart pattern				
2.8	Nifty 50 chart of SMA				
2.9	Nifty 50 chart of Bollinger Bands				
2.10	Nifty 50 chart of MACD				
2.11	Nifty 50 Chart of RSI				
2.12	Nifty 50 chart of TRIX				
4.1	SMA of Tata Motors				

4.2	Bollinger Bands of Tata Motors
4.3	MACD of Tata Motors
4.4	RSI of Tata Motors
4.5	TRIX of Tata Motors
4.6	SMA of Bharti Airtel
4.7	Bollinger Bands of Bharti Airtel
4.8	MACD of Bharti Airtel
4.9	RSI of Bharti Airtel
4.10	TRIX of Bharti Airtel
4.11	SMA of Cipla
4.12	Bollinger Bands of Cipla
4.13	MACD of Cipla
4.14	RSI of Cipla
4.15	TRIX of Cipla
4.16	SMA of Tata Steel
4.17	Bollinger Bands of Tata Steel
4.18	MACD of Tata Steel
4.19	RSI of Tata Steel
4.20	TRIX of Tata Steel
4.21	SMA of Wipro
4.22	Bollinger Bands of Wipro
4.23	MACD of Wipro
4.24	RSI of Wipro
4.25	TRIX of Wipro

EXECUTIVE SUMMARY

The project report of "a study on technical analysis of selected stocks of selected stocks of NSE Nifty fifty" is to analysis about the technical indicators to identify buying signal and selling signal and performance of selected companies the selected companies are Tata motors, Barati ,Airtel ,cipla Tata steel, Wipro.

The main objective of the study is to know the technical analysis of selected industries in the stock market and to know the which is the best indicator of selected industries. To analyse all the graphs, technical analyse is used. In the technical analysis, the technical indicators of different industries. These are study to take a best invest decisions.

The project was undertaken at Pattern Effects Labs Pvt Ltd. It deals with investment advisory and brokerage services. They provide the most comprehensive investment advisory services for the full range of capital market products. The objective of in plant training is to enable a better understanding of working in the organization and to develop a comparative approach between the theory and practical application.

The study has been undertaken on the topic of study on technical analysis of selected stocks of NSE nifty fifty to know the concept of technical analysis. The project report covers company profile, industry profile, theoretical background of the study, data analysis and interpretation, and provides recommendations based on the findings and the conclusion. It also contains the financial statements of the company.

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

STOCK MARKET:

Securities market or equity market is a place where the shares of different companies are come to buy and sell. This is only place companies buy the shares and other securities and also the consumers and vendors can deal in shares or other forms of securities is called stock exchange.

The stock exchange is the place of replace, stock dealers and investors are capable to purchase and sell equity shares, debentures and securities. Stock connections is also present services for problem and revival of securities and new financial instrument, and assets transactions mutually with the payment of income and dividends. Securities dealed on a stock exchange contain stock sold by purchased company, collective speculation securities of Stock exchangers frequently task as "nonstop sale" markets, with consumers and sellers consummate dealings at the location, as the type floor of exchange.

The maximum vital is that there is a relevant area, very little for record maintenance, but the transaction volume is a lot lower because the cutting-edge market uses electronic networks, in an effort to give faster speeds and better transaction expenses. The change's trading sports are managed by the exchanges of investors and buyers.

History of stock market:

In the twentieth century in France, alternate dealers of alternate have been worried approximately overseeing and controlling agricultural groups' duties for the bank's interests. A representative query is that inside the late 13th century, the West Flanders Product Agents mentioned the area of a man named Van der Beurze, and in 1409 they modified the "Brugse Beurse". The hobby, the corporation of what's the pastime, till then, a informal birthday party, all matters considered, the Vander_ Beurze family who labored in Antwerp at that point had these social sports there; Van der Beurze owned Antwerp, which is the Most of the time the shipper's moat, as an crucial alternate sellers. This idea spread fast in Flanders and in the nearest country. "Birchan" is frequently open in Ghent and Rotterdam.

In practise for the 13th century, Venetian agents and traders began to alternate authorities securities. In 1351, Venetian control banned the dissemination of subjects and it is expected to reduce the price of government reserves. Dealers from Pisa, Genoa, Verona and Florence also commenced to exchange government securities and prepare for the fourteenth century. This is possible on the basis that these are independent city-states, no longer led via social hierarchy, but alternatively a powerful subject matter hall. The Italian organization changed into additionally the primary to problem their first shares. England and Low Countries have been organized inside the sixteenth century.

At present, there are inventory exchanges that create their own goals and create economies for various purposes and functions. The largest markets in the international are the US, Britain, Japan, India, Pakistan, China, Canada, Germany, France, South Korea and the Netherlands.

Function and purpose of stock market:

The inventory trading shape is one of the maximum serious approaches for groups to raise finances. At the identical time, it also has an duty market. But average, those markets are greater forcing, however they've no longer been publicly exchanged. It enables organizations to alternate inside the open market and to raise additional budgetary capital to expand via modern necessities for enterprise responsibility within the publishing marketplace. Operational obligation for the liquidity of speculators allows their holders to provide securities quickly and easily. This is an thrilling detail of putting sources into stocks, compared to unique liquidity investments inclusive of belongings and different indivisible sources. A few organizations correctly growth liquidity by replacing their strict costs.

History has validated that the expenses of stocks and one-of-a-kind sources are an fundamental part of the monetary behavior procedure and can impact or turn out to be a image of social temperament. The rising inventory trade is thinking about turning into a great economic economic system.

The transaction additionally acts as a clearing residence for each trade, which means that they accumulate and offer securities and ensures to investors. This can keep away from the danger of an person purchaser or dealer that the counterparty may additionally breach.

There are two types of financial experts: folks that recognize India's venture investment possibilities and people who without a doubt will not. A inventory alternate is wherein consumers and inventory dealers meet in actual or overall rationale and motive. Members in the marketplace may be small human beings or any massive backup administrator who arranges anywhere. Financial professionals make needs on inventory buying and selling specialists who carry out these purchases and offer orders. Stocks are recorded and exchanged in inventory trading. Some transactions have been found bodily, and the sparkling open opposition framework completed the interplay on the alternate web site. The opportunity transaction is a digital transaction, even though a PC machine become created to exchange electronically. The entire framework is pushed through preparations and the necessities set with the aid of buyers are coordinated therefore with destiny requirements. This framework gives a more direct issue because it indicates all the acquisition and quotation requests. Most inventory exchanges in India are in two extremely good stock transactions, the Bombay Stock Exchange and the National Stock Exchange (NSE). In terms of marketplace capital structure, BSE and NSE have a place within the top five stock exchanges that create the sector financial system. In 14 stocks buying and selling in rising economies, as of September 2017, Mad Cow Disease still ranks fourth, advertising capitalization amounted to at least one.538 million rupees, NSE ranked fifth, and displayed capital of 108.661 million rupees.

National Stock Exchange



National Stock Exchange of India Limited

The National Stock Exchange is placed in Mumbai. It was joined in 1992 and twisted into a stock trade in 1993. The fundamental cause for this trade was to acquire the straightforwardness the securities connections or exchanges. It began its tasks in the discount obligation advertise in June 1994. The value advertise section of the National Stock Exchange initiated its activities in November, 1994 while in the subordinates portion, it began it tasks in June, 2000. It has totally current and completely mechanized screen based exchanging framework having in excess of two lakh exchanging terminals, which gives the office to the financial experts to exchange from everyplace in India. It is assuming an essential part to

change the Indian value market to bring more straightforward, incorporated and proficient securities exchange. As on July 2017, after the market capitalization above than Rs 108661 billion. The aggregate 1635 organizations are recorded in National Stock Exchange. The prevalent record of NSE, The NIFTY FIFTY is to a grand degree utilized by the speculator all through India and in addition globally. NSE was firstly presented by driving Indian money related establishments. It offers exchanging, settlement and clearing administrations in worth and responsibility showcase and furthermore in subordinates. It is India's one of biggest trades universally in real money, cash and record alternatives exchanging. There are number of local and worldwide organizations that hold stake in the trade. Some household organizations incorporate GIC, LIC, SBI and IDFC ltd. Among remote speculators, few are City Group Strategic Holdings, Mauritius restricted, Norwest Venture Partners FII (Mauritius), MS Strategic (Mauritius) constrained. The document based settlement framework was supplanted by electronic devise screen based framework and agreement of exchange exchanges be done on time. NSE additionally made National Securities Depository Limited (NSDL) which allowed financial experts to hold and deal with their offers and ,s electronically through demat account. A speculator can hold and exchange even one offer. Presently, the physical treatment of securities dispensed with so the odds of harm or losing of securities diminished to least and to hold the values turn out to be useful. The National Security reservoir Limited electronically security taking care of, accommodation, straightforwardness, low exchange costs and proficiency in exchange which is influenced by NSE, has improved the compass of Indian securities exchange to residential and in addition worldwide financial specialists.

Bombay Stock Exchange (BSE):



The BSE inventory market is founded in Mumbai, Dallal Street. The BSE set up in 1875 become the first inventory alternate in Asia and the fastest inventory change within the international, with an intermediate trading time of 6 microseconds. BSE is the eleventh biggest stock alternate within the international. As of 2017, its total marketplace cost is one hundred thirty five.84 trillion US dollars. More than 5,500 establishments are recorded on BSE free of price.

History of BSE:

BOMBAY STOCK EXCHANGE is Asia's most important skilled transaction. The area wherein these traders collect has generally modified to house the increasing number of delegates. When the remaining part have become the ultimate a part of the Dalar Avenue in 1874, in 1875 it became an executive affiliation called the "Agrarian Shares and Dealers Association". In 1986 it hooked up the BSE SENSEX file, a charity of mad cow disorder as a way of measuring the overall execution of transactions. In 2000, BSE used this record to open its subordinate advertisements and exchanged SENSEX potential contracts. SENSEX alternatives had been released with fee subsidiaries in 2001 and 2002, expanding the trade section of BSE.

This automated display-building exchange phase is known as BSE Online Transactional Lightning (BOLT) with 8 million requests according to day. The BSE additionally proposes a group of alternate-based totally internet-exchange frameworks to assist monetary professionals everywhere on Earth exchange statistics in the course of the BSE segment.

BSE SENSEX (Bombay Stock Exchange Sensitivity Index), in any other case referred to as BSE 30 or simply SENSEX, is a listing of free marketplace-weighted stock exchanges that keeps data on the Mumbai Stock Exchange by way of 30 well-installed and economically solid establishments. The 30 marketplace segments which are a part of the biggest and maximum green exchange of stocks are examples of various current components of the Indian monetary gadget. Distributed on January 1, 1986, BSE SENSEX is absorbed into the beats of the Indian residential stock trade.

Trade:

A transaction is a inventory trade, this means that that the inventory or secure cash is converted from service provider to customer. This calls for that both meetings recognize the prices. The inventory raised the keenness for the term for special association. Traders in funding buying and selling systems can build everywhere on the planet from small personal stock currency specialists to accurate merchant speculators.

Some transactions are bodily regions and are contacted at the alternate floor through a approach called open rumbling. This strategy is used as a department of some inventory

transactions and commodity transactions, and includes companies that input verbal quotes and rates at similar instances. Another stock transaction is a simple transaction made via a merchant's PC gadget that trades via the gadget. The case of this form of transaction is Nasdaq. Potential shoppers offer strict expenses for stocks, and capacity merchants additionally spend problematic costs on similar stocks. Purchasing an commercial or imparting an advertisement way that you will one by one recognize any approach fee or supply fee of the inventory.

TECHNICAL ANALYSIS

It is essential to shape, outlook on the possible pattern of the general market, and it is useful to have some thought of how to approach choosing singular stocks. Normally, all speculators might want their ventures to acknowledge quickly in cost, yet stocks, which may fulfill this desire, have a propensity to joined by a generously more prominent measure of hazard then numerous financial specialists are ordinarily ready to acknowledge. In any case, comprehend that financial specialists can be exceptionally mindful with regards to stock proprietorship. dedicated investigation is the consumption of numerical arrangement created by advertise action, for example, cost and volume, to anticipate future value patterns. The strategies connected to any market with a complete value history. Basically, not only specialized assessment is led by contemplating graphs of history value development. A wide range of strategies and devices are utilized as a part of specialized examination, yet they all depend to the supposition that value examples and patterns exist in business sectors, and they can be recognized and misused.

What's more, in spite of whether stock costs totally took after an arbitrary walk, individuals would have the power to persuade themselves that there are e designs having a prescient esteem. It has twisted out to be increasingly mainstream, as it offered a boundless arrangement of devices and flags and appeared to be an intriguing technique for showcase examination. It has been demonstrated that stock costs more often than not roughly take after an irregular walk design. Clinicians have portrayed dissimilar manners by which individuals manage irregularity. Moreover, advertise members might be accountable to crowd conduct. Specialized examination is appropriate to stocks, lists, items, fates or any tradable gadget where the cost is impacted by the powers of liberated market activity. In addition, some specialized experts incorporate volumes or open figures of intrigue with their investigation of the value activity. Financial analysts have generally been cautious with the estimation of a specialized

examination, which demonstrates the hypothesis that productive markets that do not have a technique should allow speculators and traffickers to influence surprising returns except for disarticulation.

The Technical Analysis is an investigation of the share exchange system that considers the factors identified with the free market activity of the shares. The specialized examination is a technique to evaluate values by dissecting the knowledge produced by the changing's of the storefront, for example, past costs and volume. Experts do not strive to measure the innate estimation of values, but use schemes and different devices to recognize designs which is recommends for changing's. The choice made on the basis of a specialized investigation is made simply after deducting a pattern and judging the future development of the stock according to the pattern. The specialized analysis accepts that the market is productive and the cost has effectively contemplated alternative variables identified with the organization and the business. It is the result of this assumption that many think that specialized research is a device, that it is powerful to contribute here and now.

INDUSTRY PROFILE AND COMPANY PROFILE 1.2 INDUSTRY PROFILE

NIFTY 50 statistics are India's benchmarks for India's National Stock Exchange Extended Base Stock Exchange India Value Show. It entails the everyday weights of 50 Indian business enterprise shares in 12 regions and is one in every of two basic stock files used as a part of India and the other is BSE sensex.

Nifty is supervised and supervised by means of the Indian Record Management and Project (IISL), which is a completely-owned subsidiary of NSE Strategic Investment Ltd. The Institute of International Space Law promotes and approves the assessment of value information with requirements and negative countries till 2013. Nifty 50 turned into released in April 1996 and is certainly one of Nifty's many inventory facts.

The Nifty 50 Index has dealt with the business as India's largest single forex-related challenge, its environment entails: exchange trade assets (inland and offshore), trade trade fate and options, different document shops and OTC subsidiaries (commonly at sea). Nifty 50 is the

simplest trade settlement within the world. WFE, IOMA and the FIA profile all receive NSE control positions.

NIFTY 50 covers 12 parts of the Indian financial system (as of October 7, 2017) and introduces the Indian marketplace to task capital managers. In 2008-12, because of the rise of NIFTY Bank, Nifty IT, Nifty Pharma, Nifty Serv sect, Nifty Next 50 and different industries, the quoted charge of NIFTY 50 Index NSE advertisements dropped from sixty five% to 29%.

The NIFTY 50 list is a loose buoy show uppercase listing. This list is based totally initially in the marketplace capitalization technique. From June 26, 2009, the calculation become modified to a unfastened-float system. The benchmark time-frame for the CNX Nifty listing changed into November three, 1995, representing the one-year outcomes of the duties of the inventory exchanges of the National Stock Exchange. The primary estimate of the report has been set at 1,000 and the simple capital is two.06 trillion rupees.

In this survey, the stocks selected from the Nineteen Fifties were Tata Motors (Automotive Industry), Bharti Airtel (Telecommunications Industry), Cipla (Pharmaceutical Industry), Tata Steel (Metal Industries), and Wipro (Information Technology).

1.3 COMPANY PROFILE



Company Name:	PATTERN EFFECTS LABS PRIVATE LIMITED
Date Registered:	24-05-2017
City:	BANGALORE
Class:	Private
Category:	Company Limited by Shares
Status:	Active
Authorised Capital:	1000000
Paid Up Capital:	540700

State:	Karnataka
Activity:	Business Services
Registered office:	# 42, 7th Cross, 24th Main, J.P. Nagar 2nd Phase, Bangalore-560078

Pattern Effects labs is a new business built up on 24th of May, 2017 which chip away at securities exchange particularly on choices. As of late it is additionally building up a product for getting customers and furthermore for general society which is a paid administration. To build up that product there must be a considerable measure of specialized and also key investigation is required and the organization is as of now chipping away at it. The parent organization is EDINTURE SERVICES.

About Edinture

We are a Skill advancement organization established by Industry veterans to satisfy ability hole existing in showcase today. We represent considerable authority in Entry Level Talent Management arrangements cutting over the entire lifecycle of Sourcing, Assessments, Training and On-boarding. Our creative and redid arrangements will help you in radically chopping down the cost and time of procuring and preparing. Our conclusion to-end Talent Management Services incorporate 'Contract the Assessed', 'Contract and Train' and 'Prepare the Hired'.

We likewise furnish learning improvement benefit by working with open, private, and schools in the K12 school segment. The Education Company works straightforwardly with school executives, educators, and care staff to explain the most squeezing discipline challenges in schools today.

1.3.1 PROMOTERS

ShashikumarJagatageri Math Shiv Shankar Das.

1.3.2 VISION, MISSION AND QUALITY POLICY VISION

• To accomplish and manage showcase administration, Pattern impacts should go for finish consumer loyalty, by joining its human and innovative assets to give world class quality administrations.

• In the procedure Pattern impacts should endeavor to meet and surpass consumer loyalty's and set industry measures.

• Their esteems and vision of achieving all out capacity in their adjusting has filled in as the building obstruct for making extraordinary money related undertaking, which stands strong on their fortifications of monetary quality their organizations.

MISSION

• "Our mission is to lead and favored administrations supplier to our clients, and we plan to accomplish this initiative by building an inventive, venturesome and skill driven association which will most noteworthy principles of administrations and business morals"

QUALITY POLICY

- Guaranteeing clear relationship with its customers by issuing Build in-house frames.
- In request to keep up guarantees with its clients it has made an accomplice relationship by methods for its speculator's administration operators and merchants help.
- offer better nature of work for all its staff and outfit them with adequate data and aptitudes in order to respond client's needs.

• Strive to be reliable establishment of significant worth supplementary money related items, administrations and constantly coordinate the people and association in a making sensible option of the same.

1.3.3 SERVISE PROVIDED

Ability Supply Chain Management

Fresher Training and Recruitment

We represent considerable authority in Entry Level Talent Management arrangements cutting over the entire lifecycle of Sourcing, Assessments, Training and On-boarding. Key Benefits of this program are as per the following

- Up to 90% decrease in Fresher procuring costs
- Get prepared + Assessed fresher at insignificant expenses
- Reduction in cost for greenfield preparing of fresher over all specialty abilities
- Get beneficial fresher from day 1

Competency Assessment

Our Online Competency Assessment is one-of-its-kind administration which gives logical bits of knowledge on the specialized capability levels of representatives

- · Get bits of knowledge into capability levels of workers over numerous measurements
- Analyze preparing viability
- Plan preparing and reskill prerequisites

Skill Development

Aptitude Development For Technical and Business Schools

Overhaul abilities to universal principles through huge industry contribution and create important systems for gauges, educational programs and quality confirmation. Give showcase confronting expertise advancement bringing about quicker retention into ventures.

Quick Mobilization and Recruitment Service

We spend significant time in selecting tasks for sourcing the best ability in Information Technology for customers . We can give IT experts able and talented in the most recent innovation and best practices. Key advantages of this program are as per the following;

- Get up to 90% change rates
- 100% match of hopeful profile with necessity
- Candidates met by industry SMEs before sending them for interviews with customers
- Preliminary aftereffects of Interviewed competitors crosswise over five measurements

School advancement and administration

We oversee obtainment exercises for the school division, empowering schools, focuses, to rapidly find important items and administrations in an auspicious way and at aggressive costs. This territory underpins schools by getting instructional supplies, course readings, furniture, hardware, and related administrations; sets up contracts through the aggressive and noncompetitive process and through helpful concurrences with national consortiums; reviews responsible gear all through the school division; and keeps up standard hardware rules for preparing new or revamped schools with the important hardware and furniture.

Innovation answers For Schools

Edinture is a head supplier of value instructive administrations offering world-class answers for upgrade the Online instructive condition internationally. The one-stop-site for advancement, e-

learning, correspondence arrangements, Edinture works with experienced teachers and technocrats over the globe in planning and creating computerized instructive assets, gateways and learning administration frameworks for enhanced correspondence and simple access to syllabus-particular lessons on dissimilar subjects. Be it computerized content on 3D, web based mentoring administrations, ICT courses or School Online Information Systems, every one of our items, instructive apparatuses, preparing and bolster material and administrations are all around examined and tried, giving fitting answers for make understudy progress at all levels

1.3.4 AREAS of OPERATION

Head office-Pattern Effects Labs Private Limited R.K Colony second Phase, J P Nagar Bangalore.

1.3.5 INFRASTRUCTURE FACILITIES

Online openness to represents exchange to offer extra solace to a specific and business speculators. The latest inventive ability outlined exclusively to their Demat section and innovative up degree is SPEED-E which is in charge of quick and fast and furthermore superbly conveyance of exchanges. Wide national frameworks make their productivity accessible to everybody.

offices Management benefit gives building support administrations, Lighting at work region, Work zone appearances, Pantry Services, Landscape upkeep administrations.

1.4 COMPETITORS:

- Highesto Common Factor Private Limited
- Autozo Technologies Private Limited
- Pagonivel Infotech Private Limited
- Itransform Private Limited
- Xobox India Private Limited
- Dynacommerce India Private Limited
- Cogebi Insulation India Private Limited

1.5 SWOT ANALYSIS

STRENGTH

• Well set up corporate frame.

- Many speculation choices for the customers.
- The best speculation designs depend on bona fide investigate.
- Poorer business and other administration
- all around qualified and faithful staff.

WEAKNESS

- Time devouring
- Lack of mindfulness among the general population

OPPORTUNITIES

- In India, there is a completely open market accessible and furthermore capital market.
- Updating new innovation help to give great administration to financial specialists at better speed with productivity.
- Increase in spending energy of the speculators.

TREATS

- Decrease in financier cost.
- Increase in rivalry.
- Instability in securities exchange in India.

1.6 FUTURE GROWTH AND PROSPECTS

- Total riches held by people in India has developed by 10% to achieving a characteristic of Rs.344 lakh crores in FY2018.
- Individual riches in Financial in monetary resources developed by 14.67% to reach achieving an estimation of Rs.209lakh crores in FY2018.

• Individual riches in physical resources remained at Rs. 147 lakh crores backing off to a minor rate of 5.99%.

CHAPTER 2 CONCEPTUAL BACKGROUND AND LITERATURE REVIEW

2.1 THEORITICAL BACKGROUND OF THE STUDY

OVERVIEW of TECHNICAL ANALYSIS

Technologists aren't seeking to quantify the innate respect of protection, but use outlines to distinguish designs that could advocate destiny moves. This is a method for evaluating securities that creates insights through evaluation of changes, cases, beyond expenses, and quantities. Technical analysts or professional inspectors consider that documented shares and market execution suggest future overall performance. The 'technical' analysis has gradually received reputation in latest years due to the fact more and more humans accept as true with that the real implementation of reserves is a strong signal of destiny implementation. Individuals who use fundamental exams pick out destiny improvement by way of comparing monetary records during the last few quarters and years, and feature usually been even greater effective in beyond organizational execution. The difference lies inside the notion of professional investigators that the motion of securities is illustrated by means of specifically unsurprising patterns and examples. These styles retain till matters alternate the pattern, and till this change occurs, the fee level isn't sudden. Financial specialists use their approach to securities charts to efficaciously trade securities with out know-how the obligations of the agency.

DOW THEORY

The idea of Charles Dow Jones, editor-in-chief of The Wall Street Journal, forms the premise of today's technical analysis. The Dow Jones Industrial Average (Chart Dow) has created the best blue chip industry average index and is the best stock. He believes that the midpoint behavior reflects the expectations and concerns of the entire market. The behavioral design he sees applies to all business sectors from all over the world.

During this time, the market changed more than one time period

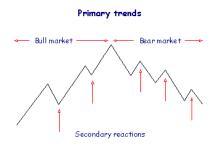
• The first is the daily change due to neighborhood reasons and purchase and supply adjustments (ripples) at specific times.

• Auxiliary development covers average time from days to weeks, with an average of six to two months (Wave).

• The third step is a huge rolling, covering an average of 6 to 4 years ranging from 6 months to 4 years. (wave).

• The bull market's upward development involves a market that may have been the most recent period, hindered by an optional response. The long-term recession of the bear market is hindered by the selective revitalization. These developments are called basic patterns.

Primary Phases of Changings



Changes inside the spinoff commonly repeat one-0.33 to 2-thirds of the predominant traits because the ultimate minor change.

For small transactions, volatility is crucial for each day volatility, however analysis of vast market changes is irrelevant.

The Great Wall of Primary School has three stages

Bull marketplace

• With the expansion of commercial enterprise reputation, the bull marketplace started to inspire self-guarantee.

• Prices rise because the market reacts to extended returns. Uncontrolled speculation dominates the market, and fee increases are based totally on hopes and opportunities in place of real consequences.

Bear marketplace

• The undergo market is built on hopes and possibilities to desert ongoing luxurious expenses.

• Due to insufficient profits, expenses have fallen.

• Embarrassing proposals will retain as theorists war to complete their positions and promote securities no matter their authentic esteem.

3. Different markets

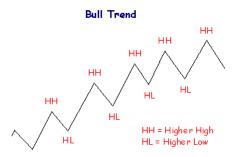
• Minor reactions may additionally take the form of "lines", which may be tolerated for weeks. Prices range inside a slim range of round five percent.

- Above the higher restrict of the line marked accrual and previous charge;
- Decrease so long as possible suggests the automobile and the terrible cost;
- Volumes are used to hold price breakthroughs.

Bull trend

The difference among the bull market fashion is that every rebound exceeds the purpose of a rebound within the beyond. The drop among rallies ended at the lowest factor of the preceding drop.

Successive higher highs and higher lows



The beginning of an uptrend is flagged when value makes a higher low (trough), trailed by a rally over the past high (top)

begin = higher Low + break above prior High.

The end is motioned by a poorer high (top), trailed by a decrease beneath the past low (trough):

close = poorer High + break below previous Low.

Bull Trend: Start and End

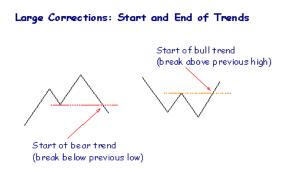


Bear Trends:

A bear trend begins toward the finish of a bull trend: when a rally closes with a poorer pinnacle and afterward withdraws beneath the past low. The finish of a bear drift is indistinguishable to the start of a bull incline. Each progressive rally neglects to infiltrate the high purpose of the past rally. Each decay ends at a inferior point than the first decrease.

Large Corrections: A huge revision happens when value falls underneath the past low (during a bull incline) or where value transcends the past high (in a bear trend).

Successive poorer highs and poorer lows



A bull trend begins when value energizes over the history high,

A bull trend closes when value decays beneath the past low,

A bear trend begins toward the finish of a bull pattern (and the other method around).

HOW TECHNICAL' ANALYSIS IS DONE

Technical analysis is performed with the aid of recognizing the version of beyond improvement and then the use of it as a device to use technical analysis gears to predict the potential price of the inventory.

Assumptions for technical evaluation

1. According to the generation's analysis of advertising estimates that stocks are determined through open market pastime of stocks, stocks are managed via a small wide variety of components that can be balanced or insignificant, as opposed to through herbal estimates of shares.

2. There are regularly beneficiant timetables for inventory charges, so if it's miles now a advantageous fashion market, then small corrections could be treated as opportunities for technical analysts to shop for.

3. Technical evaluation is based extra on the presentation of relevant statistics such as inventory value exchanges, overall populace assumptions, and then statistics in price range bulletins together with currency records or predominance and disaster bills.

4. Value In the fashion of generation inspection, value development is widespread as a style of adoption. This means that when a model is established, the future value growth won't be distinguishable from the model, not in opposition to it. Most professional exchange structures rely upon this skepticism.

5. History often returns to itself; some other primary concept of technical evaluation is that records tends to go back to itself, mainly price improvement. The dreary idea of fee development is taken into consideration to be an vital part of the show of brain studies; at the stop of the day, the advertising members will make a predictable response to the relative increase in the marketplace after a time frame. Technology's evaluation uses a chart pattern to analyze advertising and marketing improvement and understanding styles.

It may then be said that the technical evaluation does not depend on any reasonable system, however alternatively is based on using inventory expenses developed inside the past to are expecting destiny expenses.

CHART PATTERN

1 Candlestick charting:

Investors seem to have a "worship/hatred" connection to the candle chart. People either like them and often use them, or they may be completely distorted by using them.

Candlestick charts are examples. The inexperienced candle indicates that the stock rate has risen, and the crimson candle shows that the stock rate has fallen.

2.1 Candlestick charting



Investors seem to have a "worship/hatred" connection to the candle chart. People both like them and often use them, or they're absolutely distorted by using them.

 \checkmark Green candle: This is a bullish sample - the inventory starts at (or near) it's small, and is closed round its excessive function.



 \checkmark Red Candles: Different from the above pattern, that is a bearish pattern. The purple candle indicates that the inventory charge has fallen from a excessive position and dropped sharply to close at a low stage.



 \checkmark Hammer: This optimism will simplest occur after the inventory price falls for numerous consecutive days. A small body subsequent to a large variety acknowledges a hammer. Hammer mode indicates that the opposite of the downtrend is in development.

 \checkmark Doji: Doji A go is formed while one day's leap forward and loss of life are the equal. Doji showed uncertainty.

2. Line Chart:

The maximum vital issue within the chart is a line chart because it simplest suggests the very last value in a certain time frame. This line is shaped by way of concerning the final rate across the time span. Line charts do not offer visible records for a unmarried focal factor trade range, inclusive of high, low, and open prices. The different implication is that the finishing price is commonly taken into consideration to be the maximum crucial fee in the stock statistics, in assessment to the highs and lows of the day, which is the principle esteem that it's been used as a part of the line chart.

2.2 Line Chart



21

3. Support and resistance:

Supporting and resistance is the rate level at which improvement must stop and turn. Consider the help or resistance (S / R) as the story or the roof of destiny value improvement.

Support - The fee stage under the cutting-edge marketplace cost at which buying interest ought to be able to beat income weights and then mask expenses turn out to be decrease. It is referred to as "famous person". In popular, stars regularly show off the equal precise reversal as hesitation. After seeing a celebrity, there can be a reversal or adjustment in keeping with the contemporary model.

Resistance - The price stage on the modern market fee, at which the heavy promote must be proper enough to overcome the heavy purchase and prevent expenses from rising in this manner. From a perspective, it is able to be used as a reversal factor: Originally, the price of a selected stock fell to a help stage, and it would move backwards. Then yet again hold or conflict stages might also transfer components after they input.

2.3 Support and resistance



The chart indicates a notable instance of help and resistance tiers. Observe that when the inventory fee falls under the aid stage, it becomes a resistance degree. This additionally is aware of that the aid and resistance tiers differ in electricity, and the most critical is that the decided fee stage is selected as the number one or secondary aid degree or resistance level.

4. Cup and Handle:

Cups and handles are blueprints on bar charts that can be as quick as seven weeks and as long as sixty five weeks. The cup is inside the "U" form. The handle has sliding float. On the right aspect of the blueprint there's a low trade volume. As stock charges upward push to test the

highs, the stock can be problem to promoting strain from human beings buying close to the old highs. It is not unexpected that the cup and coping with of rolling pressure will tend to buy and promote stock prices, everywhere from 4 days to four weeks and then it'll take off.

Cups and handle blueprints seem like a hint pot. This is one of the extra effortlessly detectable fashions that buyers use to make a number of money.

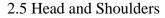
2.4 Cup and Handle



5. Head and Shoulders:

The head and shoulders are a chart configuration just like the "M" in which the value of the stock rises to the best factor, then reaches a low factor, then rises again, but falls below the following high factor and falls again.

In the chart, the first and 0.33 peaks are shoulders, and next peaks form the top. Head and shoulder blueprints are a totally bearish indicator.





6. Double Bottom:

The double bottom sample chart formation is similar to "W" and happens two times when the cost of the stock falls to a similar price level inside a few weeks or months. When the rate

exceeds the very best factor of the deal with, you should buy it. In best double bottom. This is a totally bullish indicator.

2.6 Double Bottoms



7. Double Top:

Double tops point out a weakness of the uptrend and warn for a change of trend generally selling crazy starts when this formation is shows.

2.7 Double Tops



8. Falling wedges:

Declining wedges are contradictory of the getting higher wedges and drag back react ion during the high trend. Sellers carry on judging the securities in their hand do not want to sell so, volume decreases drastically. When the higher-level line is broken, generally a convention starts. So this formation is a chance to buy security at accessible prices in uptrend.

2.8 Falling wedges



INDICATORS OF THE STUDY

1. Simple Moving Average:

In present market lists don't increase or reduce in straight line. The increasing and descending developments are hindered by offset moves. The basic pattern can be considered by smooth action of the information. To smooth the information affecting normal method is utilized. The moving midpoints are utilized to examine the development of the market and also the individual scrip cost. The simple moving average demonstrates the hidden pattern in the scrip.

2.1 Example OF SMA:

Date	Close Price	50 days SMA
01-Apr-16	287	
04-Apr-16	285	
05-Apr-16	275.25	
06-Apr-16	275.6	
07-Apr-16	281.25	
08-Apr-16	279.6	
11-Apr-16	280.45	
12-Apr-16	274.4	
13-Apr-16	277.45	280.795
18-Apr-16	275.8	279.18
20-Apr-16	278.65	278.345
21-Apr-16	287.75	278.62
22-Apr-16	287.8	279.875

25-Apr-16	287.95	281.11
26-Apr-16	288.3	281.815
27-Apr-16	290.9	282.945
28-Apr-16	285.05	283.405
29-Apr-16	288.05	284.77
02-May-16	288.65	285.89

2.8 SMA Nifty Fifty graph



The most well known technique for interpreting simple moving average evaluate the relationship among simple moving standard of the security's cost with the same security's price by self. This sort of simple moving average exchanging framework isn't expected to get you in at the correct base nor out at the correct best.

2. Bollinger Bands:

Bollinger bands is founded by John Bollinger, it is the technical indicator. And always uses basis as simple moving average which is middle line in the graph and there are additional two lines, they refers to standard deviation. Bollinger ,s helps the investors to compare relative price levels and price instability for whole period of time. The main important thing of Bollinger ,s is to indicate high and low of the related stocks.

SD refers to standard deviation and it is statistical component which is used to measure the opinion of investors investment. There are three Bollinger ,s in graph which refers to middle ,, higher-level , and poorer ,. The distance between the three, s is determined by the instability. Using the standard deviation helps to react quickly on price changing's. Middle , shows 20 days

SMA, higher-level, shows 20 days SMA with addition to 2 SD and poorer, also shows 20 days SMA and with subtraction to 2 SD.

Bollinger band lines are calculated by formulas:

Middle line (ML) = Simple Moving Average (SMA (N))

Top line (TL) = ML + k*StDev

Bottom line (BL) = ML - k*StDev

$$StDev = \sqrt{\frac{\sum_{i=1}^{N} (CLOSE(i) - SMA(CLOSE, N))^{2}}{N}}$$

For N is usually taken value of 20 and for k value of 2.

2.9 Bollinger bands graph of Nifty Fifty



Bollinger Bands are usually used to examine the price of stocks which overbought and oversold. If price comes near to the higher-leve line stock is overbought and if it is near to poorer line the stock is oversold. The graph is very important to decide trend reversal when is buy indications and when is sell indications. The core band is the twenty day simple moving average. The higher-level , is the twenty days of simple moving average plus showing 2 standard deviations. The poorer, is the 20 day simple moving average less 2 standard actions of deviations.

3. Moving Average Convergence Divergence (MACD):

Moving average discrepancy is established by Gerald Appel. It is technical indicator whichmerge oscillator and 2 EMA. Exponential moving average is calculated for short period of time and long period of time. It is also used to examine buying indications and selling indications.

To discover the fifty day moving average, you will include that close from the previous 50 days and partition them by 50. Since costs are always showing signs of change, the moving normal will move too. It ought to likewise be noticed that moving midpoints are most too. It ought to likewise be noticed that moving midpoints are frequently utilized at that point contrasted or utilized as a part of conjunction and different markers, for example, MACD and EMA. The most ordinarily utilized moving midpoints are 20, 50, & 200 days.

Formulas for calculating the indicators are:

MACD = EMA (CLOSE, 12) - EMA (CLOSE, 24) SIGNAL = SMA (MACD; 9)

2.10 MACD Chart of Nifty Fifty



Each moving average gives an alternate conversion on all stock flows will do there isn't one opportune point period. The more extended the point traverse, the least delicate the moving average will be to day by day value of actions. Moving averages all utilized pressure the route for sample and soft out cost and volume changes that can confound clarification.

4. Relative Strength Index (RSI):

Relative Strength Index (RSI) is a technical oscillator. Which the article in commodities and also it is called as future magazine in the year 1978 and it was founded by Welles Wilder.

The name RSI is somewhat disingenuous as the Relative Strength Index and does not evaluate the relation strength index of two stocks, but moderately the inner power of a solo security. When the price is falling and Relative Strength Index is rising, a deviation have occurred. Deviation shows the turning point of the market. On the chance that the RSI is rising in the over buying area, it would shows the indications to sell. In the event that RSI falls in the over buying area, it gives reasonable indications of sell. The term 'overbought' depicts the value level at which energy can never again be kept up and the cost needs to go down. At the point when the RSI is in the over sale region, it produces the buy indications. The term over sales is utilized to depict a security or market that declined to an absurdly little level. This condition refers described by an expansion in deals and abundance of actual decreases.

Formula to calculate RSI

RSI = 100 - 100 / (1 + RS)

Average gain = Total gains / n (number of RSI periods).

Average loss = Total loss / n (number of RSI periods).

Relative Strength = average gain / average loss

Relative Strength Index = 100 - 100 / (1 + RS)

2.2 RSI Example:

Date	Close Price	Change	Gain	loss	RS	RSI
31-Mar-16	350.8					
01-Apr-16	335.45	-15.35	0	15.35		
04-Apr-16	348.5	13.05	13.05	0		
05-Apr-16	330.5	-18	0	18		
06-Apr-16	334.5	4	4	0		
07-Apr-16	331.25	-3.25	0	3.25		
08-Apr-16	334.6	3.35	3.35	0		
11-Apr-16	348.25	13.65	13.65	0		
12-Apr-16	350.1	1.85	1.85	0		
13-Apr-16	351.25	1.15	1.15	0		
18-Apr-16	359.4	8.15	8.15	0		
20-Apr-16	356.65	-2.75	0	2.75		
21-Apr-16	357.25	0.6	0	-0.6		
22-Apr-16	353.1	-4.15	0	4.15		
25-Apr-16	358.95	5.85	5.85	0	1.189977	54.33741
26-Apr-16	360.4	1.45	1.45	0	1.905626	65.58401
27-Apr-16	373.05	12.65	12.65	0	1.891107	65.41117

28-Apr-16	372.7	-0.35	0	0.35	5.262626	84.03226
29-Apr-16	363.6	-9.1	0	9.1	2.531579	71.68405

2.11 RSI chart of Nifty Fifty



Wilder suggested using a 14 days Relative Strength Index. From that point forward, the nine day and twenty five day Relative Strength Index have likewise picked up prominence. The less days used to ascertain Relative Strength Index, the more unpredictable the indicator.

TRIX:

Triple exponential moving average is TRIX, it is technical indicator which is established by Jack Huston, developed in 1980 and also he wrote commodities magazine and technical analysis of stocks magazine. It shows the derivative of tripale smooth EMA. Triple EMA is calculated on given n number of days for a period as follws.

A increasing or decreasing line is an high level or low trend and TRIX demonstrates the incline of that line, refers certain for an enduring high trend, unhelpful for a downtrend, and an intersection in the course of zero is a blueprint change, i.e. a pinnacle or trough in the basic normal

TRIX is calculated by formula:

$$TRLX = \frac{EMA3_{t} - EMA3_{t-1}}{EMA3_{t-1}}$$

2.12 TRIX Chart of Nifty Fifty



Usually in TRIX buying indications and selling indications is decided by observing the zero line. When the TRIX moves above the zero line in the graph it is buying indications and if the TRIX moves below the moves below the zero line it is sell indications.

2.2 REVIEW of LITERATURE

1. **Murphy** (2007) in his research work, technical analysis is the study of market achievements, mainly from the first to the last, the use of graphics, with the intention to forecast upcoming price trends. The word market success involves the three sources of data reachable for technical price, volume and open interest.

2. Chitra (2008) in this study of the connection of the stock market to factors that change the contribute and order of shares and also usefull to be aware of the inherent value of the shares and to be recognizable with suppose the shares are undervalue. or overvalued The stock market charts would help the investor to differentiate the main turning points of the market.

3. Hemal Pandya (2008) Indian IT sector, researcher shows dissimilar technical analysis tackle for the analysis of Indian companies in the IT division that are programmed in NSE and BSE. The main tools and techniques worn in this study are the Line Graph, the Column Graph, the Candlestick Graph, the exponential Moving Average, the Convergence Divergence of Moving Averages, the Relative Strength Index and the Exchange Rate.

4. Venkatesh and Tyagi (2009) in their research document found with the objective of the results of a study surveyed in Sep to Nov 2010 by the use of technical method analysis by

agesnts or fund managers in the hindistan stock market to estimate their forward think of the price of the stock changing's. The effect of the study reveals that more than 85% of respondents rely on original and technical analysis to foresee future price changing's in strange time horizons.

5. **Cooter (2009)** discovered that stock rates be in motion accidentally when considered in a one-week gap. The data for its study was the end week prices of forty-five shares of the New York Stock Exchange. He proved the uncertainty of participation through the successive square dissimilarity test. He got that there was no sudden walk model. He feels that trends in stock cost could be predicted when premeditated at 14-week intervals. But in entire the stock prices keeping random actions at weekly intervals.

6. J. G. Agrawal, Dr. V. S. Chourasia and Dr. A.K. Mittra (2010) It has been offered in his research paper "The state of the art in stock forecasting techniques" of stock calculation techniques. There is a gap between the technologies and the user's need for a safe and accurate stock forecasting system. There are several political and economic factors that control the stock market that are also taken into account apart from the technical indicators.

7. **Sudheer (2010)** in his research began the technical analysis is the study of the prediction of prices of securities for the future, the most important objective of technical analysis is to produce returns leaving the being to decide when go into market and when to leave in safety. The conclusion is to buy in dangerous and sell at first sight to obtain a considerable amount of performance or benefit.

8. Dietze, Oliver and Macro (2010) in their research work to assess the risk-adjusted return of mutual funds in corporate ,s classified in Europe. The funds were evaluated on the basis of a single index and several models of multiple indices and asset classes. The results specify that the corporate , funds, on average, have a low performance in the reference portfolios and that there was not a particular fund that revealed a transcendental activist performance. The results also indicate that the risk-adjusted return of larger and larger funds, and a poorer charge for funds was higher

9. Andrew W. Lo, Harry Mamaysky and Jiang Wang (2011) in their research work had done "Foundation of technical analysis Computational Algorithms, Statistical assumption, and experiential accomplishment", the researcher examines this logical and mechanical approach for the detection of technical patterns using non-parametric kernel useful regression in US stocks from 1962 to 1996 to guess the success of technical analysis.

10. Lawrence Blume, David Easley and Maureen O'hara (2011) in their research paper entitled "Market information and technical analysis: The role of quantity", the researcher discovered that role of volume and its application for technical analysis. The researcher also shows that the volume, information and price are linked together and shows how the volume and price are enriching and also shows that the merchant using the information included in the market statistics does better than the merchants.

11. **Sahara (2011)**, in his research on the seasonality of the stock market, The Study of Indian Stock Market, tried to study the seasonality of the stock market in our county. She is a good observer of the resourceful as the delegate of the stock market in India and practices whether seasonality is current in the Nifty and Nifty Junior income using each day and monthly data sets.

12. Yingzi Zhu and Guofu Zhou (2012) in their research using an exploratory paper study, studied the use of technical analysis in an efficient portion of resources in individual risky assets. When yields are expected, technical analysis adds value to the asset portion and wealth maximization. The document provides a hypothetical explanation of the use of the moving average to allocate money in different actions and how to add value to the investment through the use of technical analysis.

13. **Ray R. Sturm (2013)** in his research work entitled "Market efficiency and technical analysis Can coexist?", The researcher shows that market competence is in generaly accepted in the educational society, even philosophy can not describe yourself completely as truth. Primordial and leader due to sound, prices are simply a sign of beliefs about the true unidentified intrinsic value of a company that makes behavioral finances very imperative.

14. **CL Osler (2013)** in his study provides a micro structural clarification for the achievement of two well-known predictions of technical analysis: live tend to revert to predictable levels of

maintain and confrontation, and trends acquire impetus only support and prediction once confrontation levels cross The illustration is based on a detailed examination of the stop loss and take-profit orders in a large currency bank. Profit orders can reproduce price of trends and stop the technical analysis of losses on preferred NSE shares.

15. **R. Krishnan and Vinod Mishra (2014)** in this document entitled "Intraday Liquidity Pattern in Indian Market" study the liquidity pattern and identify any common distinctive in liquidity measures, using annual intra annual data from the National Stock Exchange. India (NSE). The researcher discovered that most of the volume and liquidity measures connected show a U-shaped intraday pattern.

16. Cory Janssen, Chad Langager and Casey Murphy (2014) in their technical analysis of the research article are a system of evaluating standards by analyzes information moving up by market action, such as prices and past volume. Technical analysts do not to effort to calculate security and intrinsic value, but use graph and additional tools to recognize patterns that suggest future actions.

17. AdrinTaran-Morosan (2015) in his research paper entitled "The researcher of the revised relative strength index" examines that the relative strength index (RSI) is one of the indicators of excellent technical analysis and widely used. The research studies aim to empirically investigate the role of the RSI in its standard formation.

18.**MassoudMetghalachi, Xavier Garza-Gomez, Yong Glasure and Yung-Ho Chang (2015)** in their research paper entitled "Are the average trading policy profitable? confirmation from the Mexican stock exchange" the researcher studies three rules of average mobile technical trading for the Mexican Stock Exchange and the result specifies that the mobile average rules certainly have analytical power and can generate reliable profits.

19. Edwards, Magee and Bassetti" (2016) in their technical analysis of research refers to the study of market achievement as something divergent from the study of the goods in which the market deals. Technical Analysis is the science of recording, usually explicitly, the definitive history of changes in the negotiation price, the volume of dealings, etc., in a given action or in the averages and then deduce from that the past the potential future trend.

20. Jayakumar& K. Sumathi (2016) in their research work describes the use of technical analysis for the purchase and sale of shares listed in NSE. The investor can also recognize the return of the shares and the risk of the shares while investing money in the shares. The researcher had calculated the weekly average and standard deviation of EPS to make a decision regarding the purchase and sale of shares that appear in the list of NSE.

CHAPTER - 3 RESEARCH DESIGN

3.1 STATEMENT of THE PROBLEM

This study is takes to compare the chosen technical apparatus accessible for forecasting. The revision tries to confine the oppose views of different tools used in technical analysis. The study aims to investigation of the matter TECHNICAL ANALYSIS.

Technical analysis to use of examines the securities by analyzing the figures global by market activity, such as earlier period prices and level. Technical analysis do not challenge to assess a security's fundamental value, but as an alternative use charts and other tackle to identify patterns that can propose outlook activity.

Recently most of securities available for an share purchaser or seller, he si going to decide on, what type stock best invest? What category of security to going to buy? Which time is good for sell the securities? Place of Investment? How much to Invest? Other said sell or buy securities? All these need to be answered sooner than the investment goto take place and also formative prospective profit from the savings in a security.

3.2 NEED of THE STUDY

The equity of an investor are on the performance of a particular company's stock in the stock market. The stronger the company's share, the more profit the investor gets. So it is necessary to determine, analyze and understand the share of dissimilar firms in order to know its position in the market. Investors can make clever investment with the help of this technical analysis through this project, which the company tries to ensure buy indications and sell indications in which the investment could be made in stock market.

3.3 OBJECTIVES of THE STUDY:

- To study sample in stocks by using Technical Analysis.
- To analyze price moment by using different techniques like comparative strength index easy moving average and rate of change.

- To do the study on technical analysis of selected stocks of NSE fifty weather to buy or sell decisions by interpreting trend.
- To forecast the future trends and provide suitable suggestions to the investors.
- To know the changing's of stock prices of selected company stocks through Technical analysis.
- To using this study is very effective roll in infester life to acheve financial goals.
- To symbolize the drift of the stock price from side to side of charts of the technical analysis.

3.4 SCOPE of THE STUDY:

The above study mostly keep eye on investment decisions by analyzing futures stock price changing's throughout use of Technical tools. It is the study which is based on five companies technical analysis of selected stocks of NSE Nifty fifty.

- This is give knowledge to shareholder in creation decisions by using on report
- Examination companies shares in good way.
- This analysis helps for gain the knowledge in stock price changing's of the security markets.
- The study helps to find out the future trends in the prices of selected stocks precious hints can be acknowledged by the investors for their outlook buying and selling.

3.5 RESEARCH METHODOLOGY:

The research is based on the stock prices of five stocks selected from NSE fifty i.e., Tata motors, Cipla, Bharti Airtel, Tata Steel, Wipro. Stock prices of last 2 years from 1st April 2015 to 31 March 2017 have been taken in this research. The study mainly hopes at analyzing the price changing's of selected stocks script. The ending prices of share value were taken and the future price changing's was analyzed using dissimilar tools. Data has been collected from secondary sources like equity market in NSE, books related on subject matter, journals, magazines and dissimilar websites. The research is based on apparatus of technical investigation and involves the calculation of Simple Moving Average (SMA), Bollinger ,s (B,s), Moving Average Convergence Divergence (MACD), Relative Strength Index (RSI) and TRIX.

REFERENCE PERIOD:

The data is taken for a period of 24 months of last 2 year i.e., from 1stApril 2015 to 31st March 2017.

THE STOCKS SELECTED ARE AS FOLLOWS:

- > Tatamotors
- Cipla
- Bharti Airtel
- ➤ Tata steel
- ➢ Wipro

3.6 LIMITATIONS of THE STUDY:

- The study is limited to the data of past 2 year only.
- The area of study is limited to only few companies group of stock.
- The accuracy is limited as the data was strictly limited to secondary sources.
- The accuracy of the study is based on the data presented in the NSE website.
- The study is only for academic purpose.

3.7 CHAPTER SCHEME:

Chapter 1: INTRODUCTION

The chapter deals with the general introduction to the study in terms of industry profile and company profile: Promoters details, about vision of choosing company, mission and quality of policy in org or com. Product and services nature areas of operation, infrastructure amenities, competitors' information, SWOT analysis, future expansion and catalog.

Chapter 2: CONCEPTUAL BACKGROUND AND LITERATURE REVIEW

Theoretical background of the study, Literature review with research gap.

Chapter 3: RESEARCH DESIGN

The chapter deals with the statement of the problem, objectives, scope of the study, Research methodology, limitations of the study and the chapter scheme.

Chapter 4: DATA ANALYSIS AND INTERPRETATION

This chapter deals with qualification of derived/collected data and then analyzing it with the help of dissimilar statistical tools and therefore interpreting it.

Chapter 5: SUMMARY of FINDINGS, RECOMMENDATIONS AND CONCLUSION

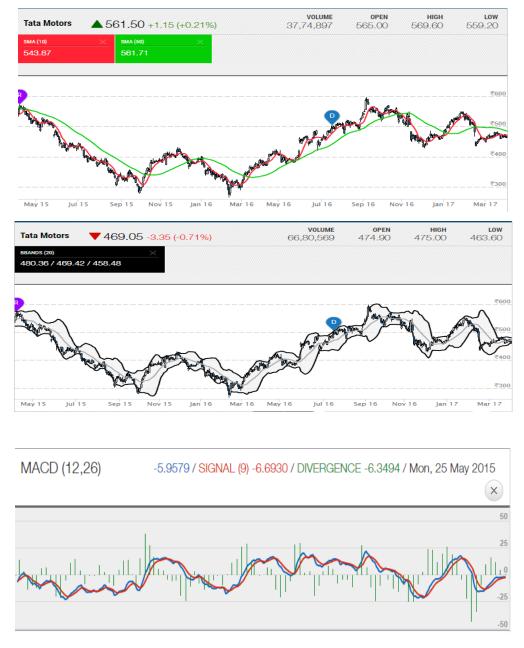
This chapter deals with the conclusion of the study based on the inference drawn from the analysis of the collected data. It includes the summary of findings, recommendations and conclusion.

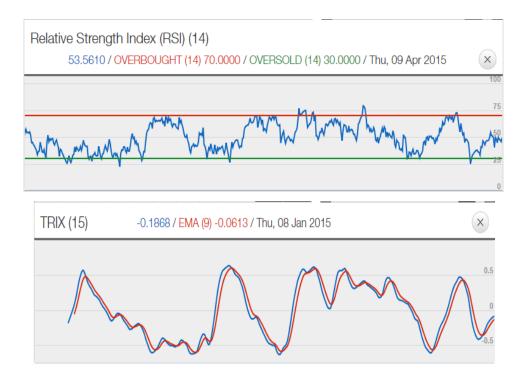
CHAPTER – 4 DATA ANALYSIS AND INTERPRETATION

TATA MOTORS (AUTOMOBILE SECTOR)



This shows Tata motors Charts for a period of 1 year from 1st April 2015 to 31st March 2017.





INTERPRETATION:

Simple Moving Average:

In the above simple moving average graph we can see 10 days SMA and 50 days EMA. The buying indications in 10 days moving average is in days of October 2015 and March 2016, selling indications is in days of September 2016 and in 50 days SMA the buying indications is in days of November 2015 and April 2016, selling indications is in days of November 2016.

➢ Bollinger ,s (B,s):

In the above Bollinger ,s graph, the middle , is 20 day SMA. The higher-leve , is 20 day SMA addition with 2 standard deviations. The poorer , is 20 day SMA subtract with 2 standard deviations. It is used to determine the particular stock is overbought or oversold. When the price reaches the higher-leve , it is overbought and it implies sell indications in days of September 2016. When price reaches the poorer , it is oversold and it implies buy indications i.e., in days of November 2015.

► MACD:

In the above MACD graph, when the line crosses below the indications line then it is selling time i.e., in days of November 2016. when the line crosses above the indications line then it shows the investors buying indications i.e., in days of march 2016.

Relative Strength Index:

RSI chart of Tata Motors shows buy indications in days of September 2015 it is at the beginning of the study. Indays of September showing bearish indications it is selling time for the investors. In days of February and March showing bullish indications it is the right time to buy the stocks of Tata Motors for the future changing's of the investors. Price reach up two times in two years, it is the selling indications of the stock it is in days of April 2016 and September 2016.

\succ TRIX:

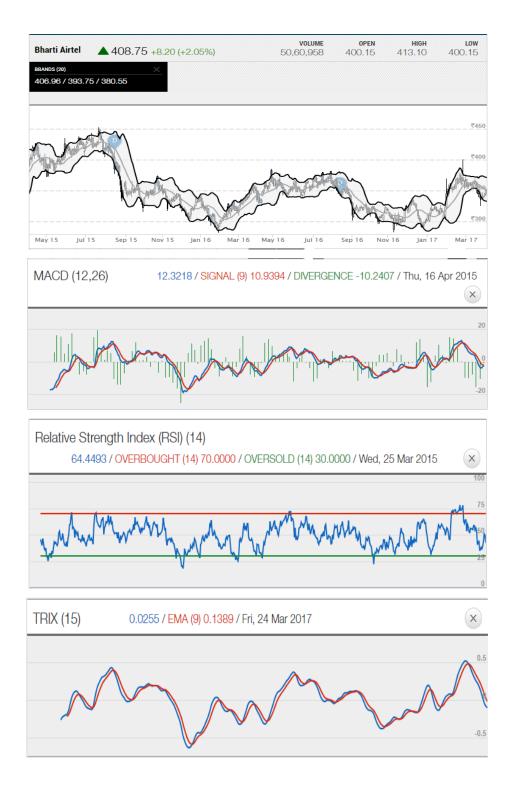
In the above chart TRIX the changing's of gradientin the above TRIX line implies the equivalent changing's in the value of stock which can be look in the above graph understandably. In days of march 2016 and January 2017 shows the buying indications in the above graph. In days of February 2016 shows the selling indications in the above graph understandably.

BHARTI AIRTEL (TELECOMMUNICATION SECTOR)



This shows Bharti Airtel for a period of 1 year from 1st April 2016 to 31st March 2017.





INTERPRETATION:

Simple Moving Average:

In the above simple moving average graph of bhartiairtel we can see 10 days SMA and 50 days EMA. The buying indications in 10 days moving average is in days of february 2016 and

January 2017, selling indications is in days of July 2015 and in 50 days SMA the buying indications is in days of August 2015, selling indications is in days of August 2015.

➢ Bollinger Bands:

In the above Bollinger Bands graph of bhartiairtel, the middle, is 20 day SMA. The higher-leve, is 20 day SMA addition with 2 standard deviations. The poorer, is 20 day SMA subtract with 2 standard deviations. It is used to determine the particular stock is overbought or oversold. When the price reaches the higher-leve, it is overbought and it implies sell indications in days of January 2017. When price reaches the poorer, it is oversold and it implies buy indications i.e., in days of July 2015.

> MACD:

In the above MACD graph, when the line crosses below the indications line then it is selling time i.e., in days of November 2016. When the line crosses above the indications line then it shows the investors buying indications i.e., in days of December 2015.

Relative Strength Index:

RSI chart of Bharti Airtel shows buy indications in days of September 2015 it is at the beginning of the study. In days of September showing bearish indications it is selling time for the investors. In days of February and March showing bullish indications it is the right time to buy the stocks of Bharti airtel for the future changing's of the investors. Price reach up two times in two years, it is the selling indications of the stock it is in days of April 2016 and September 2016.

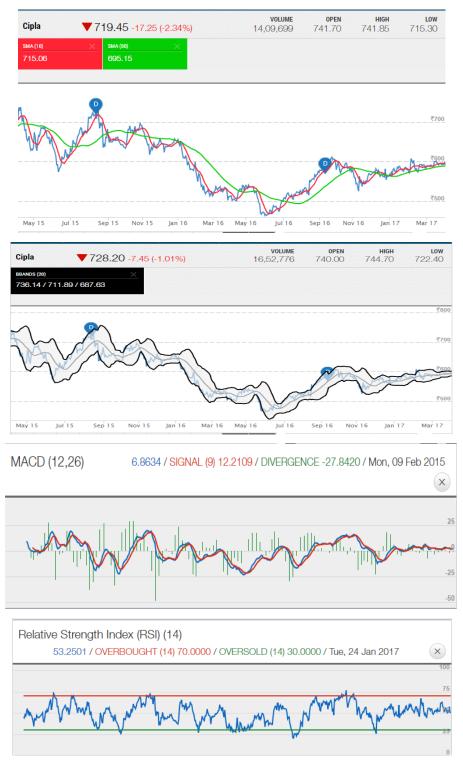
► TRIX:

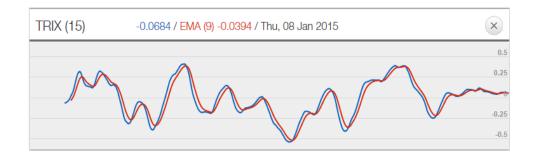
In the above chart TRIX the changing's of gradient in the above TRIX line implies the equivalent changing's in the value of stock which can be look in the above graph understandably. In days of March 2016 and January 2017 shows the buying indications in the above graph. In days of February 2016 shows the selling indications in the above graph understandably.

CIPLA (PHARMACEUTICALS SECTOR)



This shows Cipla for a period of 1 year from 1st April 2015 to 31st March 2017.





INTERPETATION:

Simple Moving Average:

In the above simple moving average graph we can see 10 days SMA and 50 days EMA. The buying indications in 10 days moving average is in days of October 2015 and March 2016, selling indications is in days of September 2016 and in 50 days SMA the buying indications is in days of November 2015 and April 2016, selling indications is in days of November 2016.

➢ Bollinger ,s (B,s):

In the above Bollinger, s graph, the middle , is 20 day SMA. The higher-level, is 20 day SMA addition with 2 standard deviations. The poorer, is 20 day SMA subtract with 2 standard deviations. It is used to determine the particular stock is overbought or oversold. When the price reaches the higher-level, it is overbought and it implies sell indications in days of September 2016. When price reaches the poorer , it is oversold and it implies buy indications i.e., in days of November 2015.

► MACD:

In the above MACD graph, when the line crosses below the indications line then it is selling time i.e., in days of November 2016. when the line crosses above the indications line then it shows the investors buying indications i.e., in days of march 2016.

Relative Strength Index:

RSI chart of Cipla shows buy indications in days of September 2015 it is at the beginning of the study. In days of September showing bearish indications it is selling time for the investors. In days of February and March showing bullish indications it is the right time to buy the stocks of cipla for the future changing's of the investors. Price reach up two times in two years, it is the selling indications of the stock it is in days of April 2016 and September 2016.

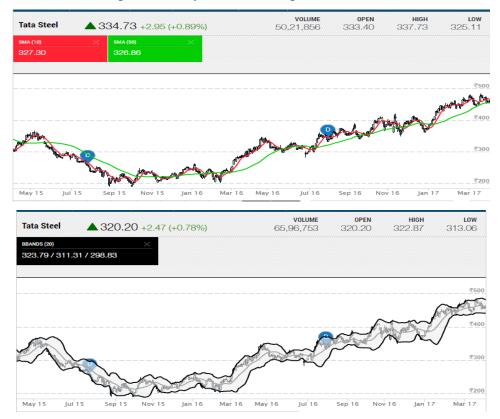
\succ TRIX:

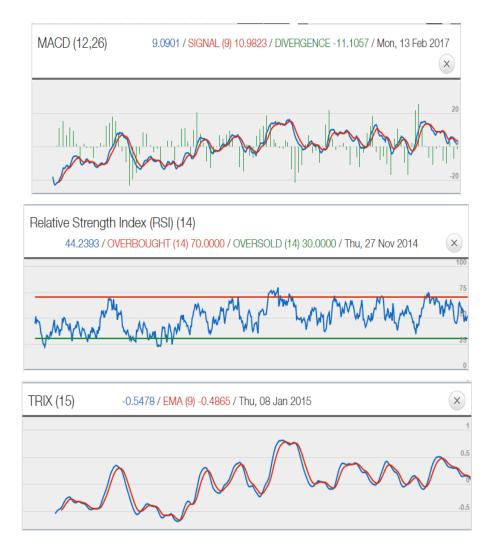
In the above chart TRIX the changing's of gradient in the above TRIX line implies the equivalent changing's in the value of stock which can be look in the above graph understandably. In days of march 2016 and January 2017 shows the buying indications in the above graph. In days of February 2016 shows the selling indications in the above graph understandably.

TATA STEEL (METALS SECTOR)



This shows Tata Steel for a period of 1 year from 1st April 2015 to 31st March 2017.





INTERPRETAION:

Simple Moving Average:

In the above simple moving average graph we can see 10 days SMA and 50 days EMA. The buying indications in 10 days moving average is in days of October 2015 and March 2016, selling indications is in days of September 2016 and in 50 days SMA the buying indications is in days of November 2015 and April 2016, selling indications is in days of November 2016.

➢ Bollinger ,s (B,s):

In the above Bollinger ,s graph, the middle , is 20 day SMA. The higher-leve , is 20 day SMA addition with 2 standard deviations. The poorer , is 20 day SMA subtract with 2 standard deviations. It is used to determine the particular stock is overbought or oversold. When the price reaches the higher-leve , it is overbought and it implies sell indications in days of September

2016. When price reaches the poorer, it is oversold and it implies buy indications i.e., in days of November 2015.

➤ MACD:

In the above MACD graph, when the line crosses below the indications line then it is selling time i.e., in days of November 2016. when the line crosses above the indications line then it shows the investors buying indications i.e., in days of march 2016.

Relative Strength Index:

RSI chart oftata steel shows buy indications in days of September 2015 it is at the beginning of the study. In days of September showing bearish indications it is selling time for the investors. In days of February and March showing bullish indications it is the right time to buy the stocks of Tata Motors for the future changing's of the investors. Price reach up two times in two years, it is the selling indications of the stock it is in days of April 2016 and September 2016.

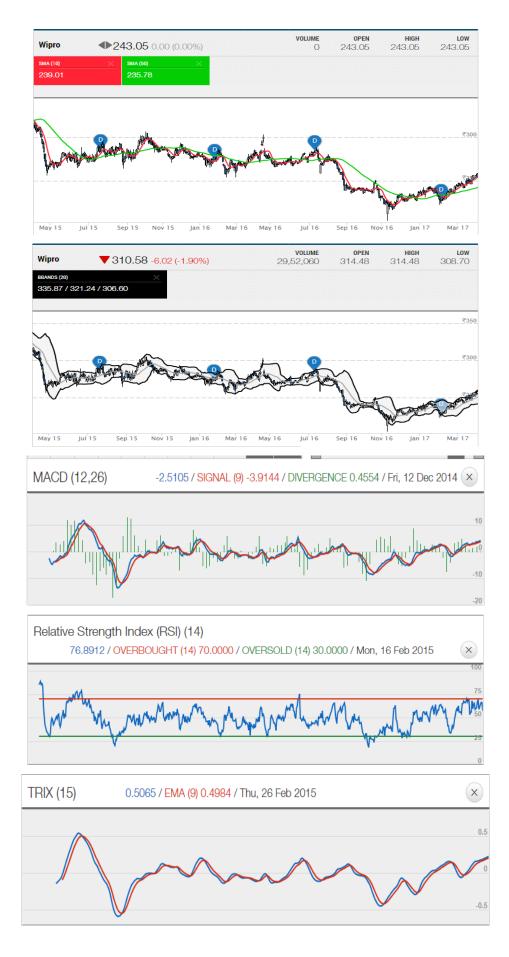
► TRIX:

In the above chart TRIX the changing's of gradient in the above TRIX line implies the equivalent changing's in the value of stock which can be look in the above graph understandably. In days of march 2016 and January 2017 shows the buying indications in the above graph. In days of February 2016 shows the selling indications in the above graph understandably.

WIPRO (INFORMATION TECHNOLOGY SECTOR)



This shows Wipro for a period of 1 year from 1st April 2016 to 31st March 2017.



INTERPRETATION:

Simple Moving Average (SMA):

In the above simple moving average graph we can see 10 days SMA and 50 days EMA. The buying indications in 10 days moving average is in days of October 2015 and March 2016, selling indications is in days of September 2016 and in 50 days SMA the buying indications is in days of November 2015 and April 2016, selling indications is in days of November 2016.

\succ Bollinger ,s (B,s):

In the above Bollinger ,s graph, the middle , is 20 day SMA. The higher-leve , is 20 day SMA addition with 2 standard deviations. The poorer , is 20 day SMA subtract with 2 standard deviations. It is used to determine the particular stock is overbought or oversold. When the price reaches the higher-leve , it is overbought and it implies sell indications in days of September 2016. When price reaches the poorer , it is oversold and it implies buy indications i.e., in days of November 2015.

> MACD:

In the above MACD graph, when the line crosses below the indications line then it is selling time i.e., in days of November 2016. when the line crosses above the indications line then it shows the investors buying indications i.e., in days of march 2016.

Relative Strength Index (RSI):

RSI chart of Wipro shows buy indications in days of September 2015 it is at the beginning of the study. In days of September showing bearish indications it is selling time for the investors. In days of February and March showing bullish indications it is the right time to buy the stocks of Wipro for the future changing's of the investors. Price reach up two times in two years, it is the selling indications of the stock it is in days of April 2016 and September 2016.

\succ TRIX:

In the above chart TRIX the changing's of gradient in relating tope TRIX line implies the equivalent changes in the value of stock which can be keep eye in the above graph evidently. In days of September 2015 shows the buying hint in the over graph. In days ofJune 2015 shows the selling indications in the above graph understandably.

CHAPTER - 5

SUMMARY OF FINDINGS, CONCLUSIONS AND SUGGESSIONS

5.1 FINDINGS

In this study I have selected five companies from Nifty Fifty as they belongs to dissimilar kinds of different sectors i.e. Tata Motors (Automobile sector), Bharti Airtel (Telecommunication sector), Cipla (Pharmaceuticals sector), Tata steel (Metals sector), Wipro (Information technology sector). We can find the performance of every company. Before trading as investor wants to check the performance of different companies before trading. In technical analysis there are dissimilar technical tools we can use for analysis each methods will have their own changing's in providing the details and the interpretation will also be different. Trading type and investors preference depends on selecting the methods of calculation. Every technical method will be having its own merits and demerits and interpretation is also given for each method. In the study I have used line chart because comparing to different types of charts line chart is easy to understand and interpret.

1. TATA MOTORS

TECHNICAL TOOLS	BUY INDICATIONS	SELL INDICATIONS
SIMPLE MOVING AVERAGE	June, July, December, March	May, September,
		February
Bollingers	May, October, December,	June, August,
	February	September
MACD	September, May	June, August
RSI	May, December,	June, August,
	February	September
TRIX	April, December	May, January

5.4.1 Technical tools and result of Tata motors

2. BHARTI AIRTEL

5.4.2 Technical tools and result of bhartiairtel

TECHNICAL TOOLS BUY INDICATIONS SELL INDICATIONS
--

SIMPLE MOVING AVERAGE	December, January	May, August, March
Bollingers	January	May, February
MACD	December, May	August, March
RSI	September, February	May, January
TRIX	September, January	December,
		February

6.CIPLA

5.4.3 Technical tools and result of cipla

TECHNICAL TOOLS	BUY INDICATIONS	SELL INDICATIONS
SIMPLE MOVING AVERAGE	June, November	October, March
Bollingers	June, November	September, December
MACD	May, June	October, July
RSI	June, January	May, July
TRIX	May, June	May, July, September

7TATASTEEL

5.4.4 Technical tools and result of Tata steel

TECHNICAL TOOLS	BUY INDICATIONS	SELL INDICATIONS
SMA	July, October, January	May, November, March
Bollingers	June, January	October, January
MACD	September, February	May, January
RSI	November, February	April, June, March
TRIX	May, December, January	July

8WIPRO

5.4.5 Technical tools and result of Wipro

TECHNICAL TOOLS	BUY INDICATIONS	SELL INDICATIONS
SMA	November, February	April, June, March
Bollinger ,s	September, November, February	June, October, March
MACD	February, November	June, April
RSI	September, November	June, March
TRIX	May, September, November	April, December

8.4 CONCLUSION

- Technical analysis very use full for every investor for making decision about time of invest .above all the companies also use the technical graphs. For knowing the position of investment.
- After analyzing the companies, the subsequent finale was reached. By chart RSI is increases, this is directly showing increase in the worth of the RSI, which shows that there is an well growth in the share price. This tells the shareholder that it is a physically powerful selling stage of best point.
- Whenever RSI decrease, that shows value of the share price is down flow, that indicating to the investor that it is a well-built purchase position in the share market. In universal, we give decides by the effect in technological lines can take part in a useful role in the way in and exit of time stock market. Through the application of technical indicators, agents or investors feel happy substantial profits.
- This analysis is helpful for several fundamental factors and the economy in general, trend lines comes a very popular part of technical analysis.
- Technical analysis doesn't work as we used this charts, because some time market prices may volatile in the nature. In that time share holder or investors unable to take decision .
- This analysis used full in currency markets .individuals also use this analysis to buy and sell of currency.

5.3 SUGGESTIONS

• Investors should use technical analysis so that investors can make best decision and make time for investing.

- Investor can choose long time frame for direction analysis and less time frame to entry in market and exit.
- The investor should have information about the conditions of the market so that they can get the more return on the maximum investment
- In the market the trader should go to to develop new tarde first, he definitely select stocks to buy in new industries after making forecasts all the and stock charts
- By choosing methodology after be consistence in its application. Before participating the market as investor.

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ACHARYA INSTITUTE OF TECHNOLOY DEPARTMENT OF MBA

PROJECT WEEKLY REPORT (16MBAPR407)

Name of the Student: VINUTHA J

Internal Guide: Prof. VIRUPAKSHA GOUD

USN No: 1AZ16MBA77

Specialization: Finance & Marketing

Title of the Project: A Study on Technical Analysis of selected stocks of NSE Nifty Fifty

Company Name: Pattern Effects Labs Pvt Ltd.

Weak	Work Undertaken	External Guide Signature	Internal Guide Signature
15-1-2018 to 20-1- 20018	Introduction about Pattern Effects Labs Pvt Ltd and its operation	Mardin	J. Ch
22-1-2018 to 27-1- 20018	Learning about the different operation and services by Pattern Effects Labs Pvt Ltd	Aburto C	J. Mas.
29-1-2018 to 3-2- 20018	Orientation and gathering information about the growth of the company	Martin .	J. Me.
5-2-2018 to 10-2- 2018	Analysis of the market position of the company	Darton	y de
12-2-2018 to 17-2- 2018	Research problem identification	Hereford S.	J. No

to 24-2- 2018	research instrument for data collection	Ask	ly. ale.
26-2-2018 to 3-3- 2018	Theoretical background of the study	Stacht	g. ale.
5-3-2018 to 10-3- 2018	Data collection and analysis	Martin	g. Me.
12-3-2018 to 17-3- 2018	Interpretation of the data gathered during the survey	Darde)	J. als.
19-3-2018 to 24-3- 2018	Final report preparation and submission	Sector	le che





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