

Infi-flux

Technical analysis is a method to analyze financial markets and assets by examining historical price charts and training volumes. It is a method of evaluating and predicting the future price moments of financial assets such as stocks, currencies, or commodities by analyzing historical price and volume data. It is used by traders and investors to make short to medium-term decisions in financial markets. Technical analysis is based on the simple idea that past price moments and trading patterns can provide insights into future price moments.

Basic Components of Technical Analysis:

- Price charts
 - Line charts
 - Bar charts
 - Candlestick
 - o Time-Frames
 - Trendlines
 - Support and Resistance Levels
- Indicators (Popular ones listed)
 - Moving average (EMA)
 - o RSI
 - o MACD
 - Stochastic Oscillator
 - o Bollinger bands
 - o Ichimoku cloud
 - o ATR
 - Volume
 - Parabolic SAR (stop and reverse)
 - On-balance Volume
 - o ADX
 - o Willams %R
 - Chaikin Money Flow (CMF)
- Patterns
 - Head & shoulders
 - Double Tops & Bottoms
 - Triangles
 - Flags and Pennants
 - Wedges
 - Rectangles
- Trends
 - o Uptrend
 - Downtrend
 - Sideways (Range Bound) Trend
- Volume Analysis

- o Volume Patterns, Bars, spike
- o Confirmation of Trends, Breakouts
- o Volume at Support and Resistance
- Volume Climax up
- Gaps
- Volume and Price Reversals
- Volume Divergence during Reversal
- Volume Spread Analysis
- Relative Volume
- Earnings and News Events
- Intraday Volume Analysis
- o Volume Profile
- o Churn
- Volume and Trend Strength
- Volume Oscillators
 - Chaikin Oscillators
 - Accumulation / Distribution Line
- Volume Price Trend
- Effort vs Result
- Volume and Options
 - Unusual Options Volume
 - Put / Call Volume Ratio
- Market Breadth
- Up/Down Volume Ratio
- Intraday Volume Patterns
 - Open / Close Volume
 - Volume Spike during News
- Oscillators
 - Overbought and oversold conditions
 - o Bounded Range
 - o Signal Lines
 - o RSI
 - Stochastic
 - o MACD
 - o CCI
 - o ATR
 - o RVI
 - Divergence and Convergence

Advance Technical Analysis

- Fibonacci Retracenment
- Price charts
 - Market Profile analysis
 - Price Histogram
 - Value Area
 - Time price opportunity
 - Day types
 - Trend
 - Balanced
 - Gap
 - Market Psychology
 - Position sizing
 - Volume profiling
 - Time frame considerations
 - Strategies
 - Fade trades
 - Breakout trades
 - Rotation trades
 - Profile shape analysis
 - o Renko & Range Bars
 - Renko variations
 - Hybrid charts
 - Point & Figure Charts
 - X & O
 - Column formulation
 - Price scaling
 - Reversal size
 - Long term analysis
 - Japanese Candlestick
 - Elliott Wave theory
 - Wave structure
 - Wave degrees
 - Wave count
 - Fibonacci ratios
 - O Elliot Wave Neo Wave theory
 - Types
 - Time & price factors
 - O Ichimoku Cloud Analysis
 - Tenkan

- ______
 - Senku A & B
 - Kumo & Chikou
 - Kagi Charts
 - Price moments
 - No time Axis
 - Reversal Criteria
 - Thin and thick lines
 - Breaks and Gaps
 - Filtering Noise
 - Trend Identification
 - Flat Markets
 - O Heikin-Ashi Charts
 - Market breadth analysis
 - A / D Ratio
 - Up Down Volume Ratios
 - New Highs-New Lows
 - Overbought & Oversold
 - Tick & Volume charts
 - Variable Time intervals
 - Smoothed Price Moments
 - Gann Theory
 - Time and Price analysis & squaring
 - Geometric Principle
 - Angles
 - Square of Nine, Twelve
 - Fans
 - Gann Cycles
 - Swing Charts
 - Master Charts
 - Law of Harmony
 - Risk management
 - Cycle Analysis
 - Market Cycles
 - Primary
 - Intermediate Cycles
 - Short-term Cycles
 - Phases
 - o Accumulation
 - o Mark-up
 - o Mark-Down

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 - Seasonal Analysis
 - Time-based
 - Short term
 - Intermediate Cycles
 - Long-term Cycles
 - Business and Economic Cycles
 - Components
 - Peak
 - Trough
 - Amplitude
 - Duration
 - Indicators on charts
 - Limitations
 - Cycle Disruption Events
 - Fibonacci time zones
 - Advanced trend line analysis
 - Types
 - Standard
 - Channel
 - o Equidistant
 - o Andrew's Pitchfork
 - Slopes
 - Upward sloping
 - Downward sloping
 - Horizontal (Sideways)
 - Breakout confirmation
 - Timeframe Analysis
 - Volume spread analysis.
 - Upthrusts and Springs
 - No Supply and no demand bars
 - Stopping Volume
 - Efforts vs results
 - Wyckoff method
 - Divergence analysis
 - Regular (Classic) Divergence:
 - Hidden Divergence
 - o Fibonacci Fan Extension
 - Cycle Harmonic
 - Gartley
 - Butterfly
 - Bat
 - Delta Volume Analysis
 - Difference

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 - Divergence
 - Cumulative
 - Fourier Transform Analysis (Algo)
 - Volatility analysis ATR
 - Bollinger Band Variation
 - Width BB
 - Double BB
 - Adaptive BB
 - %B BB
 - Volume Weighted BB
 - Fibonacci BB
 - MACD BB
 - Keltner Channels
 - Market Structure Analysis
 - Harmonic wavelet analysis
 - Basic
 - Multiresolution Analysis
 - Time-Frequency Localization
 - Filter Banks
 - Non-Stationary Signal analysis
 - Continuous, harmonic transform
 - Noise Removal
 - Phase analysis
 - Limitations
 - Market microstructure Heatmaps
 - Price
 - Volume
 - Order book depth
 - Time and Sales
 - Bid-Ask Spread
 - Trade Intensity
 - Tick
 - Sector / Asset comparison
 - Spline regression analysis
 - o Fractal dimension analysis
 - Correlation heatmaps
 - Bollinger bands
 - Volatility assessment
 - Price reversals
 - Over-bought&sold.
 - Continuation patterns
 - Squeeze & breakouts
 - Divergence

- Stochastic Oscillator
 - Overbought/oversold
 - Crossovers
 - Divergence
 - Centreline Crosses
 - Sensitivity to market conditions
- Relative strength index
 - O Speed and change of price moments
 - Overbought/oversold
 - Divergence
 - Crossovers
 - Support and resistance
 - O Range bound markets
 - Horizontal price
 - Consolidation patterns
 - Low volatility
 - Break out potential
 - Choppy price action
 - Time frame dependency
- Advance Candlestick Patterns
- Market profit
 - o Previous returns & profit potential
- Fibonacci Extensions
 - Levels
- Advanced Trendline Analysis
 - o Lines
 - o Angles
 - o Breakouts
 - Hybrid approach with indicators
 - Logarithmic Scaling
 - Volume analysis
- Cycle Analysis
 - o Identification
 - Periodicity
 - Types
 - Phases
 - Synchronization
- Volume Profile
 - o POC
 - Value Area

- Volume Gaps
- Patterns
 - Double Distribution
 - P-shaped Profile
 - B-Shaped Profile
- Harmonic Patterns
 - Gartley
 - Butterfly
 - o Bat
 - o Cypher
 - o Shark
 - o Crab
 - o 3-Drive
- Market breadth indicator
 - McClellan Oscillator
 - Arms Index
 - McClellan Summation Index
- Candlestick pattern recognition software
- Seasonal Analysis
 - Nature of SA
 - o Factors influencing Seasonal Patterns
 - Backtesting
 - Calendar events
 - Economic Indicators
 - Industry Specific patterns
 - Commodities & Agriculture
 - Holiday Seasons
- Multiple time frame analysis
 - o Long-term time Frame
 - Medium Term time frame
 - Short-term time frame
 - Avoiding Noise and False Signals
 - Divergence and Convergence
 - Combining indicators
- Market sentiment analysis
 - Bullish / Bearish
 - Indicators
 - Price Action
 - Volume
 - Put/Call Ratios
 - Surveys IISI, AAII
 - Contrarian Approach
 - Fear and Greed Index

- News and Social Media Analysis
- Event-driven Sentiment
- o Dynamic Nature of Sentiment
- Pivot points
 - Formulas and Roles
 - PP
 - \$1,\$2,\$3
 - R1, R2, R3
 - Trend identification
 - o Intraday PP
 - Weekly & Monthly PP
 - o PP Reversal
 - Limitation
- Quantitative Technical Analysis
- Quantitative Models
 - Mathematical Formulas and Algorithms
 - o Pattern recognition
 - Trend Identification
 - Mean-Reversion Strategies
 - Statistical Arbitrage
 - o ML Models
 - Factor Models
 - Backtesting
 - o Risk Management
- Market Internals
 - o Tick & trin
- Intermarket analysis
 - Price Relationships
 - Correlations
 - Sector Rotation
 - Risk-On/Risk-Off Sentiment
 - Currency analysis
 - Global Market Analysis
 - Market Divergence
 - Economic Indicators
- Economic Indicators & events
 - Interest Rates
 - Inflation Data
 - Employment Reports
 - o GDP
 - o Consumer confidence Index
 - o Retail Sales Data
 - o Trade Balance

- Government Debt levels
- Central Bank Policies
- Market profiling
 - o Time Price Opportunity profile
 - Building Profile
 - Value Area
 - High
 - Low
 - Point of Control
 - o Volume at price
 - o Composite profile
 - Auction Market Theory
 - Single prints
 - Balanced and Imbalanced Markets
- Wave analysis methods
- Market Delta
 - o Market profile & Footprint charts
 - Bid-Ask Imbalance
 - o Volume Delta
 - o Delta Divergence
 - Order flow analysis
 - o Cumulative Delta
- Market sentiment algorithms
 - Sentiment indicators
 - VIX
 - Breadth Indicators
 - News and Social Media Analysis
 - o COT Reports
 - ML & AI sentiment analysis
- Liquidity Analysis
 - Liquidity Indicators
 - Impact Cost
 - Slippage
 - Liquidity Risk
 - o ADV
 - Liquidity Aggregators
 - Liquidity Dynamics
 - Centralized Markets
 - Decentralized Markets
- Advanced Oscillators
 - o RSI, Stochastic, CII,
 - o MACD, ATR, Williams %R, DPO
 - o Ultimate, CMO, RVIElder's Froce

- Statistical Arbitrage
 - Pair Selection
 - Cointegration Analysis
 - Spread Calculation
 - o Mispricing
 - Signal Generation
 - o HFT
 - Neutrality
 - Monitoring
- Market microstructure analysis
 - Order book Dynamics
 - Market vs Limit Order
 - o Bid-Ask Spread
 - Market Impact
 - o Dark pools
 - o Tick Size and Price levels
 - Market Fragmentation
 - Liquidity Provision
 - Midpoint Trading
 - Latency & Market Access
 - Market Regulation and Surveillance
 - Trade Classification
 - Smart order Routing
 - Tick Data Analysis
 - Cross-Listed and Dual-Listed Securities
 - Market transparency
- Quantitative Behavioural Finance
 - Market Anomalies and Patterns
 - Psychological Biases
 - Sentiment analysis
 - Behavioral Factors in Algorithmic Models
 - o Price Patterns and Investor Behavior
 - o Noise Trading
 - o Individual & institutional order flows
 - Risk Perception & Technical Analysis
 - Neurofinance
 - Machine / Deep Learning Application
- Bayesian analysis
 - Prior probability
 - Likelihood
 - Posterior Probability
 - Marginal Likelihood
 - Bayesian Inference

- Conjugate Priors
- o Markov Chain Monte
- Bayesian Decision Theory
- Bayesian Networks
- Portfolio optimization
 - o Covered in Risk Management
- Fractal analysis
 - o Pattern Recognition
 - o Trends, Support & Resistance
 - Chaos Theory
 - Market Geometry
- Efficient Market Hypothesis
- Fractal Market Hypothesis
 - Chaos & Order in Capital Markets
 - Chaos Theory Principles
 - Fractal Dimensions
 - Scale Invariance
- Spectral Analysis
 - o Frequency Domain Analysis
 - o Fourier Transform
 - Identification of Cycles
 - Domain Frequencies
 - Periodicity
- High-Dimensional Data Analysis
 - Multivariate Analysis
 - Data Dimensionality
 - o Dimensionality Reduction
 - o ML Application
 - Visualization Techniques
 - Dynamic Modeling
- Advanced time series analysis
 - o ARIMA
 - o STL
 - o ETS
 - o VAR
 - o GARCH
 - LSTM Networks
 - Wavelet
 - Fractional Differencing
 - o Regime-Switching
 - o Cointegration and Johansen Test
 - Markov switching Models
 - o Kalman Filtering

- o Bayesian Time Series Analysis
- HF data analysis
- Multifractal Analysis
- o Regime Detection & Analysis
- Dynamic Time wrapping
- o Cross-Recurrence Qualification Analysis
- Event Study Analysis
- Spatial Time Series Analysis
- Entropy Measures
- Transfer learning
 - o Machine Learning Application & Implementation
- Market Environment Dynamics
 - Bull Markets
 - Bear Markets
 - Sideways or Range bound Markets
 - Volatile Markets
 - Quiet or low-volatility markets
 - o Bullish Trend
 - Bearish Trend
 - Recessionary Environment
 - Inflationary Environment
 - o Deflationary Environment
 - Stagflation
 - Bubbles and Speculative Markets
 - Rising Interest Environment
 - Global Markets
 - o Cyclic Market
 - o Secular Bull Market
 - Secular Bear Market
 - Tech-Driven market
 - Commodity Bull Market
 - Commodity Bear Market
 - Currency Market
 - o Policy Driven Market
 - Emerging Market Environment
 - M&A Environment
 - o ESG Market
 - Cryptocurrency Market
 - o Global Health Crisis Environment
 - o Government Intervention Environment
 - Quantitative Easing Environment
 - Quantitative Tightening Environment
 - o Financial Crises Environment

- Low-Interest Rate Environment
- o High-Interest Rate Environment
- Real Estate Market
- Hedging Market Activities
- o FOMO Environment
- o Tax-Driven Market
- Al and Algorithmic trading Environment
- FinTech Market
- Post-Election Market Environment
- Supply Chain Disruption Environment
- Seasonal Market Environment
- Share Buyback Environment
- o IPO Market
- Currency Crisis Environment
- o Consumer Confidence Environment
- Geopolitical Economy Environment
- o Goldilocks Economy Environment
- Infrastructure Spending Environment
- Sharing economy Environment
- o Deleveraging Environment
- o EV market Environment
- o Renewable Energy Market
- o Defi Environment
- o Global Trade War Environment
- o Digital Transformation Environment
- Health tech and Biotech
- o Remote work and Telecommunication
- Market Evolution
- Cyber Security Concerns
- SPACs Environment
- Carbon Market

And etc

Note & Warning: The above list mentioned is incomplete and is intended to encapsulate basic concepts of technical analysis and may contain errors. Please read the light-hearted anecdote used in the fundamental analysis document under the guide section on how to approach solving a problem statement and learning the above skills. We aim to update these Documents with more refined references and add new concepts that are related to Technical Analysis. We also aim to provide basic frameworks, ready-made algorithms, back testing codes in the form of games that are based on technical analysis based on your request & requirements submitted to us through feedback forms... Please subscribe to our **Newsletters** under our guide section so you will be notified whenever major updates like new knowledge, ready-made algorithms, new Innovative products, and much more are released in any section of our website.

Hope this helps.

Thank you

Be Careful

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