# Comprehensive Technical Indicators to Build a Trading System

Building a trading platform that can compete with or exceed the feature‑set of popular platforms such as TradingView requires support for a wide range of technical indicators. Two authoritative sources were used to compile the list below:

1. **Incredible Charts** – their A–Z reference of indicators highlights many classical tools as well as their proprietary Twiggs indicators. Examples include Accumulation Distribution, ADX, Bollinger Bands and ATR Trailing Stops[[1]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=A).
2. **12 Data API documentation** – the documentation categorises over 50 indicators into **Overlap Studies**, **Momentum indicators**, **Volume indicators**, **Volatility indicators**, **Price transforms**, **Cycle indicators** and **Statistical functions**. Examples include Bollinger Bands, McGinley Dynamic, Moving Average Convergence Divergence (MACD), Relative Strength Index (RSI) and Hilbert‑transform based cycle indicators[[2]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,be%20overlooked%20in%20a%20trend)[[3]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,downward%20movements%20in%20closing%20price).

Together these references provide a comprehensive set of indicators that address trend, momentum, volatility, volume, cycle analysis, price transformations and statistical measures. Implementing most or all of these will give traders the flexibility to build, test and refine virtually any strategy.

## Trend & overlap (moving‑average based) indicators

These indicators smooth price action, outline trend direction or plot envelopes around price. Many are part of **Overlap Studies** in the 12 Data API or trend sections of Incredible Charts.

| Indicator | Source & justification |
| --- | --- |
| **Simple Moving Average (SMA)**, **Exponential Moving Average (EMA)**, **Weighted MA (WMA)**, **Hull MA (HMA)**, **Wilder’s MA** | Moving averages and their variants smooth price data and are core to trend analysis[[4]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,Momentum%20crosses%20the%20overbought%2Foversold%20line). |
|  |  |
| **Double/Triple Exponential Moving Averages (DEMA/TEMA)** | Provide faster response than an ordinary EMA and are listed under 12 Data’s overlap studies[[2]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,be%20overlooked%20in%20a%20trend). |
| **Displaced/Adaptive Moving Averages (DMA, Kaufman Adaptive MA, McGinley Dynamic, MESA adaptive MA)** | Adapt more quickly to changing market conditions; included in Incredible Charts’ moving‑average systems and 12 Data’s overlap studies[[5]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,trading%20range%20for%20each%20period)[[4]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,Momentum%20crosses%20the%20overbought%2Foversold%20line). |
| **Volume‑weighted average price (VWAP)** and **Volume Weighted Average Price (VWAP)** | Weighted by volume to capture typical transaction price – emphasised in 12 Data’s overlap studies. |
| **Moving Average Envelopes & Price Channels** (Bollinger Bands, ATR Bands, Percentage Bands/Price Envelope, Keltner Channels) | Enclose price within bands to signal overbought/oversold conditions[[2]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,be%20overlooked%20in%20a%20trend)[[6]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,days%20when%20volume%20is%20higher). |
| **Parabolic Stop and Reverse (SAR)** and **ATR Trailing Stops / Trailing Stops** | Trend‑following stops used for exit signals[[7]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,and%20exit%20points%20in%20trends). |
| **Pivot Points and Pivot Points High‑Low** | Plot potential support/resistance levels[[8]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,term%20trading). |
| **Linear Regression Trendlines** & **Standard Deviation Channels** | Fit a regression line through price and plot channel boundaries to gauge trend strength[[9]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,an%20MA%20to%20trend%20changes)[[10]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,entry%20and%20exit%20signals%20for). |
| **Trendlines** & **Price Channels (Donchian, Price Channel)** | Identify directional bias and breakouts[[11]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,and%20exit%20points%20in%20trends)[[12]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,121). |

| **Indicator** | **Purpose** | **Evidence** |
| --- | --- | --- |
| **Arnaud Legoux Moving Average (ALMA)** | Applies a moving average forward and backward (zero‑phase filtering) to reduce noise and lag while enhancing trend detection. | Interactive Brokers explains that ALMA is calculated twice—left‑to‑right and right‑to‑left—so small price fluctuations are smoothed without adding phase delay. |
| **Hull Moving Average (HMA)** | Reduces lag of traditional moving averages by weighting recent prices more heavily; useful for faster trend identification. | LuxAlgo notes that HMA’s formula uses weighted moving averages and square‑root smoothing, producing a smooth curve with minimal lag. |
| **Kaufman’s Adaptive Moving Average (KAMA)** | Adapts its smoothing based on market volatility; stays close to price when volatility is low and lags when volatility is high. | The Corporate Finance Institute describes KAMA as filtering market noise—reducing false signals—by adjusting to price changes and volatility. |
| **Guppy Multiple Moving Average (GMMA)** | Combines two sets of EMAs (short and long term) to show trend strength and potential reversals. | The indicator—created by trader Daryl Guppy—shows a strong trend when the gap between the two EMA groups widens and warns of a reversal when they narrow. |

## Momentum & oscillator indicators

Momentum oscillators measure the speed of price movement and identify overbought/oversold conditions. Many traders combine them with trend filters.

| Indicator | Source & justification |
| --- | --- |
| **Relative Strength Index (RSI)** | Popular momentum oscillator that compares up and down closes[[13]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,downward%20movements%20in%20closing%20price). |
| **Stochastic Oscillator (fast/slow)** & **Stochastic RSI** | Track momentum through %K/%D crossovers; multiple forms are included in the 12 Data API and Incredible Charts[[14]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,Wilder%27s%20original%20Relative%20Strength%20oscillator). |
| **MACD (Moving Average Convergence Divergence)**, **MACD Histogram** & **Percentage Price Oscillator** | Differencing of fast and slow EMAs to identify trend changes; multiple variations recommended[[15]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,which%20enables%20comparison%20between%20stocks). |
| **Aroon Oscillator and ADX/DMI** | Measure trend strength and the time since recent highs or lows[[16]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,stock%20is%20trending%20or%20ranging)[[17]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=The%20Directional%20Movement%20Index%20,signals%20for%20trading%20the%20trend). |
| **Rate of Change (Price)**, **Momentum Indicator**, **Mass Index**, **Smoothed Rate of Change (SROC)** | Gauge the rate of price change and highlight reversals[[18]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,Momentum%20crosses%20the%20overbought%2Foversold%20line)[[19]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,downward%20movements%20in%20closing%20price). |
| **Chande Momentum Oscillator** | Uses overbought/oversold levels and divergences to spot reversals[[20]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,64). |
| **Commodity Channel Index (CCI)** | Measures how far price is from its moving average[[21]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,markets%20and%20likely%20turning%20points). |
| **Williams %R** & **Ultimate Oscillator** | Indicate momentum and potential turning points[[22]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,order%20to%20minimize%20false%20signals). |
| **Twiggs proprietary momentum oscillators (Twiggs Momentum, Smoothed Momentum, Trend Index)** | Custom momentum measures that emphasise rate-of-change and volatility to highlight strong trends[[23]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,while%20divergences%20warn%20of%20reversals). |
| **KST (Know Sure Thing)** & **TRIX** | Identify major trend reversals with smoothed ROC components[[24]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,KST%20crosses%20its%20signal%20line)[[25]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,shorter%20than%20the%20indicator%20period). |
| **Choppiness Index** | Quantifies whether a market is trending or ranging[[26]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,market%20is%20trending%20or%20ranging). |
| **Ease of Movement** | Relates price movement to volume to gauge trend strength[[27]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,the%20strength%20of%20a%20trend). |
| **Force Index** | Combines price changes and volume to measure the force behind moves[[28]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,and%20bears%20in%20the%20market). |
| **Momentum Convergence‑Divergence (MCD) variants** (e.g., **Money Flow Index**) | Volume‑weighted momentum oscillator to warn of trend weakness[[29]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,weakness%20and%20likely%20reversal%20points). |

| **Indicator** | **Purpose** | **Evidence** |
| --- | --- | --- |
| **Klinger Volume Oscillator** | Compares price and volume through two exponential moving averages (default 34‑ and 55‑period) to predict long‑term money‑flow trends and short‑term fluctuations. | The Corporate Finance Institute article notes that buy signals occur when the short EMA crosses above the longer EMA, and vice versa for sell signals. |
| **Relative Vigor Index (RVI)** | Measures trend strength by comparing a security’s closing price to its trading range and smoothing the result; used mainly in trending markets. | Investopedia points out that RVI oscillates around a centreline and divergences between price and RVI often precede trend changes. |
| **Elder Impulse System** | Combines a 13‑period EMA with the MACD histogram to colour price bars green (bullish), red (bearish) or blue (neutral), highlighting accelerations or decelerations in trend. | The system aims to identify inflection points when trends accelerate or lose momentum. |
| **Connors RSI (CRSI)** | Integrates a very short‑term RSI, the length of recent up/down streaks and the magnitude of price change to improve timing for short‑term trades. | StocksToTrade explains that combining these three components yields more precise overbought/oversold signals than a standard RSI. |
| **McClellan Oscillator** | Uses advance/decline data to calculate the difference between 19‑ and 39‑period EMAs, providing a momentum gauge of market breadth. | It shows overbought or oversold conditions; positive values occur when the short‑term EMA exceeds the long‑term EMA. |
| **True Strength Index (TSI)** | Double‑smoothed momentum oscillator that divides the double‑smoothed price change by its absolute change; useful for centerline and signal‑line crossovers. | StockCharts’ ChartSchool notes that TSI’s double smoothing filters noise and highlights positive or negative momentum. |
| **Schaff Trend Cycle (STC)** | An oscillator combining moving averages and cycle analysis; signals typically come when the STC crosses levels like 25 (buy) and 75 (sell). | Trading Technologies highlights that STC provides trend and momentum signals with faster reaction than MACD. |
| **Vortex Indicator** | Two oscillators (VI+ and VI−) measure trend direction; when VI+ stays above VI− the trend is up, and vice versa. | The TT help library explains that a crossover between VI+ and VI− signals a potential shift in trend. |
| **Fisher Transform** | Converts price data into a Gaussian distribution, amplifying peaks and troughs to highlight turning points. | LuxAlgo remarks that the transform emphasizes extreme values and can provide clearer entry/exit signals. |
| **TTM Squeeze** | Combines Bollinger Bands with Keltner Channels to detect periods of low volatility (“squeeze”) followed by potential breakouts; includes a momentum histogram for direction. | A CQG article notes that a squeeze ends when Bollinger Bands expand beyond the Keltner Channel, signalling the start of a new trend. |
| **Arms Index (TRIN)** | Breadth indicator dividing the advance‑decline ratio by the advance‑decline volume ratio; values below 1 indicate strength and values above 1 signal weakness. | TRIN helps identify overbought/oversold market conditions. |

## Volatility & range measures

Volatility indicators describe the magnitude of price changes and often confirm breakouts or signal risk levels.

| Indicator | Source & justification |
| --- | --- |
| **Average True Range (ATR)** | Measures average range and underpins ATR Bands and trailing stops[[30]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,conjunction%20with%20a%20trend%20filter). |
| **True Range** | Adjusts the high‑low range for gaps[[31]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,there%20is%20an%20opening%20gap). |
| **Bollinger Bandwidth** | Measures band width to identify volatility squeezes[[32]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,neck%2C%20often%20precedes%20a%20sharp). |
| **Chaikin Volatility** | Uses high–low ranges to detect volatility spikes[[33]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=Chaikin%20measures%20volatility%20as%20the,as%20the%20market%20loses%20interest). |
| **Normalized Average True Range** & **Volatility Ratio** | Variants of ATR and measures of volatility relative to price[[34]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,ranging%20days). |
| **Vertical Horizontal Filter (VHF)** | Differentiates trending and ranging conditions[[35]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=V). |
| **Twiggs Volatility** | Proprietary volatility indicator highlighting risk[[36]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,to%20flag%20elevated%20market%20risk). |
| **Volatility Stops / Parabolic SAR / ATR Trailing Stops / Percentage Trailing Stops** | Trend‑following exit mechanisms based on volatility[[7]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,and%20exit%20points%20in%20trends)[[37]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,104). |
| **Standard Deviation Channels** | Plots bands at a number of standard deviations around a regression line[[10]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,entry%20and%20exit%20signals%20for). |

## Volume & money‑flow indicators

Volume indicators validate price movements by measuring buying and selling pressure or comparing volume to price.

| Indicator | Source & justification |
| --- | --- |
| **On‑Balance Volume (OBV)** | Cumulative volume indicator that measures accumulation/distribution[[38]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,comparing%20volume%20to%20price%20movements). |
| **Accumulation/Distribution (A/D)** | Tracks the relationship between price and volume[[39]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=A). |
| **Chaikin Money Flow** | Uses price location within the trading range to weight volume[[40]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,61). |
| **Money Flow Index (MFI)** | Volume‑weighted RSI that warns of trend weakness[[29]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,weakness%20and%20likely%20reversal%20points). |
| **Price Volume Trend (PVT)** | Combines price and volume to confirm trends[[41]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,trends%20and%20warns%20of%20reversals). |
| **Positive Volume Index (PVI)** & **Negative Volume Index (NVI)** | Compare performance on high‑volume and low‑volume days[[42]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,to%20identify%20bull%20markets)[[43]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,days%20when%20volume%20is%20higher). |
| **Twiggs Money Flow** | Proprietary indicator emphasising accumulation/distribution[[44]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,advance%20indication%20of%20breakouts%2C%20while). |
| **Williams Accumulation Distribution** | Measures accumulation/distribution using trading ranges[[45]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=Larry%20Williams%20highlights%20accumulation%20and,its%20previous%20high%2C%20distribution%20is). |
| **Volume Oscillator** | Highlights changes in volume activity[[46]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,highlights%20changes%20in%20volume%20activity). |
| **Relative Volume** | Provided by 12 Data; compares current volume to historical average. |
| **Accumulation/Distribution Oscillator** | Variation using moving averages. |

| **Indicator** | **Purpose** | **Evidence** |
| --- | --- | --- |
| **Volume Weighted Average Price (VWAP)** | Intraday tool that calculates the average price weighted by volume; helps traders assess whether price is relatively cheap or expensive during the day. | Investopedia notes that traders often view prices below VWAP as undervalued and above it as overvalued. |
| **McClellan Oscillator** | See above (momentum). It uses breadth (advances vs. declines) to gauge market momentum. |  |
| **Ulcer Index** | Quantifies downside risk by measuring the depth and duration of drawdowns; considered superior to standard deviation for evaluating volatility. | ChartSchool explains that a higher Ulcer Index indicates deeper or longer drawdowns. |
| **VIX (CBOE Volatility Index)** | Measures market expectations of near‑term volatility derived from S&P 500 index option prices. | The Federal Reserve’s FRED database describes VIX as conveying the market’s consensus of future volatility. |
| **Gopalakrishnan Range Index (GAPO)** | Uses the logarithm of the difference between the period’s highest high and lowest low divided by the log of the period length to gauge volatility. | The indicator identifies whether an asset is more volatile or slow‑moving, helping traders choose appropriate timeframes. |

## Price and mathematical transforms

Transform indicators convert or combine price data to create new series. These are often used as inputs into other indicators.

| Indicator | Source & justification |
| --- | --- |
| **Addition, Subtraction, Multiplication & Division** | 12 Data supports basic arithmetic operations on series (e.g., subtract one moving average from another). |
| **Average, Median Price, Typical Price & Weighted Close** | Combine high/low/close to create composite prices; typical price uses (H+L+C)/3[[47]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,filter%20for%20moving%20average%20systems) and weighted close uses (H+L+2\*C)/4[[48]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,filter%20for%20moving%20average%20systems). |
| **Ceiling, Floor & Square Root** | Mathematical transforms used to normalise or bound data. |
| **Exponential & Natural/Base‑10 Logarithm** | Convert price to a logarithmic scale. |
| **High–Low–Close average & Midpoint/Midprice** | Derive mean prices[[49]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,trading%20range%20for%20each%20period). |
| **Summation & Average Price** | Cumulative sums or averages over a window. |
| **Heikin Ashi Candles** | Alternative candlestick representation that filters noise[[50]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,market%20noise%20from%20traditional%20candlesticks). |
| **Addition of multiple series** (e.g., Price Ratio, Price Differential) | Used to compare instruments[[51]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,share%20the%20same%20price%20axis). |

## Cycle & Hilbert‑transform indicators

These indicators attempt to identify cycles or phases in price data. 12 Data includes a set of Hilbert‑transform based functions.

| Indicator | Source & justification |
| --- | --- |
| **Hilbert Transform Dominant Cycle Period** & **Dominant Cycle Phase** | Estimate the dominant cycle period and phase in a time‑series, useful for adaptive indicators. |
| **Hilbert Transform Phasor Components** | Decompose price into quadrature components to analyse cycles. |
| **Hilbert Transform Instantaneous Trendline** | Trendline based on Hilbert transform (also listed in overlap studies). |
| **Hilbert Transform Sine Wave** & **Trend vs Cycle Mode** | Identify whether price is trending or cycling. |
| **Sinewave cross/indicator** | Provide cycle turning points. |

## Statistical functions & regression tools

Statistical functions summarise data or fit models to price series.

| Indicator | Source & justification |
| --- | --- |
| **Correlation** | Measures the correlation between two series. |
| **Beta indicator** | Measures stock volatility relative to the market (statistical regression). |
| **Linear Regression (line, angle, slope, intercept)** | Fit a straight line to price data and derive its slope or intercept[[9]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,an%20MA%20to%20trend%20changes). |
| **Maximum/Minimum & their indices** | Identify extreme values in a window. |
| **Maximum & Minimum and Maximum Index** | Provide both the value and its position in the series. |
| **Standard Deviation & Variance** | Statistical dispersion measures used in risk assessment[[10]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,entry%20and%20exit%20signals%20for). |
| **Time Series Forecast** | Projects the regression line forward. |

## Other specialised indicators

| Indicator | Source & justification |
| --- | --- |
| **Parabolic Stop & Reverse (SAR)** and **SuperTrend / SuperTrend Heikin Ashi** | Trend‑following stops based on volatility. |
| **Ichimoku Cloud** | Comprehensive trend‑following system using multiple averages[[52]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,averages%20with%20traditional%20candlestick%20charts). |
| **Donchian Channels** | Identify breakout points using highest high and lowest low[[11]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,and%20exit%20points%20in%20trends). |
| **Keltner Channels** | Similar to Bollinger bands but uses Average True Range for band width[[53]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,MA%2C%20to%20filter%20trend%20entries). |
| **Chaikin Oscillator & Chaikin Money Flow** | Combine price and volume to measure accumulation/distribution[[54]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,in%20short%20and%20intermediate%20cycles). |
| **Chandelier Exits** | ATR‑based exit indicator[[55]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,exits%20from%20a%20trending%20market). |
| **Coppock Curve** | Long‑term momentum indicator used to identify bull markets[[56]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=Indigo%20version%20for%20Browser.%20,the%20commencement%20of%20bull%20markets). |
| **Donchian Channels** | Breakout indicator based on price extremes[[11]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,and%20exit%20points%20in%20trends). |
| **Ease of Movement & Force Index** | Relate price change to volume to gauge how easily price moves[[57]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,the%20Triple%20Screen%20trading%20system). |
| **Elder Ray Index & Force Index** | Part of the Elder Triple Screen system; combine price movement and volume[[57]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,the%20Triple%20Screen%20trading%20system). |
| **Fibonacci Retracements & Extensions** | Identify potential support/resistance levels based on Fibonacci ratios[[58]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,75). |
| **Gann‑based tools (not listed explicitly)** – trading platforms often include Gann angles and fans. |  |
| **Ichimoku Cloud** | Comprehensive multi‑time‑frame trend system[[52]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,averages%20with%20traditional%20candlestick%20charts). |
| **Pivot Points**, **Price Channels** & **Price Ratio** | Support/resistance and relative‑strength comparisons[[59]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,days%20when%20volume%20is%20higher). |
| **SafeZone**, **Standard Deviation Channels**, **Volatility Stops** | Advanced stop‑loss systems[[60]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=S). |
| **Vertical Horizontal Filter (VHF)** | Determines whether market is trending or ranging[[35]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=V). |
| **Williams Accumulate/Distribute** & **Williams %R** | Evaluate accumulation/distribution and momentum[[61]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,crossover%20of%20the%20overbought%2Foversold%20level). |

| **Indicator** | **Purpose** | **Evidence** |
| --- | --- | --- |
| **Zig‑Zag Indicator** | Filters out small price movements by connecting significant swing highs and lows based on a chosen percentage (often 5%); helps visualise trend reversals. | Investopedia notes that the zig‑zag isn’t predictive but highlights major swings and can assist with Elliott Wave counts and Fibonacci projections. |
| **Chande Kroll Stop** | Dynamic stop‑loss indicator using average true range (ATR), a multiplier and the current price; produces two lines to set stop levels for long and short positions. | FXOpen’s article explains that it adjusts to volatility and works across asset classes; higher multipliers or periods widen the stop to reduce false exits. |
| **Keltner Channel** | Volatility‑based channel consisting of an exponential moving average with upper and lower bands set at multiples of ATR; closes above the upper band suggest strength and below the lower band suggest weakness. | The Corporate Finance Institute credits Chester Keltner and later modifications by Linda Bradford Raschke. |
| **Alligator & Gator Oscillator** | The Alligator uses three displaced moving averages (jaw, teeth and lips) to identify trending vs. resting periods. The Gator Oscillator plots the absolute distance between these averages as a histogram; expanding bars show a strengthening trend. |  |
| **Supertrend** | Overlay indicator based on ATR and a multiplier; a buy signal occurs when the indicator line falls below price and a sell signal when it rises above. |  |
| **Vortex Indicator** | See above (momentum). |  |
| **Schaff Trend Cycle & True Strength Index** | See above. |  |

## Forward‑looking considerations

To build a platform that surpasses TradingView, implementing this wide array of indicators is only part of the solution. Here are a few additional suggestions:

1. **Customisable indicator parameters** – Allow users to adjust look‑back periods, smoothing techniques and calculation methods. Adding adaptive settings, such as automatic period optimisation using cycle analysis, can make basic indicators more responsive to current market conditions.
2. **Composite indicators and scripting** – TradingView’s success stems partly from its Pine Script engine that lets users create custom indicators. Providing a scripting interface or visual strategy builder will allow traders to combine the above indicators in unique ways.
3. **Machine‑learning‑based signals** – Beyond classical indicators, consider adding tools like auto‑pattern recognition, anomaly detection and AI‑driven predictions trained on historical data. These can help users discover subtle patterns not captured by traditional indicators.
4. **Backtesting & optimisation** – Integrate a robust backtesting framework so users can test indicator combinations over historical data. Provide performance metrics and statistical significance tests to ensure strategies aren’t simply over‑fitted.
5. **Real‑time alerts and automation** – Offer alerting systems and optional trade‑execution hooks so that indicator‑based signals can be acted on promptly, reducing the latency between signal and trade. Support for webhooks or API integration will also help algorithmic traders.

By implementing the extensive list of classical indicators above—plus offering modern customisation, scripting and AI‑enhanced tools—your trading platform will provide a richer technical analysis environment than many existing offerings, including TradingView. Staying flexible and continually adding new indicators or proprietary tools will keep the platform ahead of the curve in the fast‑evolving world of quantitative trading.

[[1]](https://www.incrediblecharts.com/indicators/technical-indicators.php" \l ":~:text=A) [[2]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,be%20overlooked%20in%20a%20trend) [[3]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,downward%20movements%20in%20closing%20price) [[4]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,Momentum%20crosses%20the%20overbought%2Foversold%20line) [[5]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,trading%20range%20for%20each%20period) [[6]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,days%20when%20volume%20is%20higher) [[7]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,and%20exit%20points%20in%20trends) [[8]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,term%20trading) [[9]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,an%20MA%20to%20trend%20changes) [[10]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,entry%20and%20exit%20signals%20for) [[11]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,and%20exit%20points%20in%20trends) [[12]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,121) [[13]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,downward%20movements%20in%20closing%20price) [[14]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,Wilder%27s%20original%20Relative%20Strength%20oscillator) [[15]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,which%20enables%20comparison%20between%20stocks) [[16]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,stock%20is%20trending%20or%20ranging) [[17]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=The%20Directional%20Movement%20Index%20,signals%20for%20trading%20the%20trend) [[18]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,Momentum%20crosses%20the%20overbought%2Foversold%20line) [[19]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,downward%20movements%20in%20closing%20price) [[20]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,64) [[21]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,markets%20and%20likely%20turning%20points) [[22]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,order%20to%20minimize%20false%20signals) [[23]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,while%20divergences%20warn%20of%20reversals) [[24]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,KST%20crosses%20its%20signal%20line) [[25]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,shorter%20than%20the%20indicator%20period) [[26]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,market%20is%20trending%20or%20ranging) [[27]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,the%20strength%20of%20a%20trend) [[28]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,and%20bears%20in%20the%20market) [[29]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,weakness%20and%20likely%20reversal%20points) [[30]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,conjunction%20with%20a%20trend%20filter) [[31]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,there%20is%20an%20opening%20gap) [[32]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,neck%2C%20often%20precedes%20a%20sharp) [[33]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=Chaikin%20measures%20volatility%20as%20the,as%20the%20market%20loses%20interest) [[34]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,ranging%20days) [[35]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=V) [[36]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,to%20flag%20elevated%20market%20risk) [[37]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,104) [[38]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,comparing%20volume%20to%20price%20movements) [[39]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=A) [[40]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,61) [[41]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,trends%20and%20warns%20of%20reversals) [[42]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,to%20identify%20bull%20markets) [[43]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,days%20when%20volume%20is%20higher) [[44]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,advance%20indication%20of%20breakouts%2C%20while) [[45]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=Larry%20Williams%20highlights%20accumulation%20and,its%20previous%20high%2C%20distribution%20is) [[46]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,highlights%20changes%20in%20volume%20activity) [[47]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,filter%20for%20moving%20average%20systems) [[48]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,filter%20for%20moving%20average%20systems) [[49]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,trading%20range%20for%20each%20period) [[50]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,market%20noise%20from%20traditional%20candlesticks) [[51]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,share%20the%20same%20price%20axis) [[52]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,averages%20with%20traditional%20candlestick%20charts) [[53]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,MA%2C%20to%20filter%20trend%20entries) [[54]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,in%20short%20and%20intermediate%20cycles) [[55]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,exits%20from%20a%20trending%20market) [[56]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=Indigo%20version%20for%20Browser.%20,the%20commencement%20of%20bull%20markets) [[57]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,the%20Triple%20Screen%20trading%20system) [[58]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,75) [[59]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,days%20when%20volume%20is%20higher) [[60]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=S) [[61]](https://www.incrediblecharts.com/indicators/technical-indicators.php#:~:text=,crossover%20of%20the%20overbought%2Foversold%20level) Technical Indicators A ~ Z

<https://www.incrediblecharts.com/indicators/technical-indicators.php>