TRADING COURSE: ADVANCED LEVEL

instaforex
Instant Forex Trading

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READING THIS COURSE, YOU WILL LEARN ABOUT:

- Mathematical analysis
- Trend indicators and their types
- Trading systems
- Trading signals
- Trading diary

MATHEMATICAL ANALYSIS (TECHNICAL INDICATORS)

INTRODUCTION TO THE MATHEMATICAL ANALYSIS (TECHNICAL INDICATORS)

Technical indicators are tools that perform certain calculations according to given formulas based on indicators of a price chart and trading volume, and then automatically produce a result. These indicators are used in the InstaTrader trading platform.

TREND INDICATORS AND THEIR TYPES

Trend indicators are designed to determine the trend. The effectiveness of trend indicators increases when a new market trend is formed. Trend indicators are built directly on the chart, and move parallel to the price. Also, indicators can periodically overlap with the price and change their position.

Here are the main trend indicators:

- Moving Average (MA)
- Average Directional Movement Index (ADX)

MOVING AVERAGE

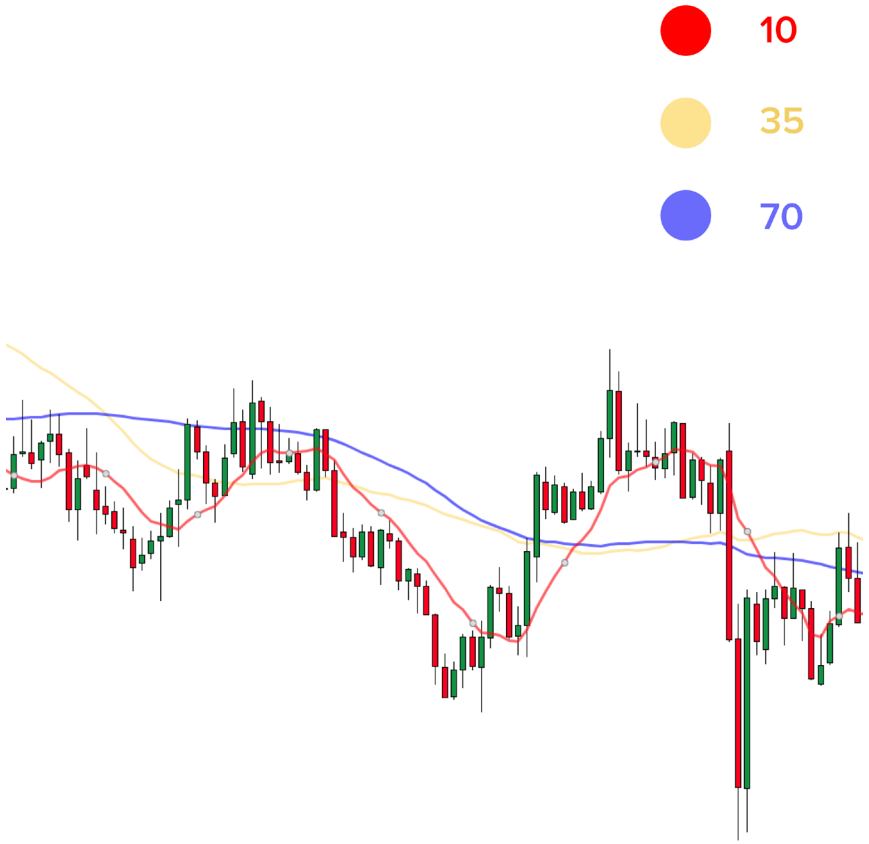
Moving Average is a standard trend indicator that shows the average price value for a certain period of time. Moving Average shows the direction of the trend and the tendency of the price to rise or fall in the future.

The price of a trading instrument for a given period is averaged for calculation of this indicator. For example, period 10 shows ten last candlesticks that are used to plot a moving average. On H1 timeframe, these are 10 hourly candlesticks. More detailed information about formulas is given in a manual of a trading platform that pops up when F1 is pressed.

There is a tendency: the higher a period is, the smoother a moving average is. And vice versa, the lower a period is, the more sharp-edged a moving average is.

There are three moving averages in the picture below: Red MA – period 10; Yellow MA – period 35; Blue MA – period 70.

Pay attention, that the red MA (the fastest one as the period is the lowest) is moving close



to the price chart and copies almost every price fluctuation. At the same time, the blue MA (the slowest one as the period is the highest) is moving far from the price chart, barely responding to correctional movements. It just indicates a direction of the underlying trend.

There are several types of moving averages:

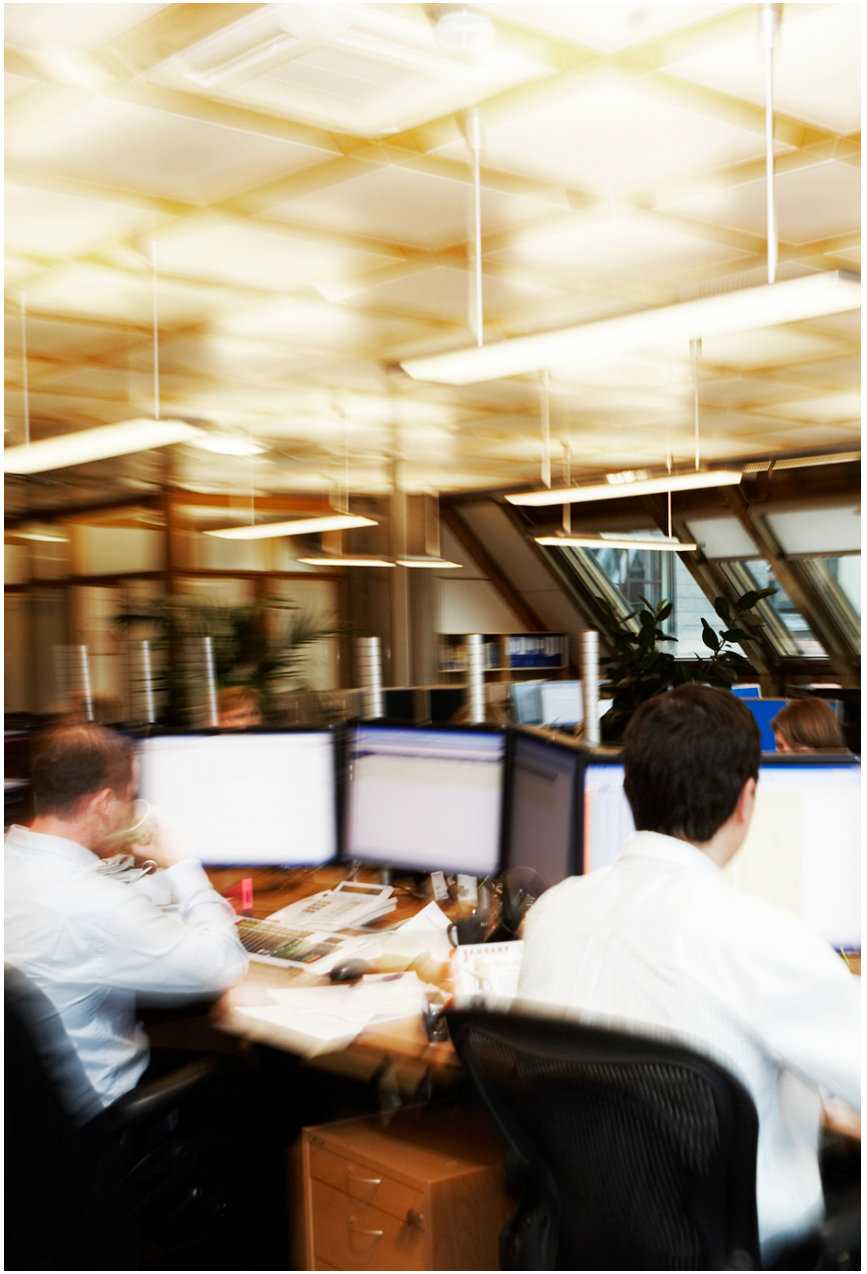
- Simple Moving Average (SMA)
- Exponential Moving Average / EMA
- Smoothed Moving Average (SMMA)
- Linear Weighted Moving Average (LWMA)

The principles of trading for each of these types of moving averages are the same. The only difference is in the method of calculating the moving average.

The Moving Average indicator is a rather important tool that is often a component of other technical indicators.

How to interpret the MA signals?

If the MA line is directed upwards, it serves as a buy signal, whereas when the MA is heading to the downside, it is a signal to sell.



How to apply a moving average to a chart

The principle of trading with a moving average is really simple: it is necessary to plot two MAs with a short and long period and watch for the moments when they cross each other.

An example:

If the fast MA (with period 10, depicted in green) crosses the MA with a longer period (depicted in red) from bottom to top, then a buy deal is opened. If the fast MA (10) crosses the MA (30) from top to bottom, then a sell deal is opened. Actually, the best and general-purpose periods of moving averages do not exist. Every trader applies the periods that suit their trading goals (10, 20, 30, 40, and etc.). There is one widely-used method: traders apply two MAs (for example, with periods 5 and 10) to a chart and watch how they behave. If they provide too many false signals, then the periods are increased by 5 units, i.e. 10 and 15 are applied instead of 5 and 10 correspondingly. In such a way traders try to set the most suitable parameters of the indicator.

AVERAGE DIRECTIONAL INDEX (ADX)

The Average Directional Index was created by Welles Wilder, who wrote about it in his 1978 book New Concepts in Technical Trading Systems.

ADX focuses on measuring the strength or weakness of a trend, but can also help determine the direction of the trend. It helps to establish if there is a trend in the market and how strong it is.

The Average Directional Index has 3 lines:

- ADX line
- Positive directional indicator (+DI) which indicates an upward trend
- Negative directional indicator (-DI) which indicates a downward trend

On the chart below, the main line of ADX is shown together with +DI and –DI lines.

The ADX line measures the strength of a trend. A rising line means that the trend is gaining strength. A falling line shows a trend that is losing momentum or reversing. A flat line indicates consolidation.

It is important to remember that the ADX line does not provide any information about the direction of the trend. When the ADX line goes up, it can signal both bullish and bearish trends.

The other two lines allow you to determine the direction of the trend. When an uptrend develops, + DI is greater than -DI. For a downtrend, -DI is greater than + DI.

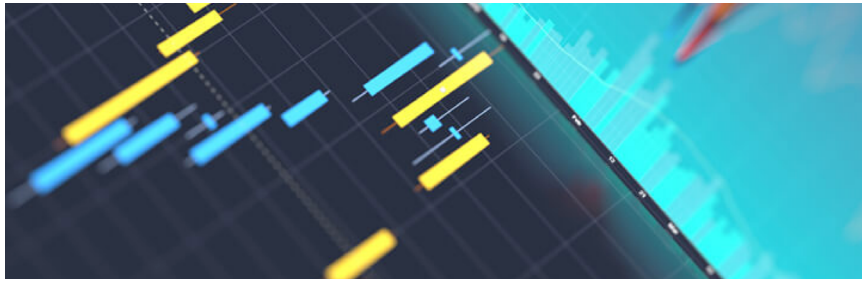
Though ADX readings are located in the range from 0 to 100 pips, they rarely reach a minimum or a maximum. The ADX value below 20 indicates a weak trend (Forex consolidation), a value above 40 indicates a strong, developing trend.

When there is any clear trend in the market – either bullish or bearish – the distance between DI lines grows as well as the ADX readings. On the contrary, when the market activity is low, both the distance between DI lines and the ADX reading are reduced.

ADX shows the best performance after consolidation periods, but it can provide false signals after V-shaped market reversals.

How to apply ADX to a chart

Buy signals are formed when the +DI line is above the –DI line and the ADX line rises. The stop loss should be set below the recent price low.



Sell signals are formed when the +DI line is below the –DI line while the ADX line is rising. The stop loss level should be set above the recent high.

OSCILLATORS

The oscillator got its name from lat. oscillo that means swing. In fact, an oscillator is a system that oscillates (up and down) with a certain periodicity. Oscillators are referred to leading indicators. Leading indicators provide information about an upcoming economic cycle or a change in a market trend.

In technical analysis, oscillators are a mathematical expression of the rate of price over time. Outwardly, oscillators in technical analysis look like sinusoids, oscillograms or cardiograms.

The key aspects that should be taken into account when applying oscillators are the overbought and oversold market conditions. When the market is overbought, the price is located near the upper boundary and it is unlikely to rise further. When the market is oversold, the price is at its lowest level and it is unlikely to fall further. Oscillators are better to be analyzed and used when the market is stable but they also can show the moment of the trend reversal.

Here are the most popular oscillators:

- MACD histogram
- Momentum
- Rate-of-Change (ROC)
- Relative Strength Index (RSI)
- Stochastic oscillator (Stochastics)

Let’s consider some of them.

MACD INDICATOR

MACD stands for Moving Average Convergence Divergence, i.e. it shows when moving averages converge or diverge. It is a trend indicator showing the relationship between two moving averages of prices.

The indicator consists of three components: MACD line, signal line, histogram.

- The MACD line is the difference between a slow exponential moving average (EMA) and a fast EMA. By default, this data in the indicator settings is set as 12 and 26 (fast and slow EMA, respectively). To plot the MACD line, the slow EMA (26) is subtracted from the fast EMA (12)
- The Signal Line is the Exponential Moving Average (EMA) from the MACD line
- MACD histogram is a visual simplified interaction of the MACD line and the signal line. The histogram shows the difference between the MACD line and the signal line. The more the MACD line deviates upward from the signal line, the higher the histogram columns will be. Conversely, the smaller the distance becomes between the MACD line and the signal line, the smaller the columns will be

Importantly, no indicators can provide clear signals all the time, so experienced traders usually combine various technical tools in their strategies.

How to apply MACD to a chart

Primary signals are formed when a histogram crosses a zero line. If the MACD histogram crosses the moving line from the bottom up, a buy signal is generated.

If the histogram crosses the MA from top to bottom, a sell signal is generated.

The strength of such signals depends on the previous movements of the histogram. If the MACD had been hovering above the zero line for too long but then it started to decline and the histogram crossed the zero line from top to bottom, then it should be considered as a strong sell signal. A buy signal is interpreted in a reverse way. Note that all indicators, no matter how good they are, can and will provide false signals from time to time. It is, therefore, advised to double check the signals you receive with other indicators or different timeframes

RELATIVE STRENGTH INDICATOR (RSI)

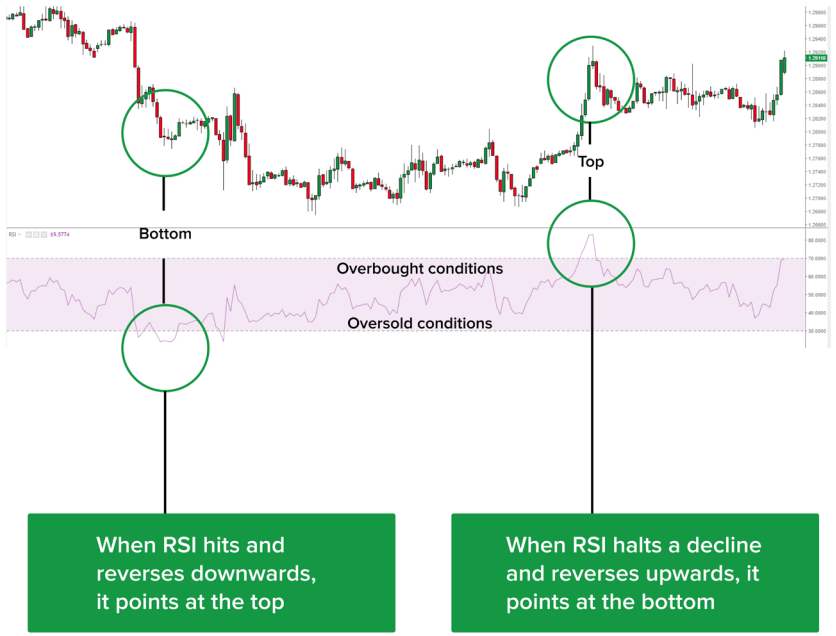
The Relative Strength Index (RSI), developed by J. Welles Wilder, is a momentum oscillator that measures the speed and change of price movements. The RSI oscillates between zero and 100. Traditionally, the RSI is considered overbought when above 70 and oversold when below 30. Signals can be generated by looking for divergences and failure swings. RSI can also be used to identify the general trend.

How to apply RSI to a chart

Typical Interpretation of Overbought and Oversold Levels

Common way of looking at oscillators and their overbought and oversold areas is to think of them as a signal to trade in the other direction. As the name suggests, when the market is overbought, the buying has been excessive and we can expect the price to make a downward correction or a reversal. On the other side an oversold market signals a possible increase in prices.

RSI



TRADING TECHNIQUES. HOW TO AVOID COMMON MISTAKES

Trading system

A trading system is a toolkit of rules and decisions (both trading and analytical), based on trading signals as well as instruments of market analysis.

Any trading system should answer the following questions:

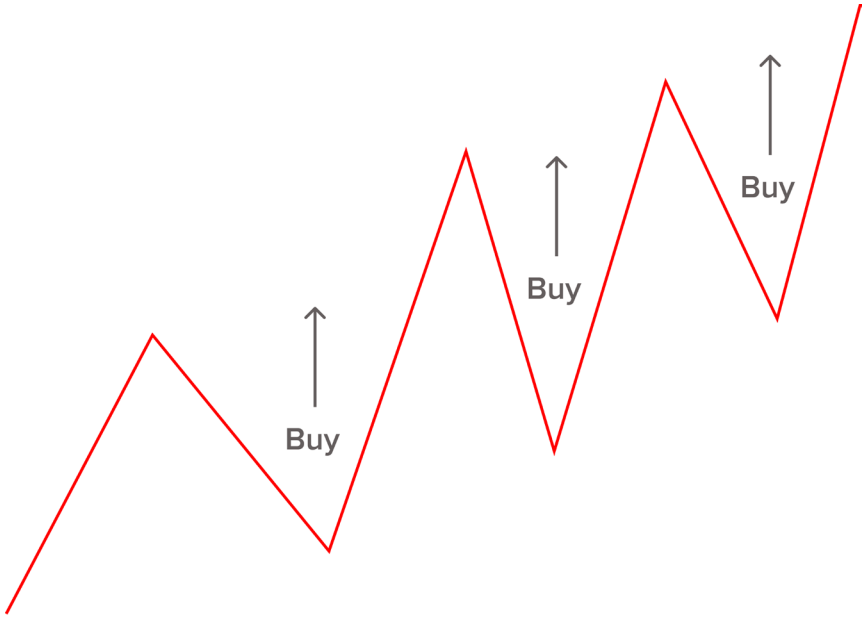
- What is going on in the market now?
- What can happen at a particular moment?
- What a trader should do at this particular point?

TYPES OF TRADING SYSTEMS

Trading systems following a trend.

These systems wait for a certain price movement and then give a signal to open a position in the same direction, based on the assumption that the trend will continue for some time.

They widely employ linear instruments, patterns of technical analysis, trend indicators, and oscillators. As a rule, deals are executed after a retracement in the market.



Advantages:

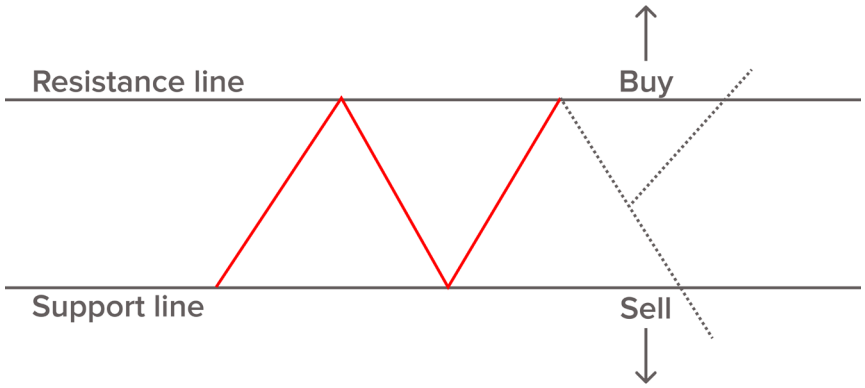
- a big profit range
- stop loss nearby
- a possibility to increase volumes of open positions

Disadvantages:

- when market conditions are not clear, such trading systems may generate many false signals

TRADING A BREAK OF SUPPORT OR RESISTANCE LEVELS

The core message of this system is simple. The ability of the market to reach a new maximum or minimum indicates the possibility of the trend continuing in the direction of the breach.



Advantages:
Such a trading system provides clear-cut signals that a new trend has emerged. Besides, it indicates when a trend could terminate.

Disadvantages:
The main problems of such trading systems are false breaches of support and resistance levels, especially in highly volatile markets.

TRADING SYSTEMS, OPERATING WITHIN A TRADING RANGE.

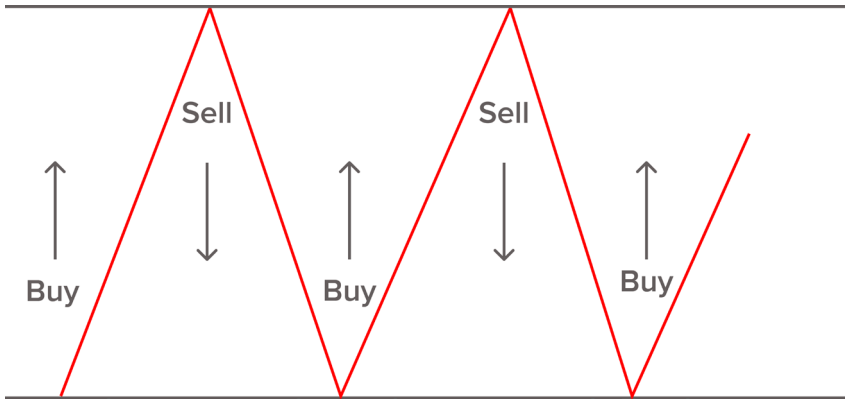
This strategy is trading in a flat market, where the price fluctuates between certain levels, i.e. within a range. Traders using this strategy find the key support and resistance levels with the help of technical analysis. After that, they buy at the lower support levels and sell near resistance. Such trading systems commonly employ oscillators which have the overbought and oversold zones, for example a stochastic oscillator.

Advantages:

- This trading system enables traders to earn under such market conditions when most market participants make losses.

Disadvantages:

- It is difficult to decide in due course when the flat market is over
- A trader misses the bulk of price action following a trend



Combination of trading strategies

Most professional traders do not focus their attention on a single trading strategy. They apply a blend of all three trading strategies that enables them to gain profits under any market conditions.

A factor of major importance to evaluate the quality of a trading system is its simplicity.

Remember, everything ingenious is simple, and everything simple is ingenious.. Your trading system should comply fully with this principle.

Your strategy should include:

1. Rationale. This is the main idea behind the trading strategy. It is the foundation on which all other components are based;

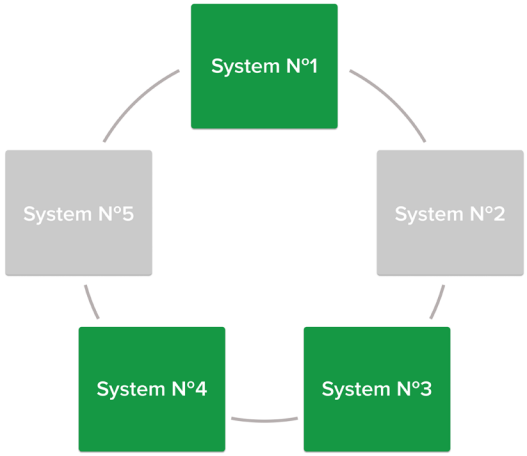
2. Trading instruments;

3. Timeframe and trading time (trading session);

4. Entry rules (signals to open a position);

5. Exit rules. How stop loss and take profit are set (for example, where to set stop loss and take profit levels);

6. The trading volume and the risk management.



INDICATORS OF TECHNICAL ANALYSIS

A lot of traders who gain steady profits on Forex owe their success to technical analysis. Importantly, technical analysis has to be accurate and well-grounded. It can be carried out by means of all instruments available on a trading platform. However, rookie traders find it difficult to combine and pick appropriate technical instruments. Nevertheless, with proper care and patience anyone can learn to make an efficient and comprehensive analysis.

Here is an example of how a trader can apply technical indicators.

For example, let us assume that the GBP/USD candlestick chart is displaying a correctional decline inside the prevailing bullish trend. A trader needs to decide where to open a buy deal.

For that purpose, he plots a few support and resistance levels, searching for possible pivot points. We see that the price presumably found a pivot point at 1.5648. Then, a trader applies another technical tool, Fibonacci levels, which helps him to find out where the price is holding right now and whether there is a pivot point.

A trader sees that at the moment Fibo 50.0% intersects the support level, thus confirming the likelihood of a pivot point. The next step is to analyze technical indicators, in particular a stochastic oscillator which is the

equivalent to the aforesaid RSI indicator. The principle is the same – to identify overbought and oversold zones. The value of Stochastics above 80 signals overbought conditions while the value below 20 indicates oversold conditions. In our case, the Stochastics is below 20. Thus, this is already a third buy signal. The Bullish Divergence provides a final decisive signal. This candlestick pattern indicates that a trend reversal is possible upwards if a current candle 100% overlaps a body of the previous candle.

Let‘s draw a conclusion. All technical tools applied in this example highlight the same trading idea, i.e. to buy. We have presented a complex analysis. It is up to you to choose a particular kit of technical instruments.

TRADING SIGNALS

What particular signals of indicators or other instruments should be kept in mind when trading? It depends on instruments picked by you as they generate their own signals and interact with other technical indicators, thus providing a clear-cut result.

As an example, let‘s examine Triple Screen, a popular trading system by Alexander Elder. We aim to find out how signals are generated.

TRIPLE SCREEN TRADING SYSTEM

Alexander Elder introduced the Triple Screen strategy in 1986 and it has been popular ever since. It is used by many traders to this day in one variation or another.

The basic idea of the Triple Screen system is to carry out a triple check for transactions: at one of the stages, many possible positions will be eliminated. We identify long-term, medium-term and short-term trends and enter the market only in the direction of the prevailing trend.

INDICATORS

The Triple Screen strategy uses a combination of trend indicators and oscillators.

The range of indicators that can be used is not limited. The point is to determine the trend on a large timeframe using the trend indicator and find an entry point using the oscillator. Therefore, you can use any trend indicators and oscillators.

This trading system is based on three screens or three time frames: 4-hour, 1-hour, and 15-minute charts.

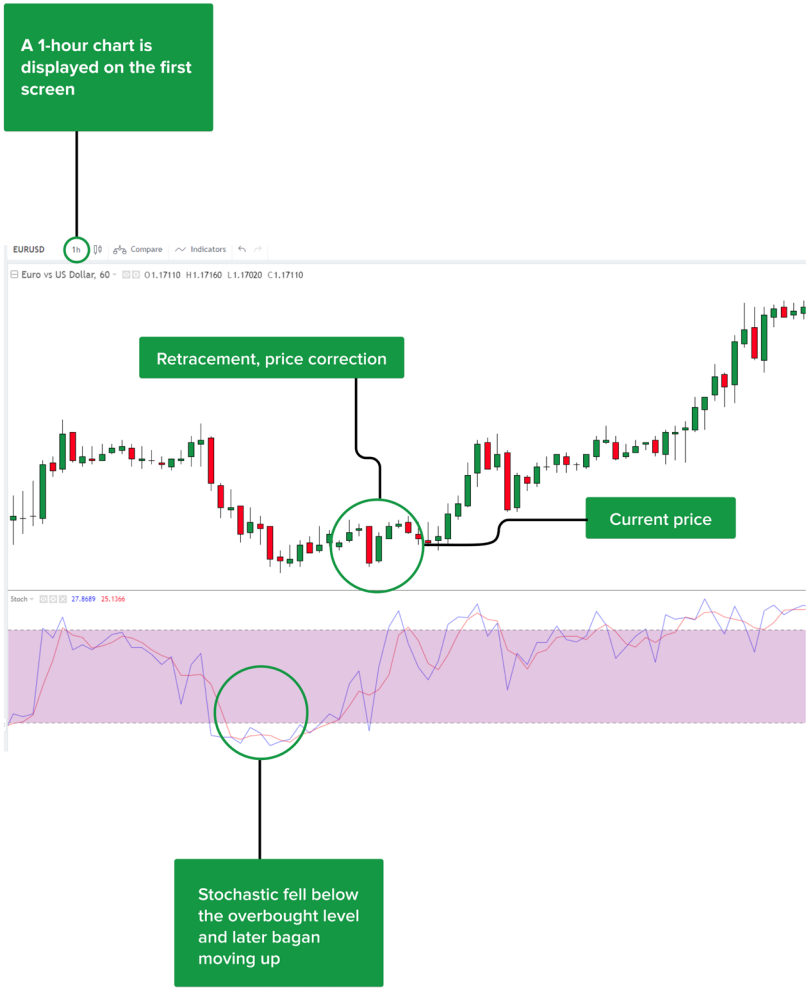
The first screen enables us to identify a trend. Thus, we can decide in what direction we are going to open a position. For this purpose, we can use a MACD oscillator. If the MACD bars are inclined to the upside, it indicates an uptrend, consequently, the downwards bars indicate a downtrend.

To identify a trend direction

The next step is the second chart.

Here we are looking for the most suitable point of market entry. It could be a minor retracement or a correction. At this stage, our task is to judge whether there is a retracement or correction. We should assess an accurate point. Let‘s assume we have seen a minor retracement. We have to find out a degree of correction and whether the market is in oversold condition. This task is solved through a stochastic oscillator. We see that a stochastic oscillator has fallen below the oversold level (20%) and is proceeding higher. This signal means that a retracement is over and the previous buy signal has been confirmed.

Moment for market entry



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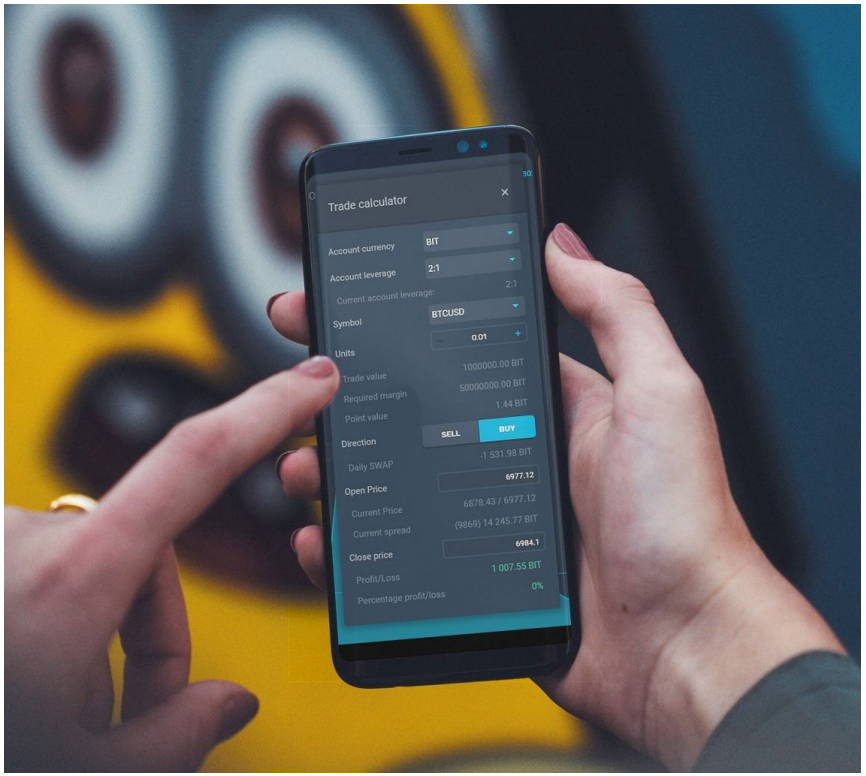
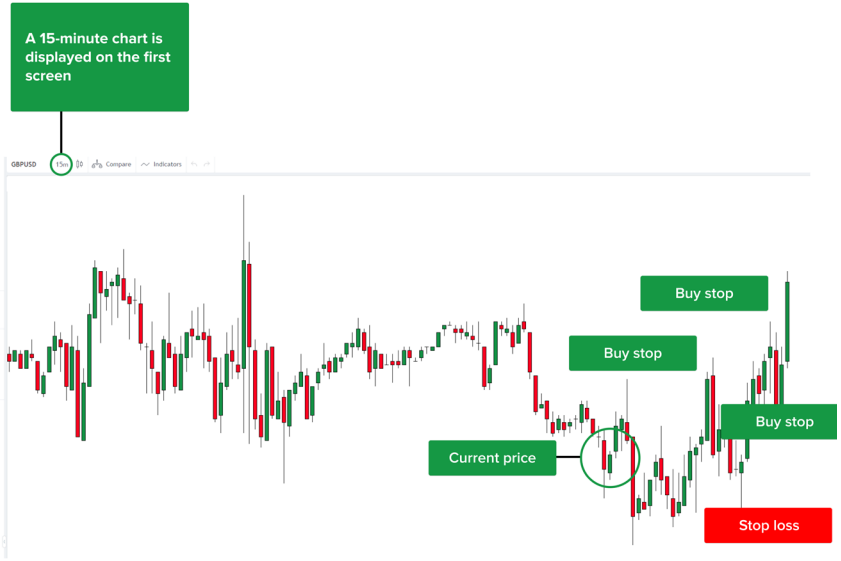
Eventually, we carry on with the third screen which will give us an idea for a market entry point.

On this chart, we place a pending order or buy stop which is a couple of pips above a high of the current candlestick (it is highlighted on the chart)



Market entry



Importantly, if a buy stop does not trigger when a subsequent candlestick is formed, this order has to be shifted to a high of the subsequent candle with the lowest value. This is the right candle where we replace our buy stop. If an order triggers all right, we should set stop loss. It should be placed a couple of pips below the lowest price of the two latest candles.

CONCLUSION

Alexander Elder’s Three Screen System can serve as a very good basis for building your own Forex trading strategy. The main thing to take from it is to check transactions in several stages, following only a long-term trend.

TRADING DIARY

The essential qualities of forex traders are self-control and self-discipline. Under tough market conditions when emotions are running high every beginner and perhaps even some experienced traders fall victim to their hasty unwise trading decisions. How to keep a cool head and develop self-discipline? A great solution is keeping a trading diary. You can write down your every step on Forex which can help you sort out your daily trading routine. Make sure you include detailed information about every deal, and most importantly, about the reason for opening or closing this or that deal in a special table.

Here is an example of such a table.

pair	size	position	date	conviction	strategy used	reward to risk	points	sucessful or not
EUR/USD	1	long	12/07/20	high	triple screen	2	200	+
USD/JPY	2	short	14/07/20	medium	RSI	2	150	-
CAD/JPY	1	long	15/07/20	high	MACD	3	80	+
EUR/USD	0,5	long	16/07/20	high	intuition	1	50	+
USD/JPY	2	long	17/07/20	low	MA	2	150	+

Every trader adopts his/her own approach to keeping a diary. However, the quality of records make a direct impact on trading results. If a trader sets a goal to get rid of emotions and trading mistakes, a diary has to be treated as an integral part of a routine. When trading signals have been analyzed and are recorded in the written form, the human mind is operating more efficiently, thus a trader is capable of making more profound analysis and spotting mistakes.

Besides regular and accurate records of every deal, it is equally important to review trading decisions for a particular period. Above all, analysis of individual trading decisions helps to find out one‘s own mistakes, realize the reasons behind them, and fine-tune trading techniques.

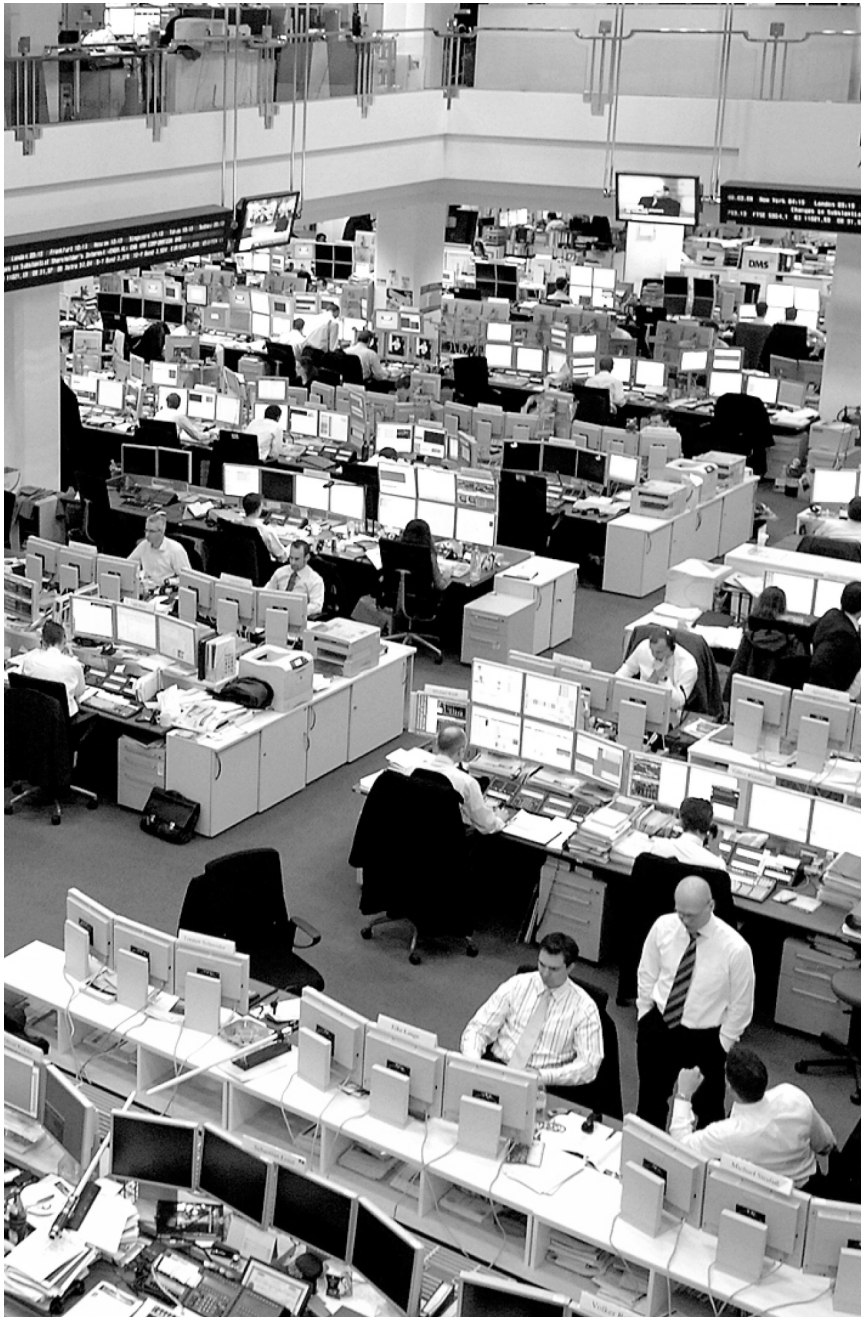
To sum up, here is what you have learned after reading this course:

1. Technical indicators are tools that perform certain calculations according to given formulas based on indicators of a price chart and trading volume, and then automatically produce a result.

2. An oscillator is a system that oscillates (up and down) with a certain periodicity in time.

3. A trading system is a toolkit of rules and decisions (both trading and analytical), based on trading signals as well as instruments of market analysis.

4. Triple Screen trading system utilises multiple trading indicators as a means to filter out contradictory trading signals.



Risk Warning: CFDs are complex instruments and come with a high risk of losing money rapidly due to leverage. 73,78% of retail investor accounts lose money when trading CFDs with this provider. You should consider whether you understand how CFDs work and whether you can afford the risk of losing your invested funds.