

PROJECTS OF TRADING ROBOTS FOR TRADING

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Abstract

Robots, which are presented in the form of programs, are available for a novice trader. Experienced speculators have already forgotten about various problems in the field of psychology by completely switching to electronic trading.

In the 21st century, everything is changing, the stock exchange is becoming more and more technical, and human intelligence is now useful in other spheres of human activity. Traders who can be prudent can use trading robots as a substitute for a human while doing other things. The Forex market requires a lot of time, it is very hard to think about independence if you sit at the computer for about 12 hours.

Trading robots or a trading advisor is an automated assistant (program) that independently makes transactions on the exchange. The most important thing is to set certain parameters. For example, at the time of opening and closing positions, fixing income, etc.

A strategy such as the Sidus method is a serious trading technique that is designed to enter the market after consolidation zones and a subsequent decline in the market, after which a price surge begins. Initially, this strategy was used on the hourly charts of the Euro-Dollar currency pairs, however, due to the fact that the tactics are based on ordinary moving averages, the strategy can be applied to any instrument.

Consolidation and narrowing of the market are characteristic of any currency pairs and timeframes of the strategy can be safely called a universal platform.

Absolutely any financial exchange keeps its savings most of the time, and the remainder forms local extremes. Intra-range trading brings significantly less profit than the methods of introducing trading operations, which are built on long-term price fluctuations. However, the feedback from experienced traders confirms this truth.

An experienced and skillful trader is able to use a specific model that would respond to market conditions in a given situation. Trend strategies need to be applied depending on the circumstances, for example, when serious extremes arise, or there

are signs of support or resistance in certain parameters, in which the trend will take the form of advancement or return to the current position.

Key words: trading, stock exchange, options, terms, Forex market, Sidus method, trend strategies, trend, currency pairs, securities.

1. Introduction

There are many different ways to invest free funds, and each method has a number of advantages and disadvantages. In industrialized countries millions of people believe that the best way to invest money is to buy securities (stocks, bills and bonds), which is perhaps one of the best ways to invest money in the future to put them into circulation, which resulted in an excellent return in the form of regular income in dividends or the final financial result in the form of profit, as a result of an increase in their value.

Human psychology practically does not change, in contrast to the improvement of computer (digital) technologies.

One of the keys to successful Forex trading is a good trading system and disciplined adherence to that system. Over time, confidence in the correctness of their actions grows, and the trader ceases to be attentive to his work.

As a rule, in such cases, profitable trading does not last long. But today there is an alternative to manual trading. In the practice of market trading, trading robots are increasingly used, which can perfectly replace a person both during analysis and directly in the process of making trading decisions. Automatic trading has become so widespread that it accounts for up to 40% of all transactions concluded on many world exchanges. At the same time, the share of trading in robots is constantly growing and expanding. The main advantage of robotic trading systems is that they are not influenced by the human factor.

In recent years, the development of Internet technologies has taken on a rapid pace. Thanks to Internet technologies the purchase of securities has become the calling of the world and the best way to invest free capital, which has become available to everyone.

Anywhere in the world, in a matter of seconds, you can form an investment portfolio and then manage assets (enterprise property), receiving without delay all the necessary complete and reliable information.

The demand for interactive trading in stocks, options, futures is growing every day. At the moment, more and more banks and brokerage companies are mastering a new promising direction of their activities.

Online trading attracts a potential investor, first of all by the external simplicity of transactions and low tariffs for the services of online brokers. At the same time, as in reality the investor can use a fully functional service, fully relying on the qualified advice of a broker or a discount service, when all responsibility for making a trading decision is shifted onto the shoulders of the investor.

The purpose of this study is to study the state of Internet trading in the securities market and create projects of trading robots for the further development of trading. In order to fulfill the goal of scientific research, a number of tasks were set:

- to conduct research on various technological solutions to create new trading robots;
- consider why such robots are needed, consider the main benefits of creating such programs;
- explore the pros and cons of such robots.

In the process of writing this article the works of domestic and foreign researchers were used. Information about individual Internet brokers was analyzed, for example: "Alor", "Aton-line", "E * Trade", "TD AMERITRADE", including the organization of electronic trading on stock exchanges.

2. Methodology

Research methodology. Descriptive, comparative, analytical methods were used as the main method. Views and study of materials of other scientists, researchers and materials of the Internet. Key and fundamental positions were examined that have methodological implications for the work. The general scientific, technical and specifically scientific aspects were studied.

3. Theory of financial trading robots and advisors

A trading robot is a special algorithm that can be a real terminator on the exchange, which will protect its owner from large financial losses.

Yet it is not a fail-safe mechanism, with no room for error. Like every program, it has strengths and weaknesses.

An automated trader - is a computer program capable of fully or partially replacing a broker in exchange trading, which sets an algorithm that repeats the actions of a trader, is able to independently track the necessary indicators and make a decision on a transaction based on one or several conditions.

Trading robots can differ in the following parameters:

- behavior strategy;
- the sequence of changing the settings;
- restrictions on deposits and trading platforms;
- mechanisms of shorts, stop-losses, take-profits.

The range of a trading robot on the exchange is determined by the degree of its automation. Semi-automatic robots or advisors deal with the state of the market, calculate various options for the development of events and the movement of the price of an asset and give a signal to buy or sell.

This robot is completely independent, it connects to a trading account and makes transactions itself. For the analysis, the level of risk is calculated to a certain extent, which takes into account force majeure situations.

The bot's strategy is set by certain parameters - opening and closing positions, taking profit and others, and their volume may vary. A simple robot can buy when it falls and sell when it rises; more complex programs will take into account additional parameters when placing orders. For example, when an asset drops to 10%, they will start buying assets, but they will stop if the minus exceeds 25%, so as not to get into a downtrend.

In the stock market, an important and indisputable quality is - emotionlessness. In addition, they are not effected to such human weaknesses as greed and indecision, they act according to a strictly specified algorithm and do not succumb to the temptation to buy at the maximum, but sell at the minimum, while risking all the profits.

Bots are capable of processing such volumes of information at such a speed that even a brilliant human brain is not capable of, they have mastered technical analysis "perfectly". They never get tired and will always carefully place orders within a given program. Automation of work saves a trader a lot of time and allows you to trade on multiple platforms at once.

However, malware can be hidden behind the mask of a trading bot.

In order for a trading robot to help get dividends, various tactics and strategies are used:

- a trend strategy that allows you to determine the moment to open a position based on a downtrend or uptrend for a long period of time, as well as fix the final financial result in the form of profit.
- scalping strategy is a short trading session with an emphasis on the maximum price levels, while using the algorithm creates an order with take profit and stop loss. The duration is up to half an hour, the profit from one transaction is small, but it is multiplied by a significant number

of sessions, which can amount to several hundred per day, which is beyond a person's strength.

- The channel strategy is considered universal. Trading is carried out within the price corridor, at the lower border of which the bot buys assets, and at the upper border it sells.

Each of these strategies already has its own modification, and a trading exchange robot can combine several of them at once. For example, in the spring of 2020, high-frequency trading using robots on the Moscow Exchange exceeded 50% of the trading volume.

4. Creation of trading robots and advisors

Trading robots can be found on the free and paid platform. The reasons can be very different, for example:

- The creator of the program has not yet acquired sufficient experience to boldly sell his product;
- the algorithm of the trading robot program has not been fully tested;
- The system has certain disadvantages: short lifespan or low profitability;
- The program can be purchased by a broker, and for his clients it is already distributed free of charge.

As in the case of manual trading, first of all you should pay attention to minimizing risks. Among other important criteria are the historical profitability of the bot, the frequency of changing the settings, because even the most perfect program constantly needs to be optimized.

For new entrants to the stock market, trading can be both a pillar and a trap, since it is not easy to take into account all the detailed settings without experience. The need to use a trading robot depends on the trader's qualifications, and on the amounts that he will operate in the future.

This virtual assistant must have sufficient financial room to maneuver. For full-fledged operation, trading robots require a range of transactions from at least half a million rubles.

There is controversy about whether a person or a robot is more efficient on the trading floor, it's too early to put an end to it. However, completely shifting responsibility to the robot is not worth it. But it can become an excellent assistant under strict guidance.

For further successful trading in the Forex market, vague skills and knowledge are required. Without this, it is impossible to analyze the market and find the right moments to open or close a deal.

Many seasoned professionals have begun to automate their earnings over the course of their careers. This is how trading robots and advisors appeared. They allow you to relieve the trader from responsibility for market analysis and significantly simplify the process of working in the financial markets.

However, for beginners there are many opportunities to receive passive additional wages, even without the presence of certain skills, knowledge and skills in the field of market analysis.

5. Trading robot "Sidus Method".

The Sidus Method is a binary options system that can generate simple trading signals and has been built on the available technical means to increase the amount of trading capital by 100% daily.

This trading technique has long been popular among stock traders, and after its adaptation to use in binary options, it has become one of the favorite market forecasting tools for professional traders.

Let's consider the basic rules of trading according to the "Sidus Method" strategy.

To use this strategy correctly and process the received trading signals with maximum efficiency, you will need a trading platform that will be equipped with the necessary professional tools for market analysis. In addition, the trading platform must provide optimal trading conditions for risk management. As the most suitable trading platform for trading, we recommend the PocketOption broker - a professional trading terminal equipped with all the services for profitable options trading:

- Lightning-fast execution of trade orders;
- Customizable quotes chart;
- Contract yield up to 90%;
- Built-in indicator set;
- More than 80 trading assets;
- Trading conditions - initial capital from \$ 50, minimum lot \$ 1.

After that, you can start forming a trading template of the "Sidus Method" trading method on the asset chart. In this regard, you will only need to rearrange the trading chart for a 1-minute interval and add technical means of the following format to it:

- Indicators EMA (exponential type) and with movings of 28 and 18 periods.
- Indicators WMA (Weighted type) and with movings of 8 and 5 periods (it is better to change the color of movings)

Thus, the indicator markup should be formed on the asset chart.

Let's consider the basic rules of the trading signal generated by the indicators of this trading tactics, has a fairly easy-to-identify format. An UP bet is placed when the moving averages of the WMA indicators have broken up the curves of the EMA indicators. Having received a trading signal of this format, you need to enter the market with a deal to increase quotes:

Trading rate DOWN is placed when the moving averages of the WMA indicators have broken down the curves of the EMA indicators.

Having received a trading signal of this format, you need to enter the market with a deal to reduce quotes:

The system for binary options demonstrates the maximum level of efficiency if the trading signals received from it are implemented with options with an expiration period of 5 minutes - 15 minutes. This contract duration is determined by the analyzed timeframe of the chart and the settings of technical indicators. In addition, trading in this mode will allow you to increase the volume of trading capital with maximum dynamics.

Risk management

For the safe use of this trading tactic, it is recommended to adhere to the classic rules of capital management. That is, with large capital, the transaction amount should be no more than 5% of the deposit volume, and with a small amount of trading working capital, it is recommended only with the smallest lots.

6. Conclusions and recommendations

An ordinary trader trades on a maximum of 4-6 instruments; for a trading robot, these are sheer trifles. For example, to open a deal, you need to look at several lower timeframes and the dynamics of instruments that correlate with the instrument for trading, and only then make a decision to open a deal. Let's be honest with ourselves. A person will not be able to trade using such a strategy using many trading instruments, and this is not a problem for a robot.

A person will not be able to trade around the clock, he needs time to sleep, eat, and rest. You can place limit orders, but this is more like trying to shoot the target with your eyes closed. Trading decisions need to be analyzed before they are implemented. A trading robot will do everything with ease: for this you need either an always-on computer or a server.

The robot's decision-making speed is much higher. Everything is obvious here - the robot processes information much faster, and therefore, it executes the algorithm very quickly.

The robot has no emotion. Everyone knows that 95% of losses in financial markets are not due to a bad trading strategy, but due to the emotions of a trader. He underexposed, overexposed, entered the deal early, "freaked out". There are many synonyms for how you can take a loss out of control of your emotions. Since the robot cannot think, it also has no emotions.

Well, the answer to the main question is obvious - the future of financial markets belongs to trading robots. Even after this comparison, many traders will remain faithful to manual trading for two simple reasons. The first will sound something like this: this type of trading brings them income - why change something? The second is that people are simply afraid of innovations that are not easy to touch.

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