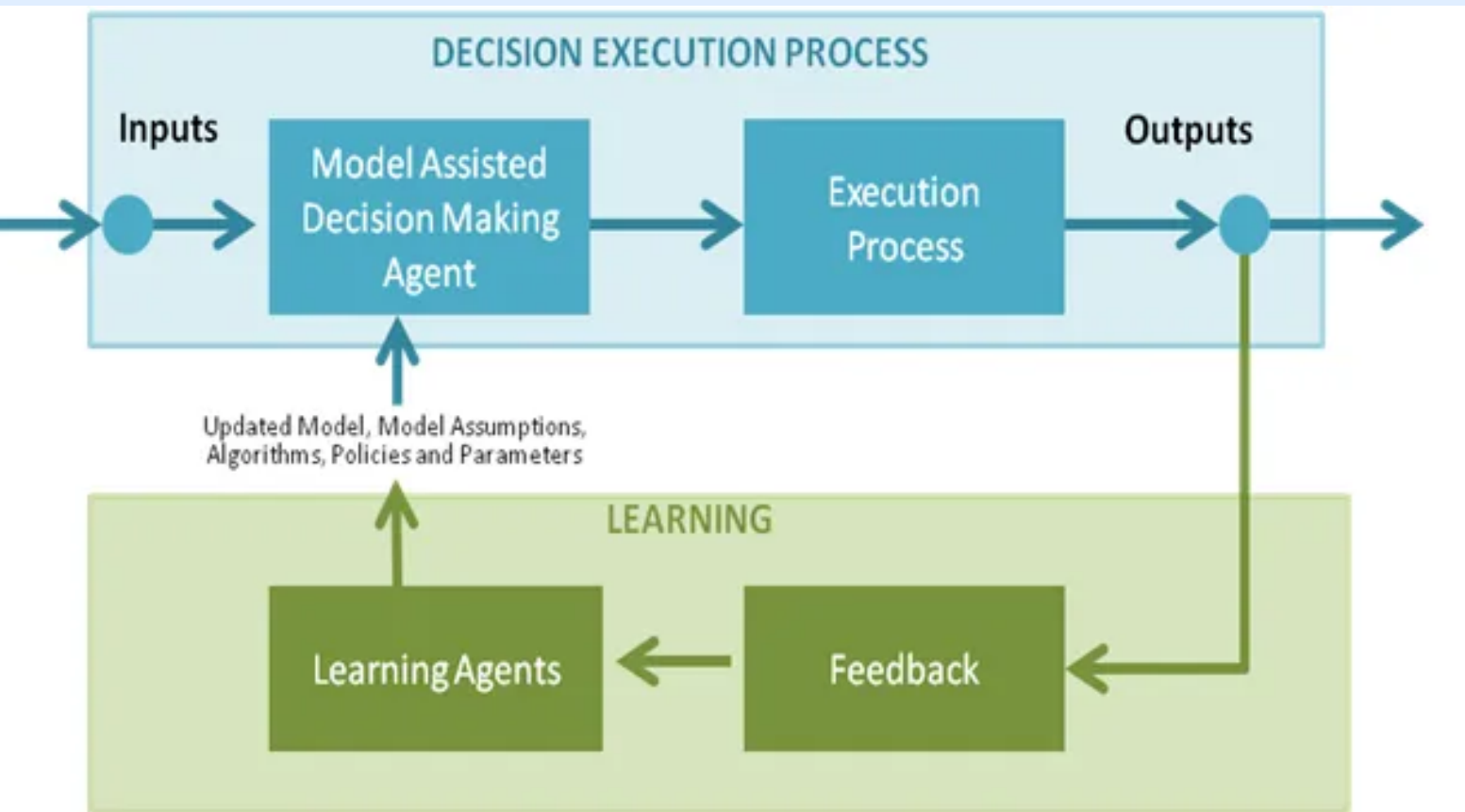


How Machine Learning helps the Human Race

Having arrived from the realms of science fiction, Artificial Intelligence has already served humans for quite some time, helping with [speech and graphics recognition](#), providing support in construction and architecture, medicine and sport - everywhere from business to entertainment. Today I want to introduce you to one of its fields - machine learning. Find out how your business can benefit from this [new IT trend](#).

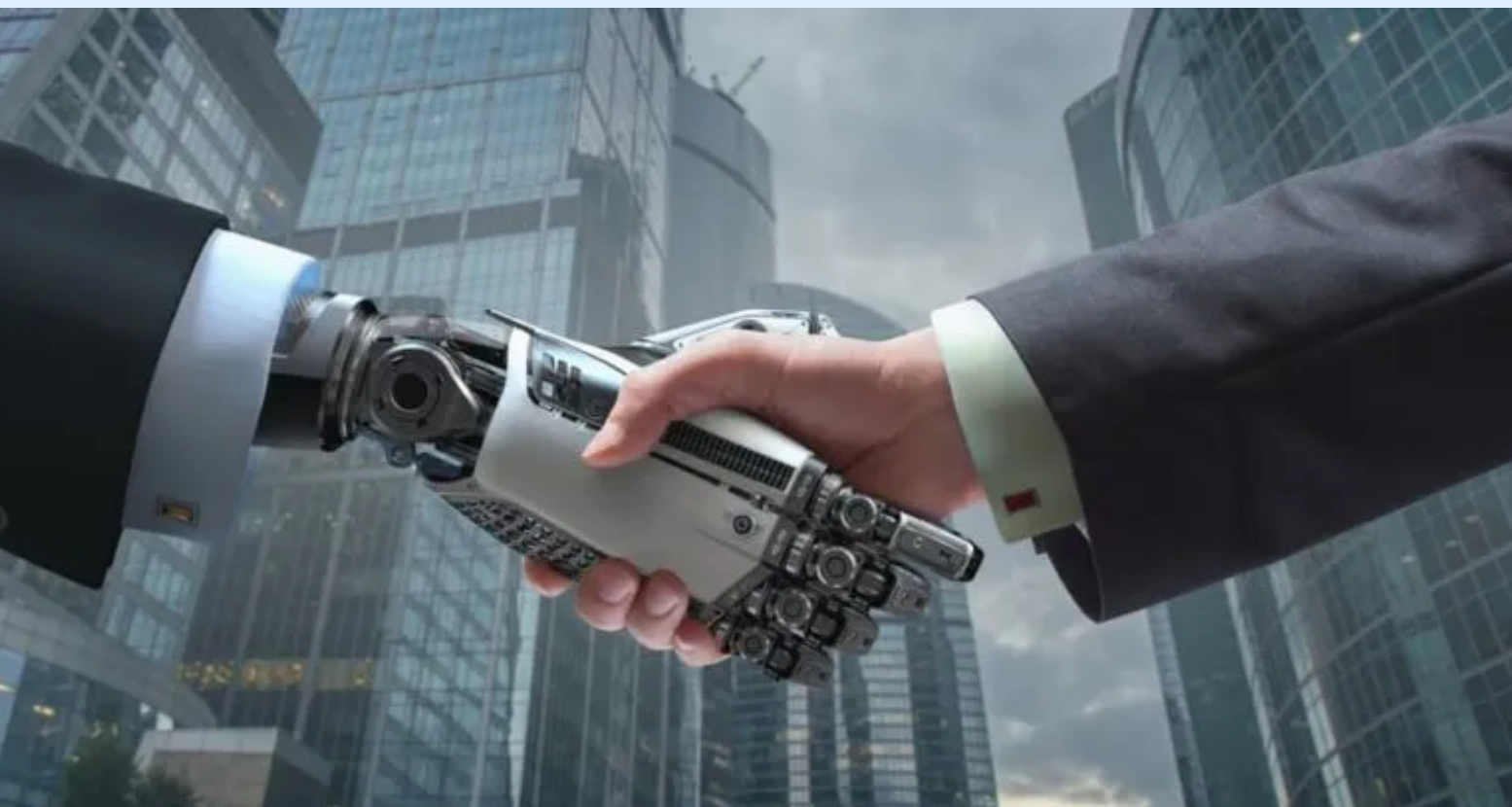
How do Machine Learning Methods Work?



[Machine learning](#) is a form of self-teaching technology that automates analytical modelling, based on the data similarities and dependencies analysis. The largest class of problems solved by these methods are sampling, clustering and trend generation.

A clear example is the traffic forecast. Congestion levels are based on many factors: location, season, day of the week, time of day, weather, number of accidents and so on. All these data affect the final result, but this isn't something a person can calculate. A machine learning model can easily do this and provide a traffic forecast for any section of the road at a particular time.

Usage of Machine Learning in Business



Selling Systems for Online Stores

Machine learning in business can consist of advisory systems for online stores. Its task here is as follows: based on analysis of the user's behavior on the site and previous purchases, additional products are offered that the user is more likely to buy (see [Chatbot is on duty](#)). A learning program is created, i.e. an algorithm that analyses a vast amount of data about purchases in various online stores and, following training, can produce fairly accurate predictions for new customers.

- Practice shows that a good system of recommendations can ensure revenue growth of up to 50%.

Customer Behaviour Forecasts

Machine learning methods are often used to predict events in a client database. One large insurance company providing VMI services, with the help of machine learning, has learned to predict which clients will soon seek expensive medical care. Using such a forecast, the company pre-connects with "high-risk" customers and takes preventative measures: for example, offering to arrange a health screening for the client or a consultation with a more qualified doctor. Clients have thus begun to receive qualified help in advance, without waiting for an acute phase of illness, and the insurance company has reduced its VHI expenses by hundreds of thousands of dollars a month.

Process Optimisation

Machine learning allows for the organisation of goods supplies, retail chains or even vehicle performance and maintenance in the most profitable way. For example, based on trend forecasting, Magora helped to realise a [Vessel Performance Solution](#) project for the cargo shipping industry. The owners of the company suffered losses from unnecessary downtime and fuel squandering: marine transport required regular servicing and cleaning to remove marine organisms that contaminate ship keels and propellers. Based on mathematical modelling, a monitoring system was created to analyse the correlation between the condition of the ship and its fuel consumption levels. This way VPS helps to decide whether it's more profitable to schedule maintenance (reducing daily fuel consumption) or to continue the transportation of goods.

- If you feel that your business is suffering from operative excesses that need to be structured and automated, ask our consultant [Dmitry +44 20 3393 1772](#) for help.

Segmentation When Working with Clients

With the help of machine learning you can effectively solve problems not only of forecasting but also segmentation. Take as an example the search for clients similar to a certain existing group. A network of dental clinics with tens of thousands of records in its client base faced such a case. They took customers who had recently ordered a professional hygiene service and, based on this data, using methods of machine learning, identified from the entire client base the most likely buyers of this service. Such smart segmentation allows you to significantly reduce the cost of cold calling.

- And machine learning can do much more. Consider the possibility of recognition of the neoplastic colony in the human body and the ability to reconstruct it in order to predict illness in its early stages. Our team is ready for involvement in such sophisticated projects, as we already have experience with several complicated [healthcare solutions](#).

Neural Networks in Mobile Processors



Artificial intelligence has already reached mobile processors and is starting to develop at the hardware level. Read more about how machine learning is reaching the mobile market [here](#).

- This year Apple introduced its new flagship processor for mobile devices - [Apple A11 Bionic](#) - with built-in neural system, designed for separate work with artificial intelligence.
- Technology giant Huawei was the first among Apple's competitors after Apple to unveil a similar development - the [Kirin 970](#) boasts a special processor for neural processing.
- Samsung is also working on a similar chip - the [Exynos](#).

You may be interested in some other articles about Artificial Intelligence and Machine Learning:

- <https://magora-systems.com/ekko-blockchain-assistant/>
- <https://magora-systems.com/smartphone-artificial-intelligence/>
- <https://magora-systems.com/driverless-cars-review/>

If you're in need of high-volume data analysis structured for trends or breakage forecasting, as well as raw material consumption prediction, everything can be solved simply via implementation of a strong mathematical algorithm.

- If your essential process is sophisticated and changing all the time, based on several free parameters, machine learning technologies are the only possible option for your project.

AI is rapidly gaining popularity and penetrating the business sphere, bringing solutions to nonlinear tasks where several hypotheses compete with each other based on the probability of several external influencers. Such scenarios require the implementation of Machine Learning.

We know how to make high technologies accomplish your business tasks. Let's talk about it.