



Robo advice - when machines manage your assets (Fintech #8)

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Many of the things that had us gasping in amazement when we watched science fiction films just a few decades ago have now become a mass-market reality. Today, Hollywood shows us what we can expect if we continue to develop digital technologies at the current pace. Of course, artificial intelligence and its use in all areas of our lives are undoubtedly still a long way off. However, substantial progress is being made especially when it comes to pattern recognition, modern data analysis and the use of self-learning algorithms. Without this technological progress, we would no longer be able to cope with the exponential growth in data volumes and data potential of which we can still only begin to conceive. We need the machines.

Fintech start-ups that provide professional digital services, for example, are increasingly exploiting the niche between traditional banks and clients with so-called robo advisors. Contrary to what the name may suggest, robo advice has nothing to do with actual robots. A robo advisor is an algorithm-based software program, while an algorithm is a set of instructions that describes a number of steps required to solve a (mathematical) problem. Essentially, robo advice involves a digital asset manager offering computer-generated investment recommendations that are not based on human intuition or dependent on human decisions.

[This is how robo advice works](#)

With just a few targeted questions and without any human interaction, the client's risk appetite, financial situation and investment preferences are used to configure investment and portfolio strategies with the aid of diversified financial market products. This allows the young entrepreneurs to offer their clients access to professional asset management, which would often not be or, at least, not have been profitable for traditional providers. In this way, the newcomers are putting pressure on established providers to innovate, which in turn is creating new momentum. However, as the technology is still in its infancy and is heavily dependent on the quality of the software, when it comes to the choice of financial products most robo advisors are (currently still) limited to Exchange Traded Funds, known as ETFs. These index trackers allow clients to participate (via their investments) in the developments of numerous companies and sectors as well as the bond markets. But it is still early days. In the future, we will undoubtedly see the automated management of other products with robo advice. However, as the currently rather standardised robo services become increasingly complex, the regulatory and supervisory requirements will become



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increasingly stricter. At present, most robo advice providers from the non-bank sector merely act as investment brokers, which means they are not subject to banking supervision. Issues concerning liability and consumer protection, for example, will have to be re-examined in the future.

Advantages of digital robo advisors

For traditional providers, it is only financially rewarding to offer personalised investment advice to clients with larger sums to invest, while our colleague the algorithm sells a similar product but dispenses with personal client contact. As the robo advisor sells digitally, the marginal costs, i.e. the costs that come from managing an additional unit, are close to zero (as is, incidentally, the case for all digital services). As a result, robo advice is accessible to a broader public, making it more interesting for retail investors to participate in capital market developments. Most providers require a minimum investment of between EUR 1,000 and EUR 10,000. The fees are generally less than 1% of the amount invested, which is considerably less than the costs for traditional asset management and advisory services. In addition to the lower costs, the new technology-driven providers also claim that their digital services produce a higher return than traditional advisory services. However, this is very difficult to assess given the lack of empirical data.

Growth potential for robo advice

Assets under Management (AUM) in bn;
lhs: worldwide in USD; rhs: DE in EUR



Sources: Oliver Wyman, Deutsche Bank Research

Market niche offers major growth potential

A study by Oliver Wyman forecasts major growth potential for the sector. Hence the reason why large, traditional financial players are increasingly joining the fintechs in the market for algorithmic investment products. Last year, the global volume of assets managed by robo advisors was just USD 30 billion. By contrast, globally managed assets of approximately USD 500 billion are expected by 2020, with 50% of the asset pool managed in North America. For the German robo advice sector, experts estimate a volume of EUR 20 to 30 billion for 2020. The forecast growth is partly attributed to demographic developments as the key target group of tech-savvy over 35 year-olds is just beginning to build up greater wealth. However, it could still take some time before a critical mass of consumers becomes familiar with the technology and is used to allowing machines to make investment decisions. Ultimately, however, high net worth clients, especially those in the fifty-plus age cohorts, will also be attracted and take advantage of these services.

Banks have the advantage of scale – if implementation proves successful

As hardly any companies are generating profits with their existing robo advice strategies, consolidation will be unavoidable. Some fintechs whose only product is the robo advisor will be forced to abandon the market in the medium to long term or cooperate with rivals in order to remain competitive, unless they can compensate for the lack of profits by cross-subsidising with alternative sources of revenue. This is something that is likely to be easier for traditional banks. Moreover, if regulatory requirements for the robo business increase, traditional banks should also be better equipped to handle these thanks to their skills and experience in working with regulatory authorities.



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This market outlook offers both opportunities and risks for the new providers of robo advisors. Their agility enables them to swiftly extend their range of financial services in order to improve their position vis-a-vis traditional banks. After all, if all financial service providers were suddenly to offer algorithm-based asset management, in addition to the quality of the algorithm the decisive factor for market success would be the range of additional complementary services on offer. This is because, in the digital era, a provider that is able to offer a harmonised range of different (financial) services from a single source, digitally integrating technology, services and individual demand, will be the one to succeed in the market (the buzzword being the Internet of Things). Of course, this is assuming that traditional banks recognise this evolutionary step and also integrate robo advice into their product range.

[Will machines replace people entirely?](#)

Cut-throat competition between "digital and human advisors" is not anticipated in the near future. Firstly, because the use of robo advisors should be regarded more as supplementing human advisors rather than replacing them and, secondly, because there will always be clients who prefer the human touch. Particularly in times of extreme market events, investors tend to feel an increased desire to talk to someone with a view to potentially restructuring their asset portfolios. Those clients will also be willing to pay for this human contact. In addition, many clients come from different jurisdictions and the current algorithms are not (yet) able to take this optimally into account. For the time being, with the current cutting-edge technology, human intervention remains essential, not least because human experience and the ability to think outside of the box allow people to correct potential errors in the programmed algorithm.

[Conclusions for competitors and clients](#)

For traditional banks, the use of robo advice is certainly to be recommended because it allows them to tap into an additional data source. The increasing volume of new and often personal data being generated enable banks – with their clients' permission – to offer further useful and personalised financial services from a single source. Ultimately, the way (personal) data are handled will decide to what extent traditional banks will be able to hold their own against the new fintechs in the market.

Depending on how swiftly the regulator intervenes with regard to liability and consumer protection as well as other aspects, the new robo providers, which are currently operating simply as investment brokers, will be forced to adjust their business models in the medium term. Consolidations and strategic alliances will be unavoidable.

As for the clients who receive robo advice, it is undoubtedly a distinct advantage if they have a certain amount of capital markets experience. But robo services are also – or even particularly – interesting for those client groups who are consciously seeking an easy way to invest without having to familiarise themselves with the finer details.

Link to the series of fintech articles:

[Fintech #7](#)

[Fintech #6](#)



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[Fintech #5](#)

[Fintech #4](#)

[Fintech #3](#)

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[Fintech #1](#)

Details about the opportunities and risks of "Big Data" can be found [here](#).

[Click here](#) for more background on the Fintech movement.

Fintech reloaded maps out a strategy showing how traditional banks should become a digital platform.

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