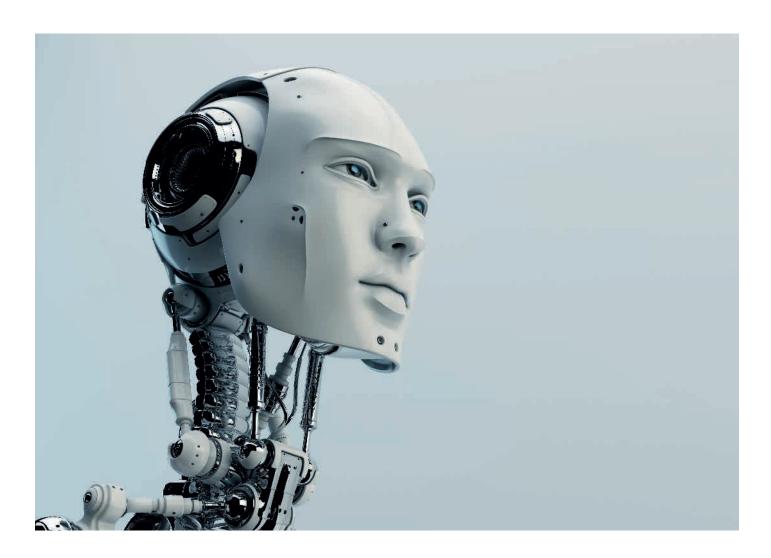
Deloitte.



The expansion of Robo-Advisory in Wealth Management

The takeover of the robots in the classic field of Wealth Management is an emerging trend across the industry. Is this the yet missing revolution to meet client expectations in a digitalizing banking environment? We provide a closer look at the German Robo-Advisory market.

Understanding Robo-Advisory

Google search queries for "Robo-Advisor" vield 423.000 results and there are close to 100 Robo-Advisors in 15 countries as of today. And while all of them make wide use of the term, the offerings themselves vary significantly.

Estimates for the future Robo-Advisory market by several well-known institutes predict between \$ 2.2 trillion and \$ 3.7

trillion in assets to be managed with the support of Robo-Advisory services in 2020. By the year 2025 this figure is expected to rise to over \$ 16.0 trillion assets under management (AuM), roughly three times the amount of assets managed by BlackRock, the world's biggest asset manager to date.

This abstract is the start of a series of Wealth- and Investment Management-

related hot topics publications providing useful industry insights. Robo-Advisory is our initial key topic experiencing highest relevance in terms of predicting the future Wealth- and Investment Management market. The series will continue with a comprehensive view of the Robo-Advisory landscape across Europe, the UK and the USA, providing insights into single business models and their chances of success. We will address aspects such as general profitability, cost of acquisition, and potential opportunities for established players as well as individual nuances of the German and European market compared to the more mature US Robo-Advisory market.

This report contains a detailed look at the Robo-Advisory capabilities in the German market, enriched with insights from more developed markets such as the USA and the UK, as early movers there are expanding their territory into the German market already. In a data-driven assessment, the report examines the characteristics and features of the overall offering of modern Robo-Advisors. Our research was carried out on a total of 74 Robo-Advisors worldwide: 29 in German-speaking countries, 25 in the USA, 15 in the UK, and 5 in other regions.

We will start with a general understanding of the term "Robo-Advisor", describe the ongoing evolution and highlight selected key players in the market for automated investment advisory services. On top of that, current and upcoming Robo-Advisory challenges are considered in our 5-years industry outlook.

First things first, let's start with a concrete definition of the term "Robo-Advisor". The word consists of two parts: "Robo" (for robotics) and "Advisor". Robo stands for an automated process without the influence of a human being, utilizing mathematical algorithms to support investment decisions. "Advisor" stands for Wealth Management services, in this case in an automated manner, making use of regular online or mobile channels. Putting these terms together we are talking about an online portfolio management solution that aims to invest client assets by automating client advisory. Encouraging self-management of financials, Robo-Advisors provide necessary information in a totally different way that doesn't require a deep financial background.

Robo-Advisors translate client input into investment logic such as risk appetite or liquidity factors and propose adequate investment opportunities well beyond simply highlighting a handful of ETFs out of a few thousands of possibilities. The majority of Robo-Advisors aim to allocate their clients to managed ETF-portfolios based on individual preferences.

Comparing current Robo-Advisors in the market a four step evolution of features and services can be outlined.

Robo-Advisor 1.0

Clients receive single-product proposals or portfolio allocations based on listed investment products after answering a questionnaire to filter suitable options. Most firms operate via web-service or smartphone app. There is no bank- or broker-API managing the execution. Clients have to buy and manage a real product-based portfolio on their own by using their own accounts, and also manage future adjustments. Product variety includes stocks, bonds, ETFs, and other investment vehicles.

Robo-Advisor 2.0

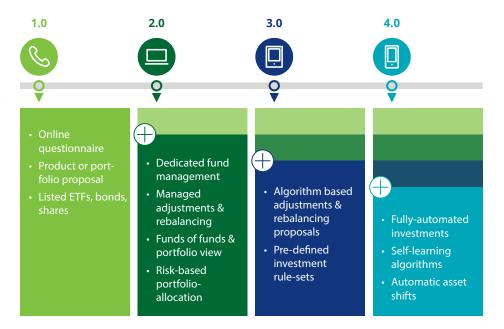
Investment portfolios are created as a fund of funds, and setting up investment accounts as well as direct order execution is part of the service. The asset allocation is managed on a manual basis by dedicated investment managers. Questionnaires are not only used to filter suitable products but to allocate clients to a handful of pre-defined risk-allocated portfolios. Real investment managers take care of investing and adjusting client portfolios. The realization is semi-automatic as investment managers oversee the investment algorithm and define rule sets.

Robo-Advisor 3.0

Investment decisions and portfolio rebalancing proposals are based on algorithms which monitor and satisfy pre-defined investment strategies.

Final oversight is provided by professional fund managers. Some services enable their clients to follow or neglect proposed portfolio adjustment decisions in order to individualize their portfolios.

Robo-Advisory evolution: Digital Wealth Management from 1.0 to 4.0



Robo-Advisor 4.0

Sophisticated risk management and profiling questionnaires lead to direct investments via self-learning artificial intelligence (AI) investment algorithms. They shift between different asset classes based on changing market conditions and individual investment needs such as profit, risk appetite, and liquidity aspects, monitor and adjust single client portfolios in real time to keep on track with their selected investment strategy.

Based on previous evolution of Robo-Advisors it can be outlined that as of today about 80% of German, EU, UK and US Robo-Advisors have 3.0 capabilities with an increasing trend to automation and service offerings. It has to be mentioned that especially the Robo-Advisor 3.0 capability includes a wide range of technology from lower to higher end depending on the Robo-Advisor's chosen strategy. Some offerings prefer a fixed investment strategy built on specific investment theory KPI's, others choose to include market movements and trends in their automated portfolio rebalancing proposals.

Hybrid-Robo-Advice is the most common model where investment managers utilize digital services for portfolio-rebalancing or asset allocation to optimize their quality of advisory services at shorter time. It can be seen as a clear trend towards classic advisory services.

Taking a closer look at the German Robo-Advisor market, a handful of well evolved players can be highlighted.

Starting with the German Fintech

Fincite – an interactive dialogue with a
number of services aiming at supporting
clients to improve their financial situation.
Fincite offers a client risk profile assessment leading to suitable investment
proposals. It is partnering with Deutsche
Bank as a white label solution.

Ginmon can be described as a Robo-Advisor 3.0 based on the previously made

classification. Since Ginmon not only offers portfolios as "paper-based" investment proposals, but also provides capabilities for creating and managing investment accounts and order execution, realized by partnering with direct online brokers DAB bank and Consors Bank. Ginmon's approach is rather holistic when it comes to providing a full service package and allin-one customer experience.

Robofolio comes close by providing services that would describe a next step in Robo-Advisory. Whereas a "Robo-Advisor 2.0" offers a one stop shop solution for client needs with regard to the investment strategy and moreover provides the depot and brokerage, the "Robo-Advisor 3.0" services go beyond that approach. Robofolio's added value is an algorithm that recognizes and anticipates changes in market conditions and hence is capable of automatically proposing shifts in client investment accounts such as the UK's fastgrowing Robo-Advisor **Wealthify**, which in addition gives individual investment-shift proposals as a push service to its clients.

Self-learning artificial intelligence (AI) algorithms are describing Robo- Advisors of the 4th generation, which seem to be at the ready. **Novofina** may prove to be one of these next level Robo-Advisors providing algorithm-based Wealth Management solutions which scan single client portfolios and open/close positions without human interaction following self-developed algorithms.

There are numerous investment advisory solutions on the market now using Robo-Advisory features. Some were there right from the very beginning and others, at times more sophisticated ones, keep appearing. However, their main promise to wealthy investors is to make decision-making and processing easier and to deliver them in all cases at lower fees compared to banks or regular brokers.

All of them have one thing in common which is essential for trust and building

up a broad client base: they promise easy investment success even when there is limited financial background knowledge, time, or intention to deal with the selection of individual investment vehicles. Clients thus transfer the responsibility of asset allocation and single investments to an algorithm, the robo-component of the advisory service. However, there are no mid- or long-term investment results yet for those solutions which combine ETFs into a synthetic product mix tailor-made to the client's risk appetite.

Even if some market participants have been praising themselves for superior investment performances in the past (e.g. during a political shake-up) it remains to be proved that the robo is indeed the better advisor in the long run.

Coming back to the two essentials for long-term success, trust and a broad client base, there seem to be ways of winning a large number of new clients in a short time and to accelerate hyper growth, using gamification features or a very simple user front-end such as CFD broker **Bux**. However it is only possible to earn sustainable trust in the long-term, and that means delivering extraordinary results or winning strong partners who leverage the still missing trust by sharing their own brand and reputation.

That brings us to the current make-or-buy discussion in Robo-Advisory. There are banks such as Quirin Bank, Sutor Bank, or European Bank for Financial Services (ebase) who are providing their own Robo-Advisory services and there are banks using white-label solutions like Deutsche Bank, partnering with Fincite. Moreover, there are those who cooperate with or acquire whole Robo-Advisory players including their respective client-base, like Hauck & Aufhäuser did with easyfolio. The main questions now are: how sophisticated is the Robo-Advisor business intelligence, making it hard to be substituted by others such as banks? And: who will be the next easyfolio?

The market consolidation has already started and will point out the winners of this race - those who deliver what they promised. However, as long as banks are partnering with the same solutionproviders, we expect to see a variety of Robo-Advisors using similar technology and investment processes. Depending on the ability of the bank's APIs to connect their infrastructure and services, single Robo-Advisor solutions can maximize their added value by providing an increased amount of faster and better client-services. Hybrid-Robo-Advice is the ongoing industry trend which can be expected to accelerate further in the near future as the logical next step towards self-learning algorithms in Robo-Advisory.

How Deloitte is getting involved

Deloitte is already working with a number of banks and Robo-Advisory companies to assess the impact on the traditional Wealth Management business and define client-centric business strategies. This includes, for example, UX and UI design test working with selected clients at our Greenhouse facilities in Berlin, Germany. This is particularly interesting for new market entrants as they receive direct feedback on design and haptic of their Robo-Advisory platform. Going one step further, and adding some additional analytics sessions, allows for a deep client interaction and strong customer growth. Something inevitable for new market entrants to win a piece of the Wealth Management market. But established market players can also benefit from a different form of client feedback compared to the classic questionnaire or telephone survey.

In additional, Deloitte's Forensic team is capable of performing sophisticated attacks on the infrastructure and system to try to expose any weak spots that could be used by criminals to steal data or funds, which is a nightmare for any company working with client data or, even more important, with their money. Especially service providers that have the financial data of clients are at a risk of

losing their clients' trust in a heartbeat, if data is exposed by criminals.

The overall goal of Deloitte looking into and helping to define the Robo-Advisory landscape is to adopt the client perspective, which is mainly driven by security, perceivability, and usability and allow both established market participants and new entrants to address these in their Operating Model.

Deloitte has a team of dedicated consultants, scientists, and developers who create meaningful insights, enabling clients to outperform their competition. Deloitte's breadth and depth of Wealth Management industry knowledge helps you achieve innovation not just once, but consistently over time. Deloitte will help you understand your opportunities in the Robo-Advisory area, including who your target clients are, what their needs are, and how they respond to your product and brand across all touchpoints.

Deloitte services include:

- Market Development Analysis
- Customer Analysis & Segmentation
- Customer Experience Strategy
- Business Strategy and Target Operating Model Definition
- Process Innovation
- Product Leadership
- Digital Platforms and Services
- Applied & Predictive Analytics
- Digital Health Checks
- Data Security
- Design Studios, Labs and Greenhouses

The challenges today's Wealth Management firms face are significant and will change the industry – Deloitte stands ready to be a partner on the journey.



Contact us

Dominik Moulliet

Senior Manager Financial Services Solutions Tel: +49 (0)69 97137 198 Mobile: +49 (0)151 5807 1047 dmoulliet@deloitte.de

Alexander Majonek

Manager Financial Services Solutions Tel: +49 (0)69 97137 177 Mobile: +49 (0)151 7016 2740 amajonek@deloitte.de

Julian Stolzenbach

Manager Financial Services Solutions Tel: +49 (0)69 97137 179 Mobile: +49 (0)172 1314 669 jstolzenbach@deloitte.de

Thomas Völker

Manager Financial Services Solutions Tel: +49 (0)69 97137 180 Mobile: +49 (0)151 5807 1127 tvoelker@deloitte.de

Deloitte.

Deloitte GmbH Wirtschaftsprüfungsgesellschaft ("Deloitte") as the responsible entity with respect to the German Data Protection Act and, to the extent legally permitted, its affiliated companies and its legal practice (Deloitte Legal Rechtsanwaltsgesellschaft mbH) use your data for individual contractual relationships as well as for own marketing purposes. You may object to the use of your data for marketing purposes at any time by sending a notice to Deloitte, Business Development, Kurfürstendamm 23, 10719 Berlin or kontakt@deloitte.de. This will incur no additional costs beyond the usual tariffs.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTL"), its network of member firms, and their related entities. DTL and each of its member firms are legally separate and independent entities. DTL (also referred to as "Deloitte Global") does not provide services to clients. Please see www.deloitte.com/de/UeberUns for a more detailed description of DTL and its member firms.

Deloitte provides audit, tax, financial advisory and consulting services to public and private clients spanning multiple industries; legal advisory services in Germany are provided by Deloitte Legal. With a globally connected network of member firms in more than 150 countries, Deloitte brings world-class capabilities and high-quality service to clients, delivering the insights they need to address their most complex business challenges. Deloitte's more than 225,000 professionals are committed to making an impact that matters.

This communication contains general information only not suitable for addressing the particular circumstances of any individual case and is not intended to be used as a basis for commercial decisions or decisions of any other kind. None of Deloitte GmbH Wirtschaftsprüfungsgesellschaft or Deloitte Touche Tohmatsu Limited, its member firms, or their related entities (collectively, the "Deloitte network") is, by means of this communication, rendering professional advice or services. No entity in the Deloitte network shall be responsible for any loss whatsoever sustained by any person who relies on this communication.