Benefits, Barriers, Governance and Controls of Automated Advisory Services

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This white paper highlights the governance and control elements as well as regulatory support to facilitate the healthy development of automated advisory services ("AAS"), also known as robo-advisors, to address the complexity of investor behaviors and avoid unintended outcomes to AAS users.

Types of AAS and Providers

AAS provide mass affluent and retail investors with low-cost investment advice primarily through online and digital platforms and electronically interact with investors for building and tracking their investment portfolios and financial plans. There are various business models of AAS to meet diverse needs of investors and the following four types are commonly seen in the established wealth management markets.

- Investment holding platforms directly hold client assets and offer algorithm-based guidance on which investments to make with money inflow and when to rebalance a portfolio.
- Investment management platforms offer end-to-end, algorithm-based automated trading instructions without holding client assets.
- Asset allocation platforms recommend algorithm-based tax-efficient portfolios that optimize clients’ respective financial situations without offering trade execution or investment holding services. These platforms aggregate data on a client’s total holdings and tax positions.
- Goal-based investment platforms design and construct algorithm-based portfolios that enhance clients’ ability to effectively achieve their investment goals, e.g. education, home ownership, retirement, estate planning, etc. These platforms need to compile and report a great deal of information for clients’ reference and investment decision making.

Industry participants offering AAS are normally subject to securities, banking and/or insurance regulations in developed jurisdictions and are broadly classified into the three groups below:

- Start-ups build new proprietary models for acquiring new client base from scratch.
- Existing financial institutions expand their client relationship platforms to increase service offering.
- Existing investment advisors look to retain and service more clients in a more cost effective way.

Benefits and Barriers of AAS

AAS possess some characteristics that are conducive to improving or revamping the traditional human advisory models. For examples, (i) aggregation and analysis of all relevant data of a client’s assets, liabilities and tax exposure to capture a holistic view and construction of a portfolio to better meet the client’s needs; and (ii) greater transparency and consistency of implementation by using model portfolios and algorithms to reduce the risk of human error and misrepresentation during the advice process. It has been noted by market researchers that young investors without investable assets and knowledge of how to start investing are more comfortable to try AAS than directly approaching human financial advisors. Overall speaking, the major benefits of AAS are the engagement of a wider range of individual investors and the delivery of affordable quality advice on accessible goal-based investments.

Barriers faced by AAS developers are numerous since many business models still in their infancy stages are evolving to serve target clients who are facing an increasing choice of financial products and to comply with regulatory changes in different jurisdictions. The following barriers have fundamental impact on the future AAS usages.

- Aggregation of a client’s income, expense and holding data inevitably require transfers of personal data from the client’s other accounts maintained with multiple financial institutions. Such transfers among account providers must be in full compliance with personal data protection laws and deserve diligently monitored client consent and data transfer security. This calls for industry-wide collaboration and best practices to achieve efficient client data aggregation by AAS providers under privacy and cybersecurity regulations.
- Inconsistent regulatory regimes for investment advice business prevent AAS providers from focusing on client-centric business models and embarking on delivery of cost-effective and more accessible investment advice to clients. When there is a common regulatory standard for assessing AAS quality, regulators and industry participants can consistently evaluate whether an AAS model has clearly defined the intended outcomes for clients, collected the required information on clients’ risk profile and goals through online questions and reports as well as presented a robust and client-engaging suitability assessment process.
Goal-based investing concentrates on meeting a client’s specific goals, such as a stable income stream and total return, and assessing the risk of investment outcomes falling short of the client’s goals. A goal-based AAS platform is expected to entail thorough ongoing analyses of a client’s household capacity to bear investment risk based on pre-set thresholds, assist the client to achieve long-term goals by correcting behavioral biases, such as holding excessive cash, and recommend an appropriate course of actions in times of market volatility to prevent the client’s tendency to buy high and sell low. Such AAS models require critical mass of clients to lower automated servicing costs for each client compared with face-to-face advisor models. To attract more investors to use AAS, industry participants need to build reputation and trust through quality services supported by strong governance and control structures.

Governance and Control Elements for AAS

AAS provided by banks, securities firm and insurance companies face different sectoral legislations in respect of cost transparency, disclosure standards and conflicts of interest management. It is crucial for respective regulators to set out guidelines for AAS governance and control structures to prevent data integrity from being compromised and reduce the risk of algorithm-based recommendations being inappropriate for investors. The U.S. and European regulators have commenced their studies on AAS and published high-level viewpoints (see web-links 1 to 2 below). It is expected that the following governance and control elements are bound to be entailed in the emerging regulatory directives.

A key aspect of AAS is the ability to deliver investment advice in a more accessible and cost-effective way by separating the costs, i.e. investment management fees, of the underlying building blocks, e.g. index funds, asset allocation funds, and guarantee funds, from the advisory and/or execution fees charged by AAS platforms. Regulators in developed jurisdictions generally mandate financial institutions to make enhanced cost disclosures for justifying the value for money of their services. AAS providers likewise may follow the same requirements and compete on the basis of the overall value of AAS to investors. For the sake of cost transparency, well-designed interfaces can assist investors to understand the meaning of individual terms and descriptions when moving through the online advisory process.

Investors’ willingness to read and act on disclosure documents depends on how key information, for example, investment objectives, policies, restrictions and risk factors, is presented. AAS models can make different presentations of the same information to allow investors view and learn the information in a way compelling to them. In addition, any client risk profile questionnaire needs adequate validation across a variety of clients to avoid potential misunderstanding and ambiguities of client risk tolerance levels. Since AAS target mass affluent and retail investors, continuous validation of client interfaces and risk profiling shall form an integral part of the design and ongoing testing of the AAS system.

There should be certainty of which regulated entity enters into AAS contract with investors and which financial institutions have the responsibility for provision of investment advice, execution of transactions and/or custody of client assets. AAS models may contain potential for bias and therefore disclosure of key elements of the model provider’s investment philosophy should be disclosed to investors prior to any investment advice given. Experienced investment professionals must be involved in the design of AAS to ensure that the algorithms deliver the expected outcomes. Investment professionals design the algorithm and investment decisions, such as investment products selection, on AAS platforms need to be monitored by investment control and risk management functions or committees. Those responsible for the design, operations and risk management of AAS models and platforms should conduct regular and ongoing testing of the AAS systems for independent reviews by compliance or internal audit. Furthermore, AAS providers have the obligation to put in place conflicts of interest policies for prevention of improper inducements that undermine the uprightness of their AAS models.

Potential Evolution of AAS

Investors prefer effective tools that can support them to make investment decisions at lower costs and will appreciate the overall benefits of AAS when aggregation of their account information under robust cybersecurity and fraud protection measures to form holistic views is realized. It is worth noting that automated advice permits a more effective use of human advisors but does not exclude human intervention or rely solely on algorithms without human oversight. AAS models can also have human advisors to answer investors’ queries and discuss investment decisions. This hybrid robo and personal services combining digital guidance with human support has gained an important place in the minds of young and mature investors according to a recent survey (see web-link 3 below).
No doubt AAS can assist human advisors to use the same platform as the clients, with mundane tasks completed automatically. When the client experiences automated portfolio rebalancing and the human advisor is assisted by automated paperwork and billing, both parties have more time to discuss investment concepts in detail and evaluate the client’s goal-based investing progress. Over the next decade and beyond, emerging technologies, such as cognitive computing and smart machines, will power major advances in AAS capabilities, for example, an automated advisor assistant that can even provide complex investment advice and that will interact with clients in a multi-step process and on mobile devices.

On an ongoing basis, digital advisors will continue to invest in the ongoing development and maintenance of AAS business models and features, including cybersecurity fortification, predictive data analytics and diversified multi-assets investment in a cross-border context. The fundamental principle is that AAS providers ought to uphold compliance, risk management, data security and related programs and employ competent staff for these functions. Wealth managers outsourcing digital advice infrastructures or processes to reputable third-party vendors still need to have responsible staff to understand and test the rules, rationales and risks behind the algorithms.

AAS have raised the bar in terms of the digital tools and fine-tuned, timely information that investors will demand from their wealth managers. The real test for AAS providers is whether their digital advice given during a financial crisis can truly assist their clients to survive the bear market shock. Facing the technology transition trend, wealth management industry is on the cusp of a major disruption.


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