Hands off
Guard up
For wealth and asset management firms, “robo-advising” platforms carry new risks
Various forms of technology have been adapted into a large portion of everyday life, and the financial industry is no exception. In today’s economy, it’s hard to imagine anyone amassing significant investment assets without using digital technology. Financial institutions continue to develop and introduce new technologies and offerings, conveniently increasing customers’ access to and control of their funds. Depending on the business model, robo-advisers may provide investment advice directly to clients with limited investment advisory personnel interaction. Or alternatively, investment advisory personnel may use robo-advisers to create investment plans that they recommend to their clients. Many customers continue to seek new automation options for their financial transactions and may consider it a positive factor to bypass human interaction.
To meet this demand, a number of asset and wealth management firms have developed automated offerings of their own. “Robo-advisers”—systems that automate investment to match the target risk profile of an investor and execute investment decisions that optimally shape a portfolio as it grows—are growing in both number and capabilities. Based on a 2016 study of ‘Future of wealth in United States’ by the Deloitte Center for Financial Services, Deloitte estimates that the $2 billion in assets under automated management today may grow to $5 trillion to $7 trillion by the year 2025.1 While this won’t approach the $18 trillion currently managed by traditional advisers, robo-advising will clearly no longer be a fringe or experimental part of the market.

Incorporating these offerings may entail more than bolting on a technology capability. Robo-advising opens new frontiers in analytics, customer satisfaction, and fiduciary responsibility. But it also exposes institutions to new risks they shouldn’t underestimate.

**Regulatory risks.** To serve clients efficiently, a robo-adviser must be programmed with investment goals and equipped to capture and quantify the details of each investor’s risk profile. And to satisfy the investment adviser’s fiduciary responsibility, the robo-adviser environment must incorporate new controls and verification. For regulators, determining how to evaluate a software platform whose fiduciary responsibilities still ultimately reside with humans can be a challenge.

**Business risks.** Moving clients from human-based experiences to technology-based experiences introduces risks such as low adoption and increased inquiries. Additionally the inability of the robo adviser platform to better capture a client’s risk tolerance than a human financial advisor may lead to misalignment in asset allocations or conflicts of interest based on fees. Automated questionnaire may not account for behavioral biases.

**Operational risks.** Firms need to establish adequate controls around their automated adviser environments to mitigate risks involving customer segmentation, business continuity planning, and IT governance. It’s also important to guard against algorithm alteration or tampering that might bias investment advice or cause the algorithm to enact steps not aligned with a client’s best interests. Finally, client interaction itself is an important focus: Robo-advising is meant to advance the client experience, but it can add client experience challenges as well.

**Technology risks.** To play a more central role in the disposition of clients’ assets, the IT control environment needs adequate levels of integrity, security, resiliency, and capacity. For example, the inability of the robo advisor platform to adapt to increasing business volumes or ineffective planning for added capacity may result in revenue and customer loss. If a firm plans to leverage a vendor robo-advisor platform, it is important to recognize and manage risks that can arise from the vendors.

**Client expectations.** Customer service is central to robo-advising. Institutions must maintain an environment in which every investor can expect a seamless, consistent experience, no matter how a transaction is handled or by whom. The client’s risk profile and other particulars should inform each delivery channel in the same way.

As robo-advising grows amid all these challenges, how can institutions keep it

“Entities that create computer-generated portfolios but fail to do the necessary due diligence to know their customers and who specifically decline most if not all the fiduciary duty are not performing the duties of investment advisers.”

—Massachusetts Secretary of State William Galvin,April 2016
inside the guardrails? To detect and address these potential risks, firms that engage in robo-advising should take a deliberate look at the ways they approach the myriad concerns.

**Regulatory: New game, new (and old) rules**
The US Investment Advisers Act of 1940 (the “Advisors Act”), establishes a fiduciary duty for investment advisers. The Department of Labor recently expanded the fiduciary duty rules to apply to retirement accounts as well. A fiduciary duty requires an investment adviser to provide investment advice and act in the best interest of their client. Meanwhile, broker-dealers have a responsibility to build suitability into their asset recommendations, which imposes the duty to know their clients’ risk appetite as well as they know the vehicles they manage. These principles, codified by an array of regulations overseen by entities, including the Office of the Comptroller of the Currency (OCC), the Financial Industry Regulatory Authority (FINRA), the Securities and Exchange Commission (SEC), and others, aren’t new. But the challenge of applying them to robo-advising is a new frontier.

FINRA issued guidance in March 2016 that called on financial services firms to back up their automated offerings with enhanced training and education for employees, initial and follow-up assessments of how digital tools perform, and heightened sensitivity to conflicts of interest. FINRA’s recommendations included a call for governance and supervision of automated services that span many areas of the robo-adviser operating model: from customer profiling and asset allocation through portfolio selection, rebalancing, tax-loss harvesting, and trade execution. FINRA has also called for firms to commit to new levels of monitoring and testing, including periodic review of the robo-adviser algorithms, and to reflect the unique characteristics of robo-advising accurately in communications and marketing efforts.

Meanwhile, the SEC has stated that examiners will perform specific reviews of robo-advising platforms. The agency also expressed concern with operational risks, such as business continuity, privacy, resiliency, and the safety of automated systems. A January 2017 announcement of the agency’s examination and inspection priorities included a statement from former SEC Chair Mary Jo White that the agency’s inspection arm will review “firms delivering investment advice through electronic mechanisms, sometimes referred to as ‘robo-advising.’”

In February 2017, the SEC Division of Investment Management further issued specific guidance on the fiduciary obligations of robo-advisers. This guidance subjects robo-advisers to the same regulatory rules that govern traditional registered investment advisers (RIAs) under the Advisers Act, which details:

- **Fiduciary duties to clients with respect to substance and presentation of disclosures.** Human interaction is low, so most communication takes place via email, websites, mobile, and other media. Clients need to understand the business model, scope of the investment advisory services, limitations, assumptions used in the algorithm, the risks associated with the model, and disclosure of fees. It is also important to present the disclosures in a form that can be easily understood by the investors.

- **Robo-advisers’ obligations to provide information to ensure ongoing client suitability of risk advice and decisions.** Most robo-advisors place a heavy reliance on online questionnaires to generate recommended portfolios based
on a client’s risk appetite, investment time horizon, and other short- and long-term financial goals. To adhere to the suitability obligation, answers to the questionnaire should clearly reflect investor risk preferences, they should be comprehensive enough to define and quantify the investor’s risk profile, and they must be able to flag any inconsistencies in the answers through additional internal validation checks.

**Effective design and implementation of a compliance program that addresses adherence to the regulatory concerns and obligations concerning automated financial advisory.** Rule 206(4)-7 under the Advisors Act requires that registered investment advisors

- Adopt and implement written policies and procedures designed to prevent violations of the Investment Advisers Act of 1940
- Annually review the adequacy of the policies and procedures as well as their effectiveness
- Designate a supervised person as chief compliance officer who is responsible for administering the above policies and procedures

In addition to the traditional compliance model, robo-advisers should consider implementing policies and procedures that address areas relevant to robo-advisers:

- Adequate testing of the algorithmic code and post-implementation monitoring, as well as appropriate oversight of any third party that develops, owns, or manages the algorithmic code or software modules utilized by the robo-adviser.

As firms execute hybrid strategies that include robo-advising, upholding fiduciary requirements is likely to become more difficult. This is due in part to the need to align risk profiles seamlessly across separately managed accounts (SMA) and unified managed accounts (UMA). It also reflects the flexibility clients will have to distribute their assets across multiple vehicles. The investment model must work across multiple dimensions: operationally within the firm’s organization, visibly as part of the customer’s experience, legally in the eyes of regulators, and technologically across different software platforms. It will take a combination of talent and technology to present a uniform experience.

**Business and operations: Finding digital’s place in the world**
While robo-advising may seem like a
glimpse into the future, it’s not the entire future. Some firms may indeed build business models around robo-advising. For others, robo-advising may stand alongside traditional person-to-person and “white glove” service models for high-value customers whose nuanced needs in areas such as tax and estate planning don’t fit into a standardized algorithmic approach.

On the business side, investment advisors should be wary of changes to traditional roles and responsibilities associated with their fiduciary duties when utilizing a robo-advisory platform. The technology could alter the landscape of risks inherent to information security, customer privacy, and fees that could be sources of potential conflicts of interest. They must also be on guard for adverse situations. What happens to a robo-adviser’s client portfolios and data in the event of a natural disaster, cyberattack, or technology failure? The inability to adopt and implement a written business continuity and transition plan introduces risk around failures to comply with regulatory requirements. A written, tested plan for these eventualities may help ward off regulatory penalties, loss of business, or reputational damage.

Operationally, robo-advising carries the risk of assigning erroneous risk profiles to investors, which could lead to incorrect asset allocations and rebalancing. This introduces a risk of inaccurate suitability determination. Using a fixed questionnaire, instead of interacting with an investment adviser, may result in a misalignment of financial planning and client goals.

If IT controls aren’t adequate, the algorithms that affect clients’ interests may not have the integrity, resiliency, or capacity required to serve their investor base. Even if they are designed correctly, those algorithms may be subject to accidental or inappropriate alteration that can lead to outcomes that may introduce conflicts or regulatory violations.

Periodic assessments of the operational risk and the associated changes to policies and procedures will be required to address current regulatory concerns. Testing of the robo-advisory platform will need to include evaluation of controls implemented across the firm (operations, business, technology), as well as the expected investor impact of changes to the underlying portfolio allocations. Firms will need to assess and update controls that bridge business, operations, and technology on an ongoing basis.

**Technology: A deeper reliance, a higher bar**

Robo-advising technology has a well-known antecedent in automated trading. In addition, as more firms enter the market, robo-advising appears likely to follow a similar growth curve. There are more than 20 name-brand offerings already, and more than a half-dozen well-known institutions have already made public their plans to introduce or expand robo-advising in 2017 and beyond.

For investment and advisory firms, there are several paths to delivering an automated investment platform to clients. Some may construct their own automated platforms from the ground up. Some may turn to third-party technology partners, with or without “white-labeling,” to make the resulting interfaces adhere to a customer’s expected brand experience. Regardless of the path chosen, the design of an automated platform must implement the appropriate compliance policies and procedures required to keep all activities within regulatory guidelines. And its controls must be up to the task of keeping the algorithm resilient and compliant over the long term. In practice, however, many firms dedicated to the robo-advisory business are startups that may not invest sufficiently in building strong governance and compliance frameworks. Their controls for data integrity, resiliency, and capacity may be not be adequate to handle adverse market conditions and prevent system failures. Failure in these areas opens the possibility of violating regulations such as Sarbanes-Oxley 302, 404, 409, 802, and many others.

The operation of a robo-advising platform also puts a premium on transaction follow-through. If there’s a breakdown in daily reconciliation of the algorithm trade list with broker trade executions, this may result in unrecognized trade execution failures and an inability to gather correct data on portfolio holdings. This may also hamper the algorithm’s ability to rebalance a portfolio correctly.

The risks described above merely address the transition from one advising framework to another under normal conditions. But when do conditions in the financial markets remain “normal” for very long? Institutions that place their faith—and their clients’ interests—in automated systems will need to understand how these systems can handle extreme market conditions and if they will be resilient against the unexpected.
For example, rebalancing becomes much more sensitive to market conditions when volatility increases. Should robo-advising systems use sophisticated rules to prevent their portfolio recommendations from exceeding certain parameters? How should manual intervention be used to govern robo-adviser platforms? And is being aware of market inflection points, as well as knowing when to “manually over-rule the autopilot,” part of an advisor’s fiduciary obligation?

These concerns can only grow as robo-advising algorithms become more complex and drive more transactions. Adding advanced artificial intelligence and machine learning to inform trade management can make these platforms more powerful. But it may also add challenges in how these platforms are able to clearly communicate, disclose, and validate the algorithms’ behavior to regulators and their clients. The real test will be how effectively the multiple platforms work together and how people can validate processes—and intervene when needed—across platforms and systems.

**Customers: Serving clients in ways they seek – and ways they need**
The growth in automated advising will be measured in several ways. Total assets under management and gross volume won’t be the only measures of success. Automated advising will also move into new parts of the investor market. As technology helps reduce the cost of providing these services, investors with $10,000 or less are beginning to gain access to automated rebalancing and wealth management services that would have traditionally involved a human-based experience and required six-figure portfolio balances.

But moving from human-based to technology-based experiences introduces potential risks to both new and established customers as well as investment firms. Unlike human advisors, most robo-advisers provide advice without any human contact, only requiring customers to answer standardized questions relating to investment goals and risk tolerance. They may not ask, for example, if an investor has children, and determine how that would affect investment decisions. This may pose a limitation to meeting the customers’ constantly changing interests, which might violate the fiduciary rule under the Advisers Act. Additional areas of concern include:

- Integrating a system that contains personally identifiable information (PII) data into an existing IT environment exposes a firm to additional information security and customer privacy risks.
- Inability to secure customer privacy may have long-lasting effects on sales and profits and can lead to increased regulatory scrutiny and loss of clientele.
- A glitch in the robo-adviser algorithm may result in failure of certain algorithm functionality and lead to incorrect asset allocations and improper rebalancing.
- Inability to construct the correct asset allocations may subject clients’ portfolios to increased risk and cause potential investment losses to investors with smaller investment portfolios.

Firms that add robo-advising to their offerings have a heightened responsibility to match increased client services with increased client protection. This benefits investors and proactively addresses regulatory concerns. If financial institutions provide an environment in which investors can combine traditional and robo approaches with confidence, they may attract more investors and retain their business. As in so many financial matters, confidence begins with consistency.
Mastering uncertainty to reap new rewards

In confronting the complex array of new risks that come with robo-advising, firms may first be drawn to specific problems and point solutions. But the first step should be comprehensive—to surround the entire undertaking with a “scaffold” in the form of a robust risk management framework. This should be a purpose-built approach, not simply a retooled version of the risk management regime that worked in the pre-digital era.

Like the frameworks that already mitigate risk in traditional operations, the robo-advising risk and compliance framework should include Governance and Supervision, Know your Customer and Suitability, Client Communications and Disclosures, Compliance with Regulatory Requirements, Algorithm Assessments and Establishment of Controls and Periodic Effectiveness Testing.

In addition to the elements that will apply specifically to the new realm of automated advising, firms should consider implementing periodic Algorithm Assessments and Establishment of Controls and Periodic Effectiveness Testing to safeguard against risks that may creep into operations over time. Robo-advising should represent a new, vital target area for information security testing and business continuity measures. And for firms whose platforms aren’t built internally, implementing robo-advising may also add a new facet to the task of third-party risk management.

Managing the risks inherent with robo-advising necessarily covers multiple dimensions. It spans such phases as due diligence, integration with the existing business, and ongoing monitoring of both operational effectiveness and regulatory compliance. As with any risk management regime, the approach to robo-advising should be more than a defensive stance. It should be a strategy to find the opportunities for heightened performance that risk taking makes possible.
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Endnotes


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