



Ryan, Swanson & Cleveland, PLLC

Robo-Adviser Presentation

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SEC's February 2017 "IM Guidance Update: Robo-Advisers"

- Introduction
- "Substance and Presentation of Disclosures"
 - Explanation of Business Model
 - **\$216,806,864**
 - Scope of Advisory Services
 - Presentation of Disclosures
 - Are key disclosures presented prior to the sign-up process?
 - Are key disclosures specially emphasized?
 - Should some disclosures be accompanied by interactive text?
 - Have the disclosures been presented and formatted appropriately for the mobile platform?

SEC's February 2017 "IM Guidance Update: Robo-Advisers" (cont.)

- "Provision of Suitable Advice"
 - *Suitability of Investment Advice Provided by Investment Advisers*, Investment Advisers Act Release No. 1406 (Mar. 16, 1994) ("*Suitability Rule Proposing Release*")
 - *Status of Investment Advisory Programs under the Investment Company Act of 1940*, Investment Company Release No. 22579 (Mar. 24, 1997)
 - Regulation of Investment Advisers by the U.S. Securities and Exchange Commission (March 2013)
 - Enforcement Actions
 - IM Guidance Update: Robo-Advisers

SEC's February 2017 "IM Guidance Update: Robo-Advisers" (cont.)

- "Provision of Suitable Advice" (cont.)
 - Reliance on Questionnaires to Gather Client Information
 - Elicit sufficient information?
 - Sufficiently clear?
 - Handle inconsistent client answers?
 - Client-Directed Changes in Investment Strategy

SEC's February 2017 "IM Guidance Update: Robo-Advisers" (cont.)

- "Effective Compliance Programs"
 - Reliance on algorithms
 - Limited (if any) human interaction with clients
 - Internet-based advisory services

What's Next?

- Electronic Investment Advice
 - “Oversight of computer program algorithms that generate investment recommendations”

- C1.** [Initialize.] Set $a_j \leftarrow 0$ for $0 \leq j < s$, $a_j \leftarrow 1$ for $s \leq j < n$, and $w_j \leftarrow 1$ for $0 \leq j \leq n$. If $s > 0$, set $r \leftarrow s$; otherwise set $r \leftarrow t$.
- C2.** [Visit.] Visit the combination $a_{n-1} \dots a_1 a_0$.
- C3.** [Find j and branch.] Set $j \leftarrow r$. If $w_j = 0$, set $w_j \leftarrow 1$, $j \leftarrow j + 1$, and repeat until $w_j = 1$. Terminate if $j = n$; otherwise set $w_j \leftarrow 0$ and make a four-way branch: Go to C4 if j is odd and $a_j \neq 0$, to C5 if j is even and $a_j \neq 0$, to C6 if j is even and $a_j = 0$, to C7 if j is odd and $a_j = 0$.
- C4.** [Move right one.] Set $a_{j+1} \leftarrow 1$, $a_j \leftarrow 0$. If $r = j > 1$, set $r \leftarrow j - 1$; otherwise if $r = j - 1$ set $r \leftarrow j$. Return to C2.
- C5.** [Move right two.] If $a_{j-2} \neq 0$, go to C4. Otherwise set $a_{j-2} \leftarrow 1$, $a_j \leftarrow 0$. If $r = j$, set $r \leftarrow \max(j-2, 1)$; otherwise if $r = j - 1$, set $r \leftarrow j - 1$. Return to C2.
- C6.** [Move left one.] Set $a_j \leftarrow 1$, $a_{j-1} \leftarrow 0$. If $r = j > 1$, set $r \leftarrow j - 1$; otherwise if $r = j - 1$ set $r \leftarrow j$. Return to C2.
- C7.** [Move left two.] If $a_{j-1} \neq 0$, go to C6. Otherwise set $a_j \leftarrow 1$, $a_{j-2} \leftarrow 0$. If $r = j - 2$, set $r \leftarrow j$; otherwise if $r = j - 1$, set $r \leftarrow j - 2$. Return to C2. ■

IS YOUR FIRM READY TO SUPERVISE AN ALGORITHM?

What's Next? (cont.)

- Marketing materials
- Data protection
- Disclosures relating to conflicts of interest

SEC's February 2017 "Investor Bulletin: Robo-Advisers"

- "What Level of Interaction with a Person is Important to You?"
- "What Information is the Robo-Adviser Using to Create a Recommendation?"
- "What is the Robo-Adviser's Approach to Investing?"
- "What Fees and Costs Will the Robo-Adviser Charge?"

Algorithm Design and Oversight

- Internal vs. Third-Party Provider
- Development
 - Investment and risk professionals close involvement
 - Coding control procedures
- Initial Review
 - Policy committees involved in due diligence review and implementation
 - Testing and review
 - Consistent with firm’s approach?
 - Methodologies, strategies and assumptions
 - Normal vs. stressed market performance (e.g., Betterment and Brexit)
 - Expected outcomes?
 - Document diligence and testing efforts
 - Third-party legalese/disclaimers (MA’s policy)

Algorithm Design and Oversight (cont.)

- Maintenance and Oversight
 - FINRA's Principles of Effective Practices: Governance and Supervision of Algorithms (ensuring resulting advice is consistent with securities laws and FINRA rules)
 - Ongoing review and testing by compliance/tech professionals (procedures, personnel and processes)
 - Can you explain to regulators, if asked, how the tool works and how it complies with regulatory requirements?
 - WA: If you can't explain in plain English what your robo-advisory tool does, you probably shouldn't be using it.
 - Does the description given to the regulators match that given to clients?

Algorithm Design and Oversight (cont.)

- To assess the competence of algorithms regulators will require:
 - Explanations of the models and the data upon which the models are based;
 - Evidence regarding the appropriateness of the data used to create the model;
 - Explanations of the outcomes that the algorithms are seeking;
 - Evidence that the algorithms perform in the way that they are designed;
 - Evidence of how the creators of the robo-adviser are measuring whether the algorithm is succeeding and what they are doing in response; and
 - Explanations of what other alternatives the robo-adviser creators considered and rejected.

Data Protection and Cybersecurity

- Aggregate and share client information only as necessary to facilitate client's stated objectives
- Data encryption, third-party risk management, cybersecurity insurance, business continuity plans, incident management frameworks
- Due diligence assessments of third-party providers



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Thank you!

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