The Robo-Advisor Journey
From fintech superstar to wealth management table stakes

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What does…

Cognitive Computing

Enhanced Investments & Financial Products/Services

Blockchain

ALL HAVE IN COMMON?
Let’s start with the obvious...

THERE IS A FINTECH EXPLOSION!
Fintech Technology Drivers

Global Fintech Impact

$20 Billion¹
VENTURE CAPITAL in 2015

Finovate Word Cloud Fall 2015 – New York, BBVA Article on Five Fintech Trends for 2016, quote from 'Warren Mead Global co-lead of KPMG’s fintech practice
## Fintech Disruption from Every Corner

<table>
<thead>
<tr>
<th>Category</th>
<th>What they do</th>
<th>How they make money</th>
<th>Example Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crowdfunding</td>
<td>Marketplaces that enable individuals to fund business opportunities often in return for equity</td>
<td>Most charge a percentage of the amount raised if the campaign is successful</td>
<td>CircleUp; Crowdcube; Crowdfunder; EarlyShares; Indiegogo; Invesor; Kickstarter; Indiegogo; Invesdor; Portfolia; Seedrs</td>
</tr>
<tr>
<td>Digital financial advice</td>
<td>Help customers track their investments and make better long-term financial decisions through specific recommendations</td>
<td>Many charge an annual/monthly subscription fee</td>
<td>eyeOpen; FeeX; FlexScore; Jemstep; LearnVest; Money on Toast; Wealth; MarketRiders; NextCapital; Personal Capital; Planwise; YourWealth</td>
</tr>
<tr>
<td>Digital Investment Managers</td>
<td>Offer consumers a cheaper alternative to traditional managed accounts, delivered through digital touchpoints</td>
<td>Most charge an annual fee based on total invested assets</td>
<td>AssetBuilder; Betterment; Cashboard; Covestor; FutureAdvisor; Fidelity’s Headstart; Hedgeable; Nutmeg; SigFig; vaamo; Wealthfront; WiseBanyan; Hargreaves Lansdown;</td>
</tr>
<tr>
<td>Digital retirement plan advice</td>
<td>Help employees optimise their retirement investments through specific recommendations</td>
<td>Most charge an annual/monthly subscription fee and/or a percentage of the invested assets</td>
<td>Financial Engines; Rebalance IRA; Smart401k; Wealth Wizards</td>
</tr>
<tr>
<td>Social lending</td>
<td>Marketplaces that let customers lend to or borrow from other customers</td>
<td>Some charge a percentage on the assets lent or borrowed, others charge a percentage of earned interest</td>
<td>Fixura; Funding Circle; Lending Club; Prosper Funding; RateSetter; SocietyOne; Zopa</td>
</tr>
<tr>
<td>Social Investing</td>
<td>Communities that let investors share tips, see others’ portfolios, and copy other investors’ trades</td>
<td>Many charge commission based on trades</td>
<td>Ditto Trade; eToro; hopee; ibrok; Motif Investing; StockTwits; TradeHero; TradeKing; Unience; Wikifolio; Zignals; 8 Securities</td>
</tr>
</tbody>
</table>

Forrester, November 14, 2014 - Digital Disruption Threatens Wealth And Asset Management.
Fintech Impacts on Wealth Management

Disruptive Potential  Maturity Level  Widespread Adoption
Fintech & Digital Disruption › Two Paths

POWERFUL EXTERNAL FORCES...

- Millennials
- Fee Compression
- Digitization
- Passive Investing
- Regulation

...CAUSE FIRMS TO ALTER THEIR STRATEGIC DIRECTION...

- Empower the Adviser
- Digitize Advice

...AND SEEK TO OPTIMIZE THEIR BUSINESS MODELS ACCORDINGLY

- Channels
- Segmentation
- Technical Architecture

ROBO ADVISORS

A segment in transition...
Robo-Advisor › Global Growth Drivers

› Growing demand for advice by consumers
› Advisors seeking to move up market to gain increased revenues
› Shrinking pool of qualified financial advisors
› Growing “advice gap” in the mass affluent market  (UK £60K-£250K, US 100K-$1M)
› Digital adaptation of the consumer market
› Increased use of technology by the advisor for advice and execution
› Influence of social media on consumers (the power of the “crowd”)
› Consolidation and centralisation of advisory services and programs
Robo-Advisor › Industry Impact

› **Increased fee pressure** – Robo-advisor solutions offer lower fees for technology-centric services. The feeling goes that this could set an expectation for lower fee expectations investors seeking an advisory relationship.

› **Pressure to accommodate the digital consumer** – Robo-advisor solutions will reach a not only a younger, technically savvy, growth accumulating generation – but will attract those who want a digital relationship with “advice on demand” or advice as they grow wealthier. The key is that they may want to engage purely online.

› **More technology** – Investors may increasingly demand that they interact with the advisor in the way they choose. This will include video conferencing, on-line chat, the ability to schedule time with an advisor online, and intuitive ways of collaborating together.

› **Access to comparative data** – Investors want information about how they are doing compared to their peers, and for their advisor to present other views (both expert and non-expert). This allows the investor to be better informed in the decision making of their financial plan. The pressure of the “social crowd” will only increase.
## Robo-Advisor › It’s Not Just About Advice

<table>
<thead>
<tr>
<th>ACQUISITION</th>
<th>ADVICE</th>
<th>ADMINISTRATION</th>
<th>COMMUNICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Search</td>
<td>Education/Research</td>
<td>Account Open</td>
<td>Progress to Plan</td>
</tr>
<tr>
<td>Paid Search</td>
<td>Risk Assessment</td>
<td>Account Transfer</td>
<td>Performance</td>
</tr>
<tr>
<td>Display Click</td>
<td>Asset Allocation</td>
<td>Asset Transfer</td>
<td>Activity</td>
</tr>
<tr>
<td>Email</td>
<td>Portfolio Analytics</td>
<td>Invest/Top Off</td>
<td>Valuations</td>
</tr>
<tr>
<td>Social Networks</td>
<td>Tax Analysis</td>
<td>Disburse/Withdraw</td>
<td>Events</td>
</tr>
<tr>
<td>Referrals</td>
<td>Holistic Planning</td>
<td>Transact (Buy/Sell)</td>
<td>Markets</td>
</tr>
<tr>
<td>Direct</td>
<td>Suitability</td>
<td>Education/Research</td>
<td>Education/Research</td>
</tr>
<tr>
<td></td>
<td>Decisions &amp; Trade-off’s</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## AUTOMATION | SCALE | EFFICIENCY | ENGAGEMENT
A Crowded Landscape › US Providers

As of February 2016
Robo-Advisor Usage › Provider Penetration

<table>
<thead>
<tr>
<th>Provider</th>
<th>TOTAL</th>
<th>HEAVY USERS</th>
<th>LIGHT USERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fidelity Investments</td>
<td>31%</td>
<td>34%</td>
<td>25%</td>
</tr>
<tr>
<td>Vanguard</td>
<td>18%</td>
<td>15%</td>
<td>23%</td>
</tr>
<tr>
<td>Charles Schwab</td>
<td>13%</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td>Folio Investing</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>MarketRiders</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>AssetBuilder</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Financial Guard</td>
<td>3%</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>FlexScore</td>
<td>3%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>FutureAdvisor</td>
<td>3%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Jemstep</td>
<td>3%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Covestor</td>
<td>2%</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>Acorns</td>
<td>2%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Betterment</td>
<td>2%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Motley Fool Wealth Management</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>TradeKing Advisors</td>
<td>2%</td>
<td>1%</td>
<td>3%</td>
</tr>
<tr>
<td>Personal Capital</td>
<td>2%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Edelman Financial Services</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Hedgeable</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>LearnVest</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Litoff</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
</tr>
</tbody>
</table>

## Robo-Advisor Usage › AUM Rankings

<table>
<thead>
<tr>
<th>Robo-Advisor</th>
<th>AUM (as of 31-Dec-2015)</th>
<th>Model</th>
<th>Official Launch Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vanguard Personal Advisor Services</td>
<td>$31 Billion</td>
<td>Hybrid (Robo + Financial Advisor)</td>
<td>May 2015</td>
</tr>
<tr>
<td>Schwab Intelligent Portfolios</td>
<td>$5.3 Billion</td>
<td>Robo Only</td>
<td>March 2015</td>
</tr>
<tr>
<td>Betterment</td>
<td>$3.2 Billion</td>
<td>Robo Only</td>
<td>June 2010</td>
</tr>
<tr>
<td>Wealthfront</td>
<td>$2.6 Billion</td>
<td>Robo Only</td>
<td>November 2009</td>
</tr>
</tbody>
</table>

*Form ADV on SEC.GOV website, January 2015 Research*
Robo-Advisor Usage › Legacy Brands Dominate

% OF INVESTORS USING ROBO-ADVISORS (US)

Source: Market Strategies International. Cogent Reports. Investor Brandscape, September 2015. *With which of the following firms do you have assets invested in automated investment advice services?* * Investors with over $100k investable assets
Robo-Advisor Usage › Legacy vs. Emerging Brands

### Generation
- **Millennials**: 26% (All), 23% (Legacy), 38% (Emerging)
- **Gen X**: 31% (All), 38% (Legacy), 27% (Emerging)
- **2nd Wave Baby Boomers**: 19% (All), 17% (Legacy), 16% (Emerging)
- **1st Wave Baby Boomers**: 18% (All), 19% (Legacy), 12% (Emerging)
- **Silent Generation**: 5% (All), 3% (Legacy), 7% (Emerging)

### Assets
- **$1M+**: 7% (All), 7% (Legacy), 8% (Emerging)
- **$500K to <$1M**: 12% (All), 10% (Legacy), 14% (Emerging)
- **$250K to <$500K**: 25% (All), 25% (Legacy), 24% (Emerging)
- **$100K to <$250K**: 56% (All), 58% (Legacy), 54% (Emerging)

### Gender
- **Male–Primary Decision Maker**: 40% (All, Legacy, Emerging)
- **Female–Primary Decision Maker**: 31% (All), 33% (Legacy), 28% (Emerging)
- **Shared Decision Maker**: 29% (All), 28% (Legacy), 26% (Emerging)

Robo-Advisor Usage › Age, Wealth, Gender

Robo-Advisor Adoption › % of Investors Likely to Adopt Services

22% Likely to Adopt

30% Current Robo-Advisor User

48% Not Likely to Adopt

Robo-Advisor Adoption › Profile

Robo-Advisor › Key Observations

› **Automation** and the advisor are not mutually exclusive. Automation is now an expectation within advisor tools, and part of their workflow.

› **Portfolio management** has been commoditised. Business processes for rebalancing, reporting, investment strategy and performance are no longer competitive differentiators – online firms specialise in these areas, providing low cost services directly to the investor.

› **Aggregation** is table stakes for any provider looking to offer a holistic solution to clients. Clients expect to receive holistic advice, and absent of aggregation, this cannot be achieved.

› **Client experience** transcends products. Although product diversity matters (especially among the affluent), client experience is equally important, with a new focus on delivery mechanisms

› **NexGen** (Gen X and Millennials) is the future of wealth management. NexGen mass affluent customers represents an underserved opportunity for wealth managers.

› **Power has shifted to clients**, and its not going to reverse itself. Investors are demanding digital delivery. Advisors must adapt to client demands.

Source: Celent, Wealth Management Trends, September 2015
What’s next for ROBO-ADVISORS?

You are HERE!

FUTURE
What’s Next?

› Continued platform transition

› New players looming

› Cognitive computing impacts

› Enhanced investments & financial products/services

› Blockchain
What’s Next › Continued Platform Transition

Robo-advisor platforms are increasingly becoming B2B. This trend reflects the high cost of customer acquisition, the challenges of creating brand awareness, as well as increased competition in the D2C marketplace.

› FutureAdvisor acquired by Blackrock
› Jemstep acquired by Invesco
› Learnvest acquired by Northwest Mutual
› Upside acquired by Envestnet
› Betterment introduces Betterment Institutional
› Betterment Institutional partners with Fidelity
› eMoneyAdvisor acquired by Fidelity (Fidelity then breaks partnership with Betterment Institutional)
› Motif Investing partners with JP Morgan, Pacific Life, and Ascent Private Capital Management of U.S. Bank
› SigFig pivots from D2C to B2B and begins to target banks
What’s Next › New Players Loom

› **Financial Planning tools** are well positioned to be the next round of B2B providers of robo-advisor tools.

› **Today, many offer client facing portals** that engage clients in the adviser-led planning process; thus transforming these into robo-advice portals is not a far leap.

**POTENTIAL PLAYERS**

› Advizr

› eMoneyAdvisor (now owned by Fidelity)

› Figlo/ Advicent

› Finance Logix

› Guide Financial

› inStream

› MoneyGuide Pro

› MoneyTree Software
What’s Next › Cognitive Computing & Advice
Cognitive Computing › Impacts to Robo-Advisors

› **Deep Learning/Machine Learning Applications**: Machine learning is the technology of computer algorithms that operate based on its learnings from existing data. Deep learning is a subset of machine learning that focuses on deeply layered neural networks.

› **Natural Language Processing**: Natural language processing is the method through which computers process human language input and convert into understandable representations to derive meaning from them.

› **Virtual Personal Assistants**: Virtual personal assistants are software agents that use artificial intelligence to perform tasks and services for an individual, such as customer service, etc.

› **Natural Language Processing (Speech Recognition)**: Speech recognition is a subset of natural language processing that focuses on processing a sound clip of human speech and deriving meaning from it.

› **Recommendation Engines and Collaborative Filtering**: Recommendation engines are systems that predict the preferences and interests of users for certain and deliver personalised recommendations to them. Collaborative filtering is a method of predicting a user’s preferences and interests by collecting the preference information from many other similar users.
## Cognitive Computing › Advice Evolution

<table>
<thead>
<tr>
<th><strong>HUMAN ADVICE</strong></th>
<th><strong>ROBO ADVICE 1.0</strong></th>
<th><strong>ROBO ADVICE 2.0</strong></th>
</tr>
</thead>
</table>
| › Domain Expertise  
› Product Expertise  
› Empathy, Listening, Guidance  
› Holistic Advice  
› Potential Product Biases  
› Financial Planning Tools  
› Portfolio Management Tools  
› Ad hoc Tools | › Quantitative Analytics  
› Technology Driven  
› Simulators/Models  
› Programmatic Evaluation on Structured Data  
› Programmatic Portfolio Construction/Management & Rebalancing  
› Programmatic Tax Optimization  
› Marketing & Product Content | › Qualitative & Quantitative Analytics  
› Inferences  
› Recommendations & Trade-offs  
› Tax-Smart Portfolio Management & Rebalancing  
› Unstructured Evaluations  
› Linguistic Interpretations  
› Answer Questions with Knowledge |

**Knowledge & Insight**

**Programmatic Rules**

**Cognitive Computing**
What's Next › Enhanced Investments & Financial Products/Services

**ENHANCED INVESTMENTS**
› Actively Managed Accounts
› Precious Metals
› Real Estate
› Managed Futures
› Private Investments
› Other Alternatives

**FINANCIAL PRODUCTS & SERVICES**
› Aggregation
› Savings & Current Accounts
› Borrowing – Loans & Mortgages
› Insurance
› Payments
What’s Next › Blockchain

WHAT/WHY/HOW BLOCKCHAIN?

› Blockchain is a value exchange protocol that allows value and its ownership to be freely exchanged amongst anything that shares the same protocol.

› Blockchain is an open protocol that anyone can innovate on – whether that’s investments, payments, lending or credit, or things that are physical that have ownership and value.

› Blockchain maintains a “chain” of ownership – or a chain of custody of any asset, home, car, boat, currency, diamond, etc. that is unchangeable.

› Blockchain implements the notion of smart contracts, which provides for the elimination of additional 3rd parties to enforce the rules of the contract between parties.

› The way that the Internet democratised information, the Blockchain will democratis the global financial system

ROBO-ADVISOR IMPACT

› Dramatic fee reductions – Robinhood charges USD $0 today to investors.

› Dramatic increases in speed of processing (think T+0)

› Increased access to additional financial products and instruments
What’s Next › The Crystal Ball

› Tier I emerging brands remain positioned as large RIA firms, expand into qualified plans to continue growth and may introduce hybrid models.

› Tier II emerging brands are acquired by banks, fund providers, or brokerage firms, die, and/or pivot to target those firms in a B2B strategy.

› Banks launch robo-advisor solutions as independent propositions (silo) and they perform poorly. They eventually realise that customers demand an experience which integrates all of the banks products and services into a single, aggregated, and compelling digital experience.

› All wealth management brands (including legacy brands) launch robo-advisor solutions as a new channel to acquire, onboard, advise, service, and engage clients. Robo-advisory capabilities become table stakes in the industry.

› Differentiation then becomes the next wave of growth – driven by zero fees, comprehensive and holistic advice, alternative investments, and additional financial products/services.

› NexGen consumers continue to drive digital transformation throughout the entire experience, and become the next wave of digital investors.
So what do these all have in common?

Cognitive Computing
Enhanced Investments & Financial Products/Services
Blockchain

Each will drive the **next wave of growth** in the robo-advisor space.
SEI UK is helping their Wealth Management clients to be more digitally enabled and launch direct propositions.

We would encourage you to find out more...
QUESTIONS

The Robo-Advisor Journey
From fintech superstar to wealth management table stakes

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