FINTECH'S IMPACT ON WEALTH MANAGEMENT



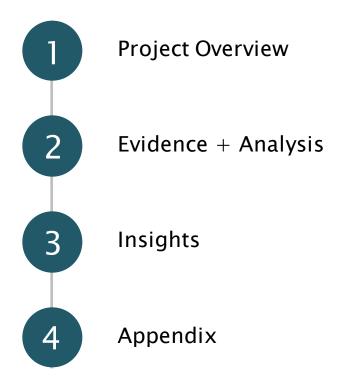




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Agenda*

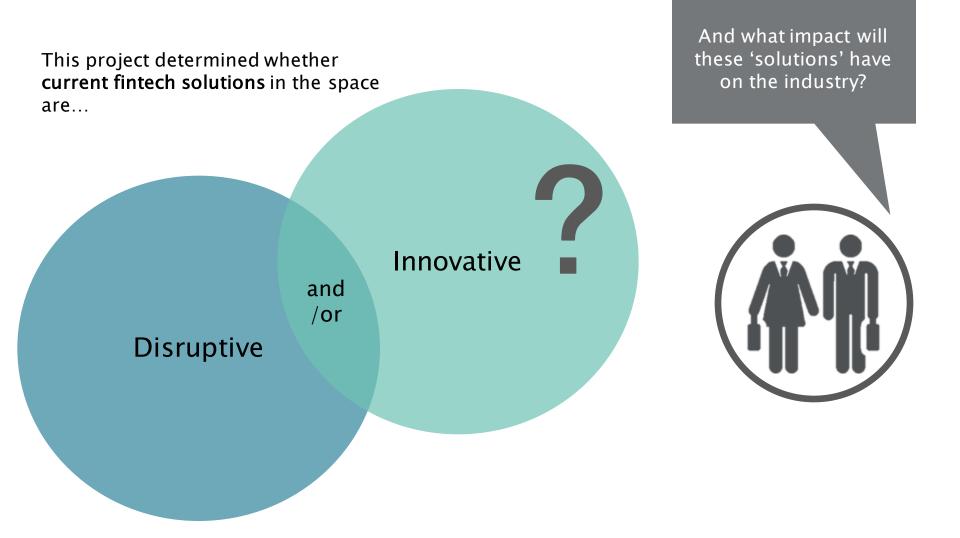


^{*} Note that this is a summary of my final deliverable and therefore only includes key slides.

PROJECT OVERVIEW

The industry and popular press confuse whether fintech companies are delivering innovative and / or disruptive solutions in products and services within the wealth management space

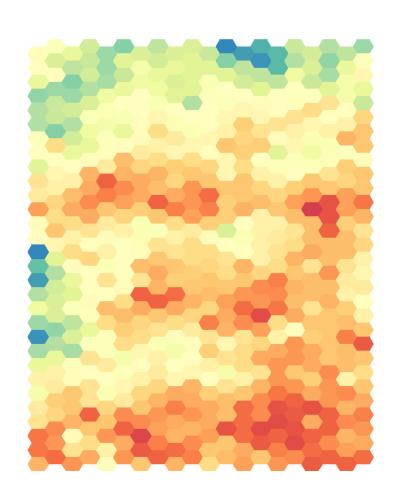
ISSUE / PROBLEM STATEMENT



The overarching goal of the project was to create a heat map identifying key areas of the value chain ripe for innovation and / or disruption

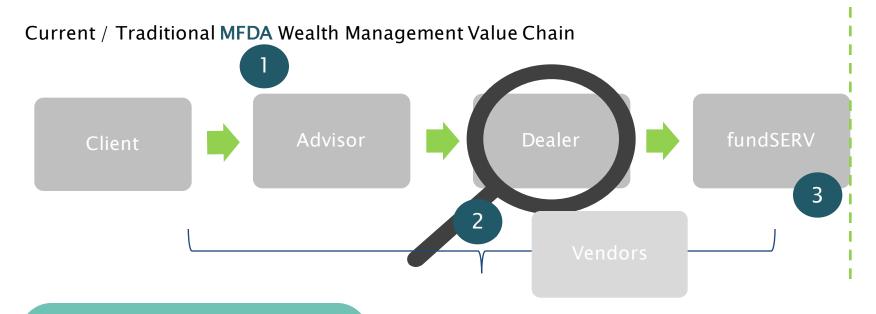
OBJECTIVE / GOAL

- Differentiate current initiatives in the MFDA value chain on the basis of innovation and / or disruption;
- Identify areas in the MFDA value chain that are unusually sensitive to innovation and / or disruption (understand a 'future' looking value chain);
- Identify opportunities and ideas to reduce the amount of processes within the wealth management value chain;
- Identify areas in the value chain where behavioural finance techniques and concepts could be leveraged.



The project took a dealer's perspective on innovation and disruption in the space and focused on the first portion of the value chain

SCOPE



LEGEND

- 1 Evaluate the MFDA value chain
- 2 Take a dealer's perspective
- 3 Stop analysis at fundSERV

EVIDENCE AND ANALYSIS

Interviews across stakeholders led to consistent themes surrounding the failure of the current processes in the wealth management space

RESEARCH THEMES

Current Wealth Management and Value Chain Themes



COSTS

Costs are going up across the value chain, with bleak signs of growth



EFFICIENCY

The lack of efficiency creates redundant tasks and increases costs



TECHNOLOGY

Technology could significantly improve efficiency in the value chain



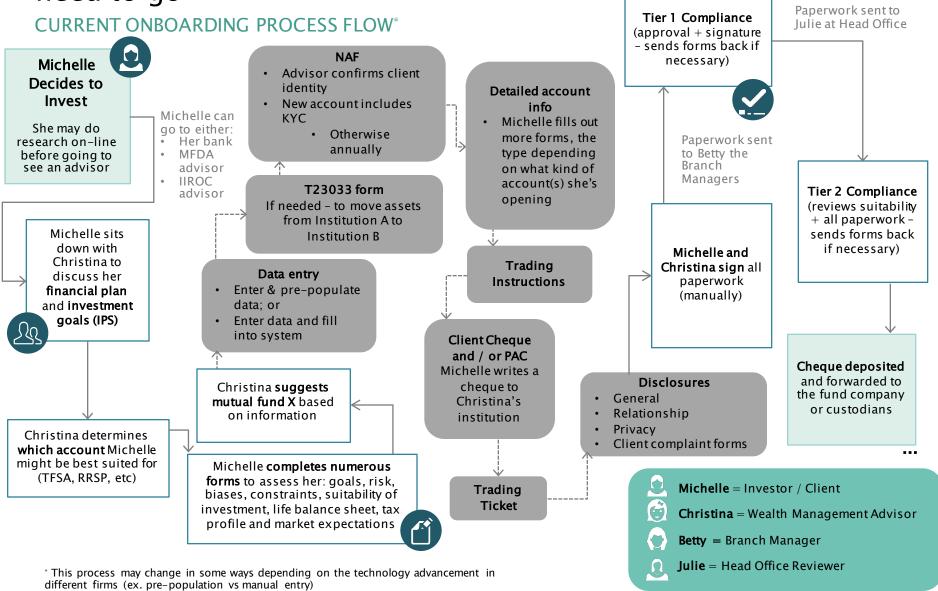
STRATEGY

Strategies should revolve around digital and fintech solutions



ARCHAIC

A current state process flow of the onboarding process was created to analyze "where we are" to understand "where we need to go"



The current onboarding process involves numerous timely steps from the time the client walks in, until the time Tier 2 compliance is complete

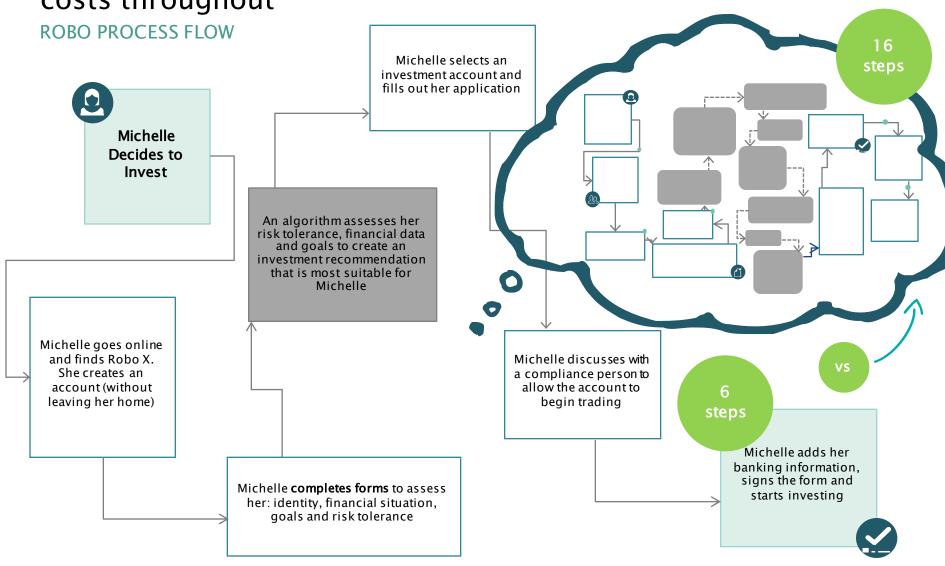
EVALUATION AND INSIGHTS OF CURRENT PROCESS FLOW

SUMMARY: ARCHAIC

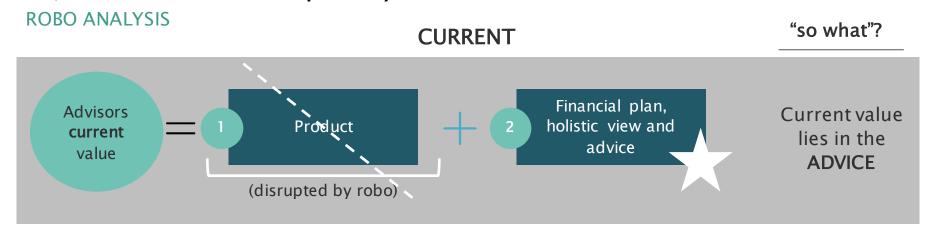
- Almost 40% of an advisors day is **spent on administrative and low value added tasks**. Solutions that increase efficiency throughout the process **would give advisors around an hour to hour and a half back per day** (time that could be spent on clients).¹
- Technology that does exist and that has been implement is old and not efficient –
 platforms lack integration, systems / technology are still manual which leads to human
 error and wasted time.
- The entire process lacks efficiency and foreword thinking. For example, why is compliance only done AFTER advisors have assessed client suitability?
- The ever increasing compliance costs will not be sustainable in the long run.
- The amount of forms in the process is overwhelming, unnecessary and redundant.
 Lack of integration continues to reduce efficiency and wipe away margins.
- Simple technology such as pre-population, automated form selection and suitability tools would improve efficiency and reduce errors throughout the process.

¹ Grosser, Dana. "Wealth Management Industry Must Reinvent the Value Chain, According to SEI and WISE Gateway Report." Marketwire. SEI, 4 Apr. 2016. Web. 10 Oct. 2016. http://www.marketwired.com/press-release/wealth-management-industry-must-reinvent-value-chain-according-sei-wise-gateway-report-nasdaq-seic-2111468.htm.

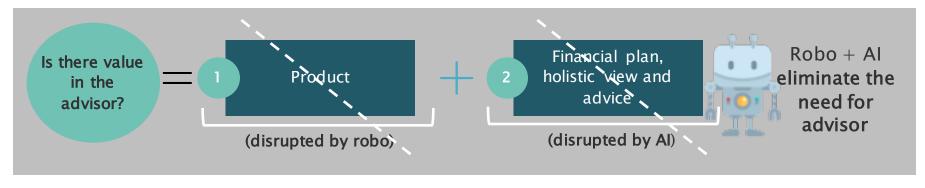
Robo automates nearly every step of the current process flow, which ultimately increases efficiency, reduces errors and lowers costs throughout



Robo on its own is not disruptive, as it lacks the ability to give 'advice' – it is purely automation of tasks. When combined with AI, this duo will completely eliminate the need for advisors.

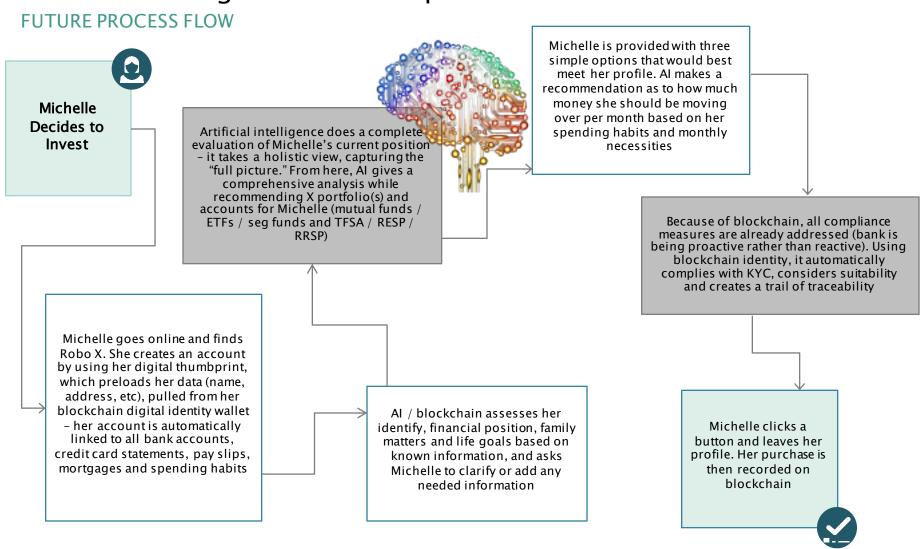






The industry is on the verge of being disrupted

The future process flow would combine the best of everything: automation from robo, the advice / financial planning of artificial intelligence and compliance from blockchain



INSIGHTS

Insights were developed by combining research from across the industry through primary and secondary sources and reflect the changing space

INSIGHTS (1/2)

• Robo-advice is both innovative and disruptive. The part of robo that automates tasks (ex. onboarding) is only innovative. The function of receiving an investment recommendation based on a computer algorithm without leaving your home and with little to no human interaction, is disruptive - as it reaches for a new market.

On Robo

- The term 'robo-advice' is extremely misleading. Robo-advice is simply the automation of onboarding and paperwork and an algorithm that spews an investment recommendation based on a simple profile. However, the term 'robo-advice' leads us to believe that all capabilities of an advisor (ex. advice, financial planning, mutual fund distribution) is available through a robot this is not the case. Many forget (or aren't aware) that robos are still operated by humans.
 - In today's space, robos are to advisors what accounting software has been to accountants a way to allow straightforward profiles to do their own taxes and a tool for accountants to use in completing more complex profiles.¹
 - Robo is a tool for everyone (clients + advisors).
- Robos are not necessarily replacing advisors, as they provide different products to somewhat different markets. Robos currently provide ETFs, while MFDA dealers provide mutual funds.
 - Clients are switching to robo because of costs.²
- Advisors should embrace robo (aka automation). Not only will it increase their efficiency and give them back a portion of their time, it will allow them to increase the top and bottom line by spending more time with clients, improving relationships, bringing in more sales and reducing costs.

On Technology

- Blockchain technology will be utilized in a number of areas of the process flow, including to improve / replace the compliance function, to update information (KYC) and / or to improve data collection, among other tasks. The question is not if, but when.
- Some technologies on their own are underwhelming. However, when these technologies are combined (ex. robo + AI + blockchain + goal setting behavioural finance apps) they can completely change what we know as the industry today.

Gonnet, Emmanuel. Essay on Robo-Advice Technology. Rep. Univeris, Dec. 2015. Web. 3 Oct. 2016.

² Resnik, Paul, and Stuart Erskine. The Robo Revolution - Robo-Advice Market Commentary and Analysis. Rep. FinaMetrica, Nov. 2015. Web. 4 Nov. 2016.

Insights were developed by combining research from across the industry through primary and secondary sources and reflect the changing space

INSIGHTS (2/2)

Banks are often slow to develop a fintech / digital strategy because of mission / scope creep. Traditional players are trying to do too many things at once with technology and lack the much needed innovative perspective.¹
 Customers are willing to try fintech solutions, but want the platform to be integrated through their bank (primarily for trust reasons). This serves as a huge opportunity for traditional banks to embrace innovative solutions to supply to new and existing clients and for fintechs to have a reputable and "trustworthy" name behind them.²

- For financial reasons, fintechs will need to partner with banks unless there is a huge uptake in robos in the near future. Robo-advisors need between \$16B \$40B AUM to break even.³
- Organizational agility is critical as a strategy for traditional players as high-value added capabilities continue to be commoditized.4
 - Scale will no longer be an advantage, as technologies are becoming widely available to new players. 4

On Other Solutions

- Behavioural insights can easily be leveraged to encourage saving and simplify processes for clients.
 It is an 'easy win' and low cost solution for providers.
 - Encourage saving
 - Reduce bias
 - Improve info overload / onboarding (ex. salience)
- High impact wealth management should be leveraged through technology. The majority of current solutions (robos) in the market are missing three key steps: "save", "beware that your behaviour drives risk" and "avoid catastrophic risk."

Yeng, Jasen. "Why Legacy Firms That Buy Robos in Haste Show No Signs of Urgency after They Take Title." RIABiz. N.p., 1 Sept. 2016. Web. 16 Sept. 2016. http://riabiz.com/a/2016/9/1/why-legacy-firms-that-buy-robos-in-haste-show-no-signs-of-urgency-after-they-take-title.

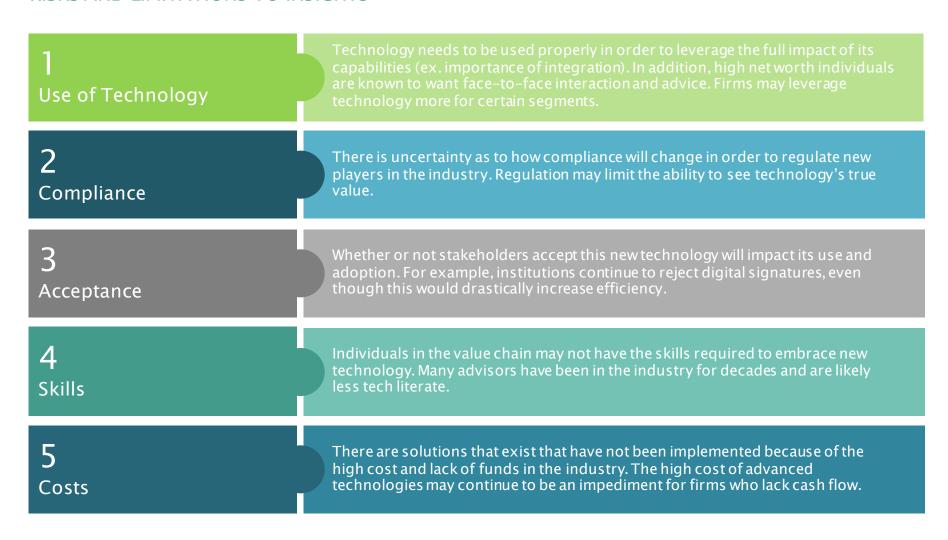
² FinTech Disruption in Financial Services. Rep. CGI, 11 Oct. 2016. Web. 12 Oct. 2016.

³ Banerjea, Sejuti. "What You Need to Know About Financial Technology (FinTech) Today." *NASDAQ.* N.p., 10 Oct. 2016. Web. 12 Oct. 2016. http://www.nasdag.com/article/what-you-need-to-know-about-financial-technology-fintech-today-cm691220>

⁴ *The Future of Financial Services*. Rep. World Economic Forum, June 2015. Web. 15 Oct. 2016. http://reports.weforum.org/future-of-financial-services-2015/.

There are challenges and barriers to adoption that could limit the use or availability of these technologies / innovations in the industry

RISKS AND LIMITATIONS TO INSIGHTS



A number of areas in the process flow are ripe for disruptive and innovative technologies, although different technologies are in different stages of use, availability and R&D



Five key areas were identified as ripe for innovation and disruption after conducting the process flow and value chain analysis

VALUE CHAIN INNOVATION / DISRUPTION



Compliance

The compliance function is costly and inefficient.
There are a number of technologies that could replace this function and reduce redundancy and error.



Financial Planning / Advice

The value in the advice will eventually shift when AI becomes available and is in use by clients.



Onboarding

The entire process from walking in to an advisor, filling out paperwork, client identification to submitting funds will change.



Reporting

With CRM2, mutual fund providers are being forced to be more transparent - this transparency is engrained in fintech solutions.

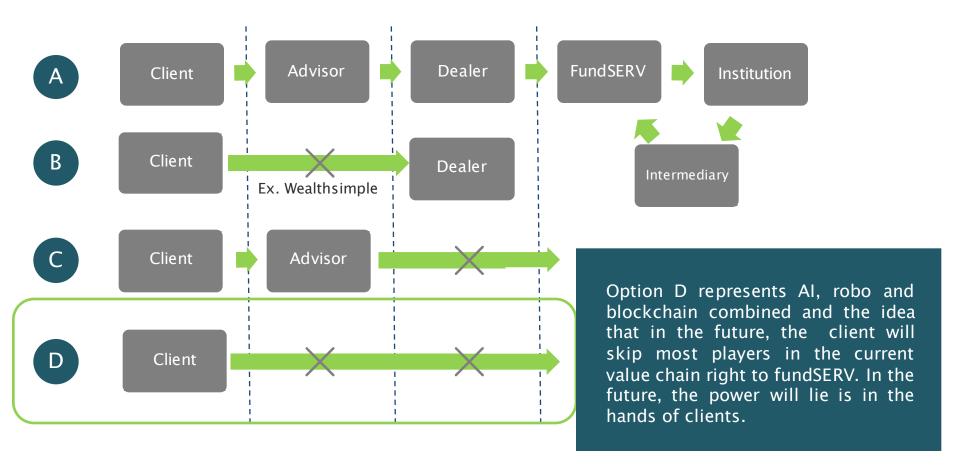


Client Relationship Although people still want a personal relationship, the advisors value is shifting from providing products to advice.

Size of the bubble = prioritization of change

The current state of the wealth management space puts in question whether or not each group in the work flow is truly adding value

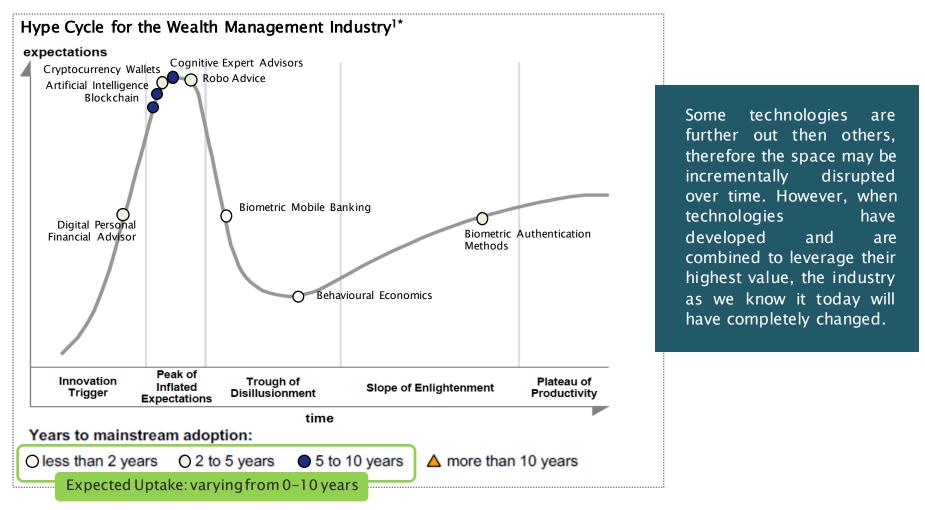
FUTURE STATE MFDA WORK FLOW MODELS¹



¹ Anthony Stockley

Industry players must realize that these technologies are on the brink of disrupting the industry; if action is not taken soon, Scotia risks being left behind

RECOMMENDATION TIMELINE



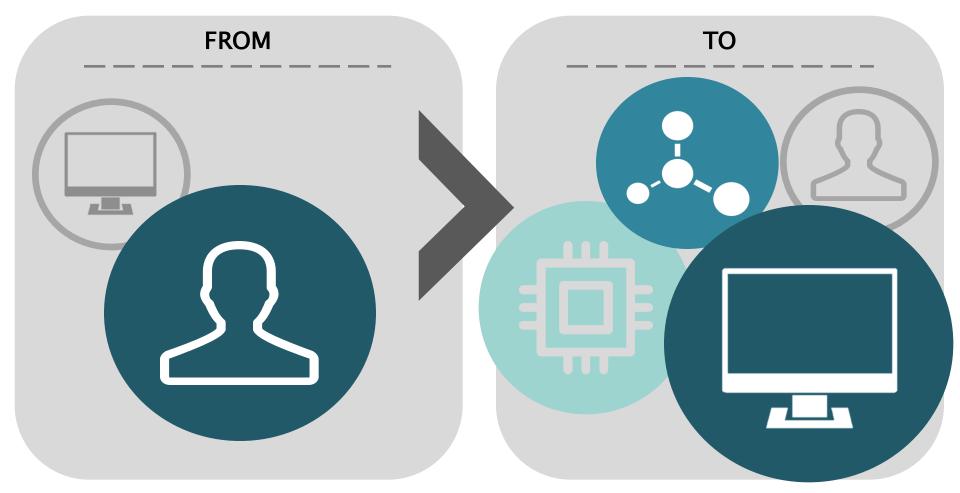
^{*} This is my interpretation (in combination with Gartner research) of placement of current solutions in the market and how quickly they will come to life.

¹ Walker, Mike, Betsy Burton, and Michele Cantara. *Hype Cycle for Emerging Technologies*, 2016. Rep. Gartner, 19 July 2016. Web. 23 Nov. 2016. http://www.gartner.com/explore/hypecycles.

The future of wealth management shifts to a more technologically driven space, value chain and process flow, ultimately limiting the need for humans

TECH MOVEMENT

"Asset and wealth management shifts from technology-enabled human advice to human-supported technology-driven advice."



¹ Blurred Lines: How FinTech Is Shaping Financial Services. Rep. PwC, Mar. 2016. Web. 8 Oct. 2016. http://www.pwc.com/gx/en/industries/financial-services/fintech-survey/report.html.

The combination of technology and human advice will advance solutions for the near future until more sophisticated technology can replace the holistic advice component of humans

HUMANS AND TECHNOLOGY¹

Figure 3: Science vs. Human Based Advice

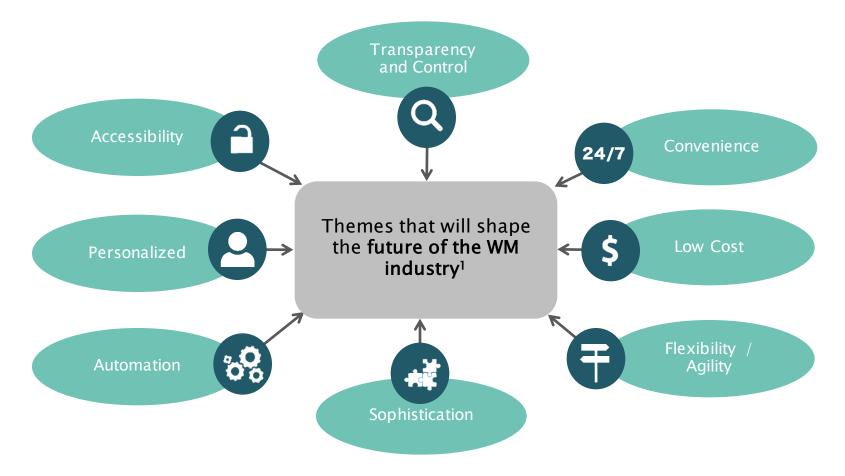
The "winning" advisory model will likely be a hybrid model that combines the best elements of science and human based advice, taking into account differences in needs and willingness to pay across the client wealth spectrum



¹ Vincent, Gauthier, Jared Goldstein, and Sean Cunniff. *Deloitte*. Rep. 10 Disruptive Trends in Wealth Management, 2015. Web. 5 Nov. 2016. https://www2.deloitte.com/us/en/pages/consulting/articles/ten-disruptive-trends-in-wealth-management.html.

The future of wealth management will look considerably different than the current space and changes are already seen in new technologies

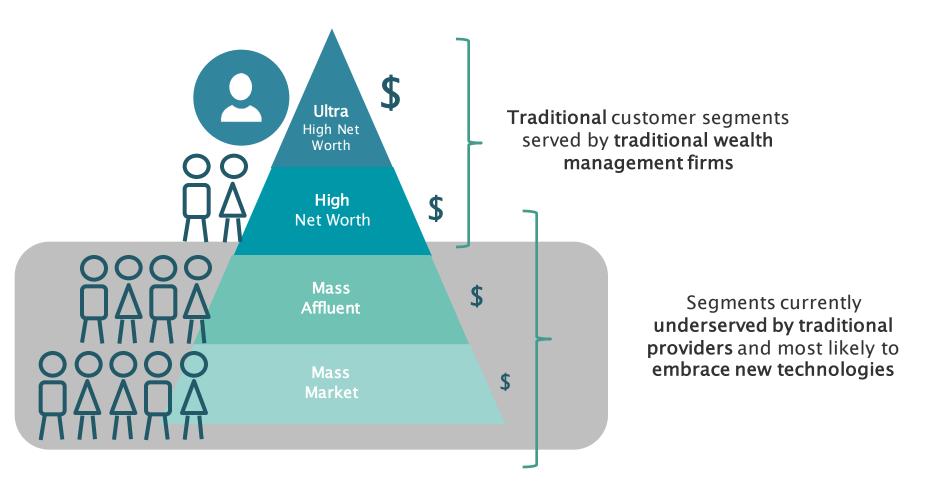
FUTURE OF WEALTH MANAGEMENT



¹ *The Future of Financial Services*. Rep. World Economic Forum, June 2015. Web. 15 Oct. 2016. http://reports.weforum.org/future-of-financial-services-2015/.

There are individuals who will always want or require face-to-face interactions. Technologies seeking to 'replace' humans completely will likely target the mass market segment

TARGET SEGMENTS OF THE CHANGING SPACE¹



¹ Rogers, Greg. Disruption in Wealth Management, 2015. Deloitte

APPENDIX

Research Limitations

It should be noted that the primary research gathered may not be representative of perspectives of all vendors, advisors and dealers; only five individuals were interviewed and this does not reach statistical significance.

- The individuals interviewed **may be biased** based on their position, experience and knowledge in the wealth management space.
- The research lacks views from other stakeholders, such as customers, industry regulators, institutions, etc.; however, individuals chosen to be interviewed were based on the "dealer's lens" approach.
- Geographic perspectives were also limited due to the fact that individuals interviewed were from the GTA and Calgary area only this research may not represent the perspectives of such individuals in other areas of the country.
- There is also a time and resource limitation associated with the research, as the project has a limited lifespan (Sept Nov).

Key Industry Insights

"In our view, robo-advice will complement, rather than displace, financial advisors. Some large firms will build their own offerings, while other large and mid-sized firms might buy independent robo-advisory firms. Smaller firms may offer "white label" services or incorporate a branded industry solution."³

- The Rise of Robo Advice - Accenture

"Over time, we believe that robo-advice will have a significant effect on the wealth management business model. Investors who have low-cost and reasonably effective alternatives to traditional wealth management programs will not be willing to pay premium prices unless they see real differentiation and value."

- The Rise of Robo Advice - Accenture

"Rather than just an add on, digital technology has the potential to completely transform every stage of the wealth management journey, from how existing clients are advised and services to how prospective clients are identified and marketed to."

- Sink or Swim - PwC



"We anticipate that competition, innovation and new technologywill dramatically increase roboadvice capabilities in the near future. Future versions will consider the client's complexities by adapting questions based on earlier responses."

- The Rise of Robo Advice - Accenture

"FinTech will complement banking services, but will not fully replace them."²

- Blurred Lines Report - PwC

"Wealth management is dangerously behind the curve in its adoption of digital technology compared both to other financial services such a banking and other consumer options. But there are emerging opportunities that the industry is powerfully positioned to exploit to advance its position."

- Sink or Swim - PwC

¹ Sink or Swim. Rep. PwC, 2016. Web. 4 Nov. 2016. http://www.pwc.com/sg/en/publications/wealth-20.html.

² Blurred Lines: How FinTechIs Shaping Financial Services. Rep. PwC, Mar. 2016. Web. 8 Oct. 2016. http://www.pwc.com/gx/en/industries/financial-services/fintech-survey/report.html.

³ The Rise of Robo-Advice. Rep. Accenture, 2015. Web. 5 Nov. 2016. https://www.accenture.com/ca-en/insight-rise-robo-advice-changing-concept-wealth-management.

References

Resources (Consolidated) (1/2)

- Banerjea, Sejuti. "What You Need to Know About Financial Technology (FinTech) Today." *NASDAQ*. N.p., 10 Oct. 2016. Web. 12 Oct. 2016. http://www.nasdaq.com/article/what-you-need-to-know-about-financial-technology-fintech-today-cm691220>
- Blurred Lines: How FinTech Is Shaping Financial Services. Rep. PwC, Mar. 2016. Web. 8 Oct. 2016. http://www.pwc.com/gx/en/industries/financial-services/fintech-survey/report.html.
- Dietz, Miklos, Vinayak HV, and Gillian Lee. "Bracing for Seven Critical Changes as Fintech Matures." *McKinsey & Company*. N.p., Nov. 2016. Web. 16 Nov. 2016. http://www.mckinsey.com/industries/financial-services/our-insights/bracing-for-seven-critical-changes-as-fintech-matures?cid=other-eml-alt-mip-mck-oth-1611.
- FinTech Disruption in Financial Services. Rep. CGI, 11 Oct. 2016. Web. 12 Oct. 2016.
- Furlonger, David, and Ray Valdes. *Hype Cycle for Blockchain Technologies and the Programmable Economy, 2016.* Rep. Gartner, 27 July 2016. Web. 23 Nov. 2016. http://www.gartner.com/explore/hypecycles.
- The Future of Financial Services. Rep. World Economic Forum, June 2015. Web. 15 Oct. 2016. http://reports.weforum.org/future-of-financial-services-2015/>.
- Grosser, Dana. "Wealth Management Industry Must Reinvent the Value Chain, According to SEI and WISE Gateway Report." Marketwire. SEI, 4 Apr. 2016. Web. 10 Oct. 2016. http://www.marketwired.com/press-release/wealth-management-industry-must-reinvent-value-chain-according-sei-wise-gateway-report-nasdaq-seic-2111468.htm.
- Gonnet, Emmanuel. Essay on Robo-Advice Technology. Rep. Univeris, Dec. 2015. Web. 3 Oct. 2016.
- Marathe, Shailendra. "How Robo Advisors Are Disrupting Wealth Management Value Chain." *LinkedIn.* N.p., 7 Jan. 2016. Web. 13 Oct. 2016. https://www.linkedin.com/pulse/how-robo-advisors-disrupting-wealth-management-value-chainmarathe+.
- Newton, Alistair. *Hype Cycle for Digital Banking Transformation, 2016*. Rep. Gartner, 18 July 2016. Web. 23 Nov. 2016. http://www.gartner.com/explore/hypecycles.
- Nagji, Bansi, and Geoff Tuff. "A Simple Tool You Need to Manage Innovation." *Harvard Business Review.* Harvard, 23 July 2014. Web. 12 Oct. 2016. https://hbr.org/2012/05/a-simple-tool-you-need-to-mana

Resources (Consolidated) (2/2)

- "Research Methodologies Gartner Hype Cycle." *Gartner*. N.p., 2016. Web. 23 Nov. 2016. http://www.gartner.com/technology/research/methodologies/hype-cycle.jsp.
- Resnik, Paul, and Stuart Erskine. *The Robo Revolution Robo-Advice Market Commentary and Analysis*. Rep. FinaMetrica, Nov. 2015. Web. 4 Nov. 2016.
- The Rise of Robo-Advice. Rep. Accenture, 2015. Web. 5 Nov. 2016. https://www.accenture.com/ca-en/insight-rise-robo-advice-changing-concept-wealth-management.
- Robbins, Christopher. "Will Al Kill the Roboadvisor?" *Financial Advisor*. N.p., 22 June 2016. Web. 14 Nov. 2016. http://www.fa-mag.com/news/will-ai-kill-the-roboadvisor-27624.html.
- Schutzer, Dan. "CTO Corner: Artificial Intelligence Use in Financial Services." *Financial Services Roundtable*. N.p., 11 Sept. 2015. Web. 14 Nov. 2016. http://fsroundtable.org/cto-corner-artificial-intelligence-use-in-financial-services/.
- Sink or Swim. Rep. PwC, 2016. Web. 4 Nov. 2016. http://www.pwc.com/sg/en/publications/wealth-20.html.
- "Unlocking Economic Advantage with Blockchain." *Oliver Wyman*. N.p., n.d. Web. 8 Nov. 2016. http://www.oliverwyman.com/insights/publications/2016/jul/unlocking-economic-advantage-with-blockchain.html.
- Verhage, Julie. "Citi: Robo-Advisers Will Never Take the Place of Traditional Investment Managers." *Bloomberg*. N.p., 31 Mar. 2016. Web. 14 Nov. 2016. http://www.bloomberg.com/news/articles/2016-03-31/citi-robo-advisers-will-never-take-the-place-of-traditional-investment-managers.
- Vincent, Gauthier, Jared Goldstein, and Sean Cunniff. *Deloitte*. Rep. 10 Disruptive Trends in Wealth Management, 2015. Web. 5 Nov. 2016. https://www2.deloitte.com/us/en/pages/consulting/articles/ten-disruptive-trends-in-wealth-management.html.
- Walker, Mike, Betsy Burton, and Michele Cantara. *Hype Cycle for Emerging Technologies*, 2016. Rep. Gartner, 19 July 2016. Web. 23 Nov. 2016. http://www.gartner.com/explore/hypecycles.
- Yeng, Jasen. "Why Legacy Firms That Buy Robos in Haste Show No Signs of Urgency after They Take Title." *RIABiz*. N.p., 1 Sept. 2016. Web. 16 Sept. 2016. http://riabiz.com/a/2016/9/1/why-legacy-firms-that-buy-robos-in-haste-show-no-signs-of-urgency-after-they-take-title.