



### Digital advice sizing and projections continue to rise



Many incumbents are looking to partner with startups for a variety of reasons: speed to market, appetite for long-term digital investment, ability to attract engineering talent, and their core competency (investment acumen vs. consumer software).



### Digital has already made a significant impact...

#### WEALTH MANAGEMENT

- Robo-adviser platform assets under management globally are forecast to grow from US\$50 billion currently to more than US\$300 billion by 2020.
- Financial advisory firms are using online and mobile technology to provide integrated portfolio, practice management and reporting solutions to digitally enable the adviser of the future.
- Data aggregation platforms combine data from a variety of different sources to provider a complete financial picture of client holdings, behaviours and goals.

#### ASSET MANAGEMENT

- Digital utilities enable asset managers to provide insurers with information on fund investments on a look-through basis down to holding level to meet their Solvency II obligations.
- Exploratory front office analytics transcend day-today controls and standard compliance reporting by offering a powerful but flexible framework for the rapid assessment of compliance deviations, potential internal control weaknesses or unintentional errors and inefficiencies.

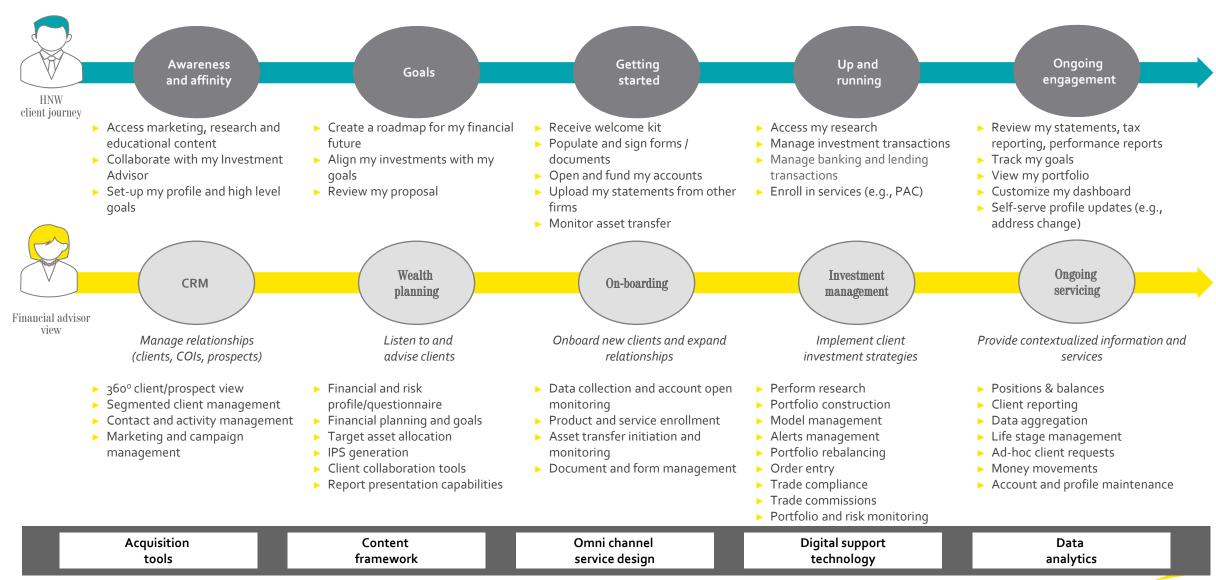
#### ASSET SERVICING

- The first shares were traded on the blockchain in 2015 and many global exchanges have either launched blockchain-based trading platforms, or are in the process of doing so.
- Instead of transactions going through a central clearing house, then settling on both sides' internal ledgers several days later, blockchain allows deals to be settled within minutes, with everyone in the network seeing and checking the trade on a "distributed ledger".
- Blockchain is also being used to streamline investor voting.

We have been in the midst of a digital revolution in wealth and asset management for the past ten years. And while we haven't (yet) seen the emergence of a major disruptor, that doesn't mean that technology hasn't changed the shape of our industry significantly.



### Digitally enabled firms have greater capacity to focus on connecting with and providing expertise to clients



#### ... but significant opportunity remains

For all the advances we've seen in technology and data, our clients continue to face a number of significant issues that inhibit the client or adviser experience, the development of new products and services, or financial performance.



On-boarding is time- consuming and a barrier to winning new business



Clients do not have timely access to the accurate information they need



Provision of financial advice is time consuming and inconsistent



Ongoing portfolio management is not scalable and delivers suboptimal strategy



Asset management systems are not integrated and prone to costly error



Existing project resources do not have required digital capabilities

A. Client engagement and experience

B. Product and service proposition

C. Fulfilment and operational support

D. Enterprise risk and financial performance



Data is scattered and limits our ability to understand our clients' needs



Difficult to engage clients in a meaningful, goals-based discussion



Disconnect between client objectives, investment strategy and performance



Back office processes are not scalable and result in increasing costs



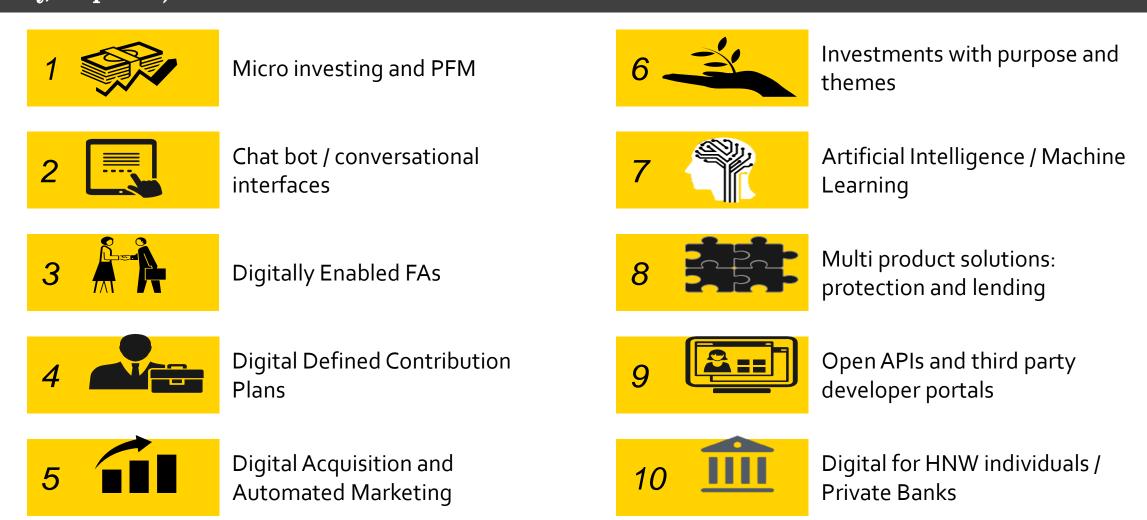
Difficult to maintain compliance with global regulatory reporting obligations



Business strategy does not have effective response to threat of disruption



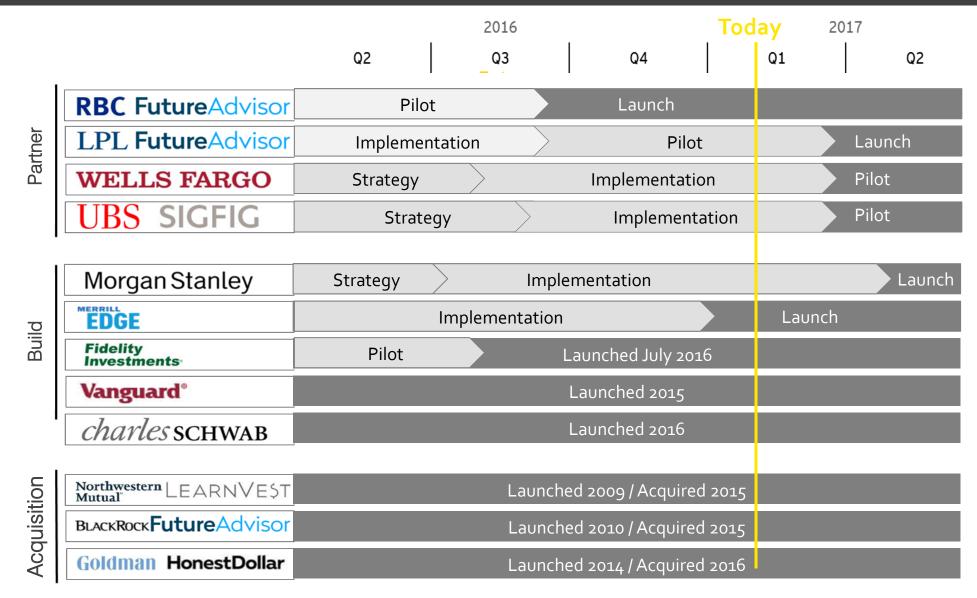
## ...keeping up with the pace of innovation has been challenging as leading FIs struggle to prioritize new technologies (build, buy, and partner)



Convergence of new technology, continued demographic shifts, and user preferences are creating unique opportunities for established and new digital advice firms.



### Competitive landscape—US implementation of digital advice capabilities



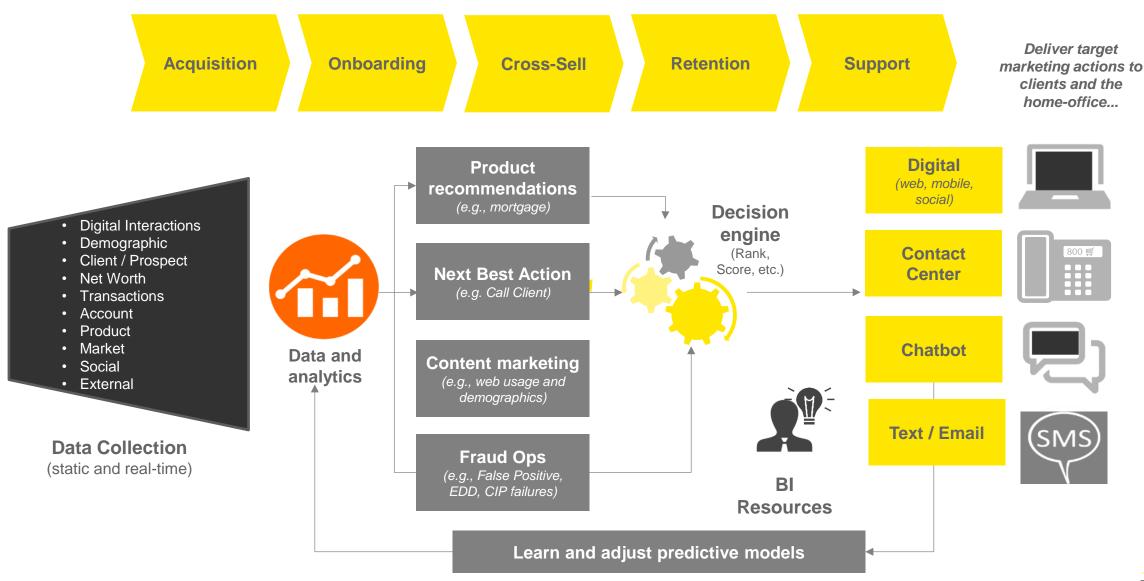
### ....And the list of Online Advice Firms continues to expand

- Acorns
- Advisor Software
- Asset Builder
- Betterment Holdings
- Blackrock FutureAdvisor
- BOM Financial Group (Harris MY CFO)
- Brinker Capital (Retirement Advice Business)
- Circle Black (ex- Bloomberg)
- Edelman Financial Services (Hybrid model)
- Ellevest
- Envestnet (Upside)
- Financial Engines
- Fidelity Go
- Guided Investing by Merrill Edge
- Goldman Sachs Honest Dollar
- Hedgeable
- Interactive Brokers Group Covestor
- Jempstep

- Market Riders
- Marstone (B2B)
- Morgan Stanley Launch in Summer
- Morningstar Retirement Advisor
- NextCapital
- Northwestern Mutual Life Learnvest
- Personal Capital Corp.
- Rebalance IRA
- Riskalyze
- Sigfig
- TD Bank Financial (Amerivest)
- The Bank of New York Mellon Corp (Pershing Robo)
- The Charles Schwab Corp (Intelligent Portfolios, Institutional intelligent, Hybrid RIA)
- The Vangaurd Group
- Trizic
- Wealthfront
- WiseBanyan



# However, not all software is created equal. The next battleground is focused on 1) data to define what customers want and 2) machine learning to scale that problem





## Open APIs will impact banks' role in the financial services ecosystem and will drive continued unbundling of FIs

#### The unbundling of WM ecosystem

- APIs that can be white labeled in any market.
- Simple revenue share structure.
- Modules (widgets) can be offered on top of the core APIs for a fee.
- Integration with your own website / with only a few lines of code.
- New use cases from non traditional providers (insurance, P2P, etc.)

#### CORE WM API FEATURES

- Account Info
- Custodian Integration
- KYC
- Account Funding
- Bank links
- Support Ticketing
- Live Chat & Text Message
- Emails
- Secure Documents
- Financial Planning

- Two-Factor Authentication
- Promotions
- Rewards
- Analytics & Benchmarking
- Alerts
- Partner Tools
- Account Aggregation
- Goals
- Tax Management
- Portfolios & Allocations

#### ADD ON MODULES

- UI/UX
- Operations as a Service (OaaS)
- AI Artificial Intelligence
- Investing (CIO as service)
- Banking (via Partner)
- Self Directed Trading (via Partner)
- Insurance



The winners will have an open architecture strategy but understand how to re-bundle and package up a core set of services to work together in managing a holistic client relationsihp

#### Unbundling of a Bank Pave \*SparkFund @ WiseBanvan everplans Propellr III PERSONAL CAPITAL motifinvesting Stockpile wealthfront SprinkleBit smartasset EVEN Patch of Land Aspiration Betterment nerdwallet ADF PRANCE AssetAvenue oanlogics Stilt est finance SINGEO (E) FUNDTHATFLIP Buying a house? -Landed LendingHome Estimate how much you may be able **Figtree** INSIKT O lenda SELFLENDER (3) blooom **Get Prequalified** CoverHound Need online access? Sion Un Novi or Take a Tour. thezebra AVANT Upstart CREDIT LendUp earnest TUITION.IO E/evate Banking Made Easy Credit O Karma OP RTUN College AVE PROSPER **Zebit** Moven ■ SnapCheck Bank wherever life takes you Open a new checking account bread digit PayNearMe chime covestor Remitly **Affirm** thumzap #"RUSHCARD lendio Deyonic Make saving money Juvo FUNDBOX ) uphold LendingRobot rize varo **EMBROKER** Automatically save with a Ma CaFi Way2Save® Savings accoun SimplyInsured BOOST Learn More > able able AVVA O BOND STREET coverwallet WB21 P2Binvestor @ GUSTO Sinsureon BEHALF BROKE fundera Lumity JUSTWORKS. Even GUARD Manage Pay Check Employees Manage Payroll and Get Started with Make & Receive Make & Ra Payments GO CO Checking Wave zuora Namely ' Captain401 CAN CAPITAL **Kabbage** flint next insurance TRANSACTIS C2FO R \* Dealstruck ((mobeam)) Shares M CREDIBLY Mozido Credit Junction BlueVine InvestNextDoo





