



Institute
and Faculty
of Actuaries



Is C3PO your next insurance agent?

Jason Whyte, EY
Carl Ghiselli, EY



Agenda & introduction

- Financial advice context
- What is automated advice now, and where it could go
- Building an auto-adviser: implications for actuaries



Institute
and Faculty
of Actuaries

Financial advice context



How the retail market has evolved

RDR reduced adviser numbers by c20%, since when they have remained fairly stable



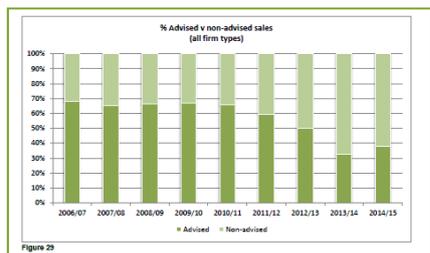
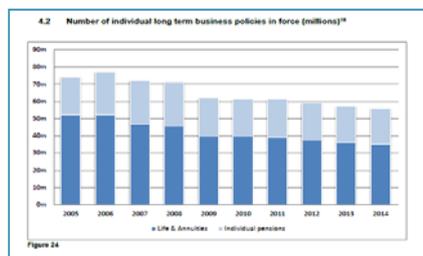
Source: Association of Professional Financial Advisers EY Analysis

- Impacts of RDR
- Significant drop in bank advisers
 - Catalyst for IFA retirement
 - Remaining IFAs moved upmarket, targeting customers with >£100k
 - Advice now seen to be working well for customers who can access it
 - Pensions Freedoms created demand in the mid-market that IFAs are unwilling or unable to serve
 - Banks and insurers are looking at how to serve these “orphaned customers”

The combination of RDR and Pensions Freedoms has led to a focus on how to serve the mass market customers now unattractive to IFAs

Recent trends in financial advice

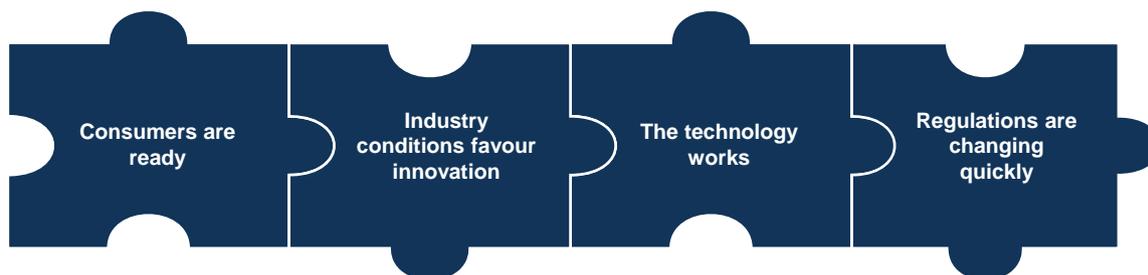
Individual long term products are decreasing in number, this trend was exacerbated by Retirement Freedoms. These products are traditionally advised.



Advised sales are decreasing as a percent of the total number of sales. This appears to be due to the RDR, but could be due to risk and other regulatory reasons.



Drivers leading to change in the advice market



- Always connected
- More comfortable conducting financial lives through digital touchpoints

- ETFs allow low-cost portfolio construction
- Massive investment in fintech, starting to be focused on the asset management space
- Startups are moving quickly to steal march on the established

- Cloud-based cheaper than mainframes
- Consumer-facing technologies deliver a substantially better customer experience

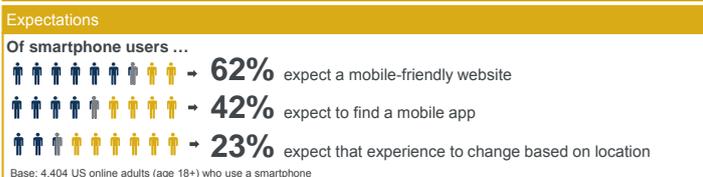
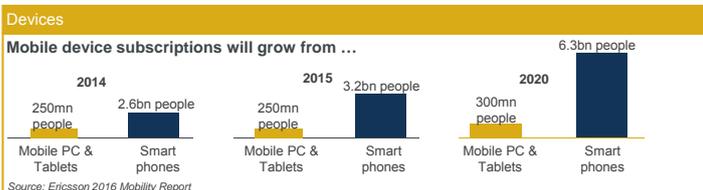
- RDR and pensions freedom 'deliberately' created an advice gap
- FAMR to help address the advice gap and spur innovation



Digital is changing the world around us



Pope announcements, St. Peter's Square



Is C3PO your next insurance agent?

Investment is increasing exponentially

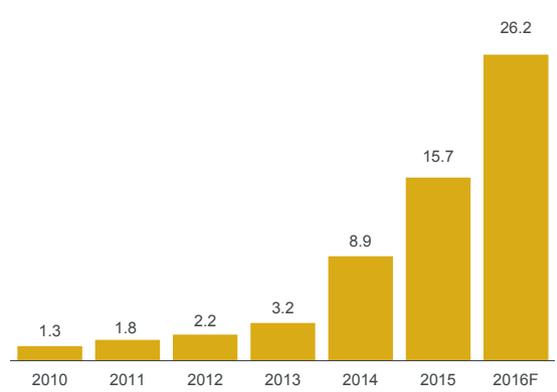


Auto advice investments

- ▶ Blackrock acquisition of FutureAdvisor in Aug 2015, with \$150-200m valuation
 - ▶ Will operate as a business within BlackRock Solutions selling services to banks, insurers, and other advisory firms.
- ▶ LV= majority stake in WealthWizards in Aug 15 (price not disclosed)
 - ▶ To support CORA retirement advice service and offer a 'white-label' automated advice platform and along
- ▶ €25mn raised by Nutmeg mid 2014
 - ▶ Funding investors included Schroders
- ▶ Aberdeen Asset Management has publically stated it is interested in acquiring stakes in selected Fintechs
- ▶ Other investments (mostly by Venture Capital Funds)
 - ▶ Wealthfront: \$65.5mn
 - ▶ Betterment: \$45mn



Global value and volume of FinTech investment (£bn)¹



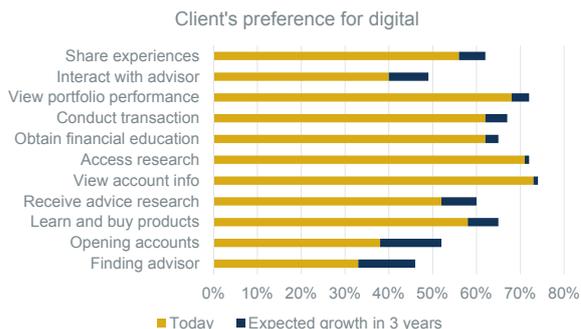
Source: 1 - CB Insights



Sources: Financial Times, Crunchbase, EY Analysis

Is C3PO your next insurance agent?

Customer expectations have increased and they demand more from providers



Source: EY 2016 Global Wealth Report

Is C3PO your next insurance agent?

FCA Definition of Advice Models



FCA (FG 15/1): Retail Investment Advice: Clarifying the boundaries and exploring the barriers to market development
 FCA - FAMR – Financial Advice Market Review – Consultation Completed December 15 and findings published Spring 2016



The FCA Advice Unit is part of Project Innovate, and was set up to provide regulatory feedback on automated solutions that seek to deliver lower cost advice to those in gaps identified by FAMR.



Is C3PO your next insurance agent?



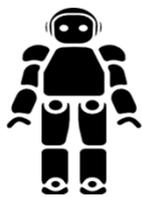
Institute
and Faculty
of Actuaries

What is automated advice now, and where it could go

How do you take your 'TEA'?

"Black tea"

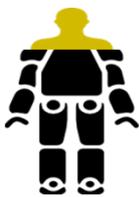
Full automation



- Automated computer algorithms offering D2C experience without (or with limited) FA interaction:
 - Convenient
 - Easy to use
 - Low cost
 - Accessible to many
 - Consistent and repeatable outputs
- Fully automated is limited to asset allocation at this point.

"Builder's tea"

Adviser-assisted



- Automation with financial adviser support – 'digital adviser'
- Adviser is available for more complicated cases and to review output and outcomes for consistency
- Level of automation dependant on customer needs
 - More affordability for those with bespoke needs
 - 'Comfort blanket' of F2F

"Chai"

IFA Support/Guided Advice



- Technology facilitated tools assist FA in assessment of customer needs and outcome modelling
- Advice process led by FA, assisted by technology
 - Cognitive shortcuts
 - Enhanced productivity
 - Retain FA relationship
- Reduce time with FA and thus cost to provide tailored advice
- May also include educational tools for preparation of the client



Institute
and Faculty
of Actuaries

Current state

Current market activity	Current offerings
-------------------------	-------------------

- Plenty of players and activity
- Penetration remains small in AUM terms
- Most robo-advisers are running at a loss in order to gain market share and hopefully AUM
- Scale players are beginning to enter the market, following the lead of major US players (Vanguard, Charles Schwab):
- Name brands attract money faster than start-ups, though are less nimble in general (see Hargreaves Lansdown news)
- Current intention of retail banks and larger players/insurers in the UK is to (re)enter the mass market with a robo-advice proposition

- Most UK (and US) players do not offer financial advice:
 - Typical offering is based on the Discretionary Fund Manager model with an automated tool to speed the process and to match portfolio to attitude to risk
- Where advice is offered it is typically simple investment/portfolio allocation advice on a single product
 - Some provide a bit more complexity, such as tax harvesting or automated rebalancing

According to Ignites Europe estimates, there are now as many as 70 robo-advisers in Europe ... Large European banks, including Deutsche Bank, Barclays, ING Diba, Santander and Union, part of DZ Bank, have either developed or are reported to be developing robo-services. **"In the next five to seven years every single serious high-street financial institution, not just banks, will have a [robo-adviser]-type proposition,"** says Shiv Taneja, principal at research firm Market Metrics.

Current robo-advisers are essentially online wealth management services which use algorithms to suggest automated investment portfolios based on customers' goals and attitude to risk.
 – *The Guardian.*

"Many digital services are currently very much in their infancy, and the organisations offering them make it very clear that they are not a substitute for holistic financial planning. Using one of today's digital advisers is a bit like going to the pharmacy and asking them for advice rather than going to see your GP."
 – *Ian McKenna.*

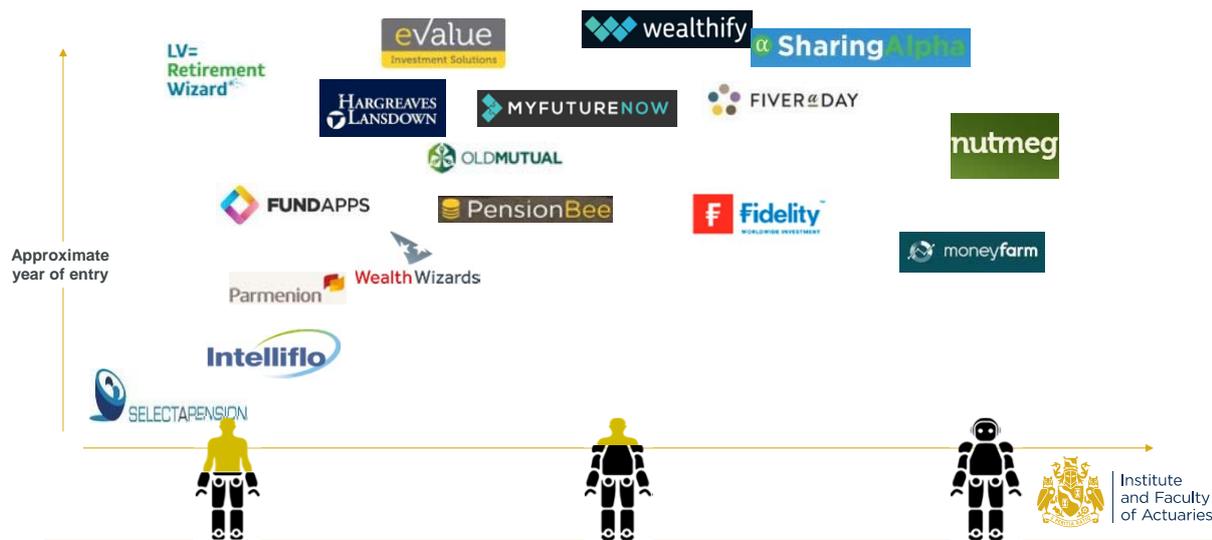
"'Robo-advice' has become a bit of a faddish term, and it isn't how we would choose to describe our ready-made portfolios, as we're not providing advice but a simple, step-by-step process to help investors select a managed portfolio without the need for an advised process."
 – *Jason Hollands Tilney Bestinvest*

Sources: Citywire, Financial Times

Is C3PO your next insurance agent?

13

Selected robo advisers - UK



Is C3PO your next insurance agent?

14

Challenging economics require efficiencies

Profit pools do not exist for much of the population.
We must find more ways to serve more people in a more cost effective manner.



Notes: real estate and cash not advisable; one-time advice: two advices per customer lifetime during the 55-64 age band; ongoing advice: totality of securities assets; revenues: standard average 1% margin across segments
Source: ONS, EY analysis



Is C3PO your next insurance agent?

15

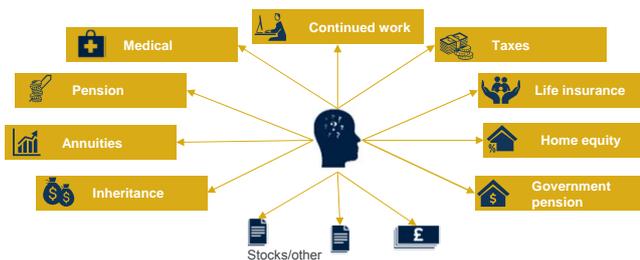
Is there more to “advice” than just asset allocation?

Current solutions



- Mimics discretionary fund management for a lower fee.
- Easy to use interfaces.
- Some tax harvesting, but no understanding of full tax situation
- Simple projections of income and accumulation
- No understanding of full financial situation or risks that customers may face

Potential solutions



- Goal is to understand the consumer and their goals, and mitigate the risks they face
- Takes into account all financial circumstances of the customer (e.g. taxes, homes, insurance, other investments, etc.)
- Provides more holistic education on outcomes and options
- Helps customer tailor their financial solutions to meet their goals



Is C3PO your next insurance agent?

16



Institute
and Faculty
of Actuaries

Building an auto-adviser

Implications for actuaries

Approaching retirement planning systematically

Three simple questions (with complex answers)

How can I make sure I have enough income to live on today?

How can I make sure I can cope with unexpected future costs?

How can I best manage my assets to answer the other two questions?

Help to manage and trade-off a wider range of risks

Market volatility

Inflation risk

Timing risk

Longevity

Health and care risk

Tax risk

Lifetime support to adjust the plan as circumstances change

The questions are the same throughout life but need different answers at different times

In a low-growth environment, need to rebalance priorities and expectations regularly

In retirement have to balance flexibility, growth and security

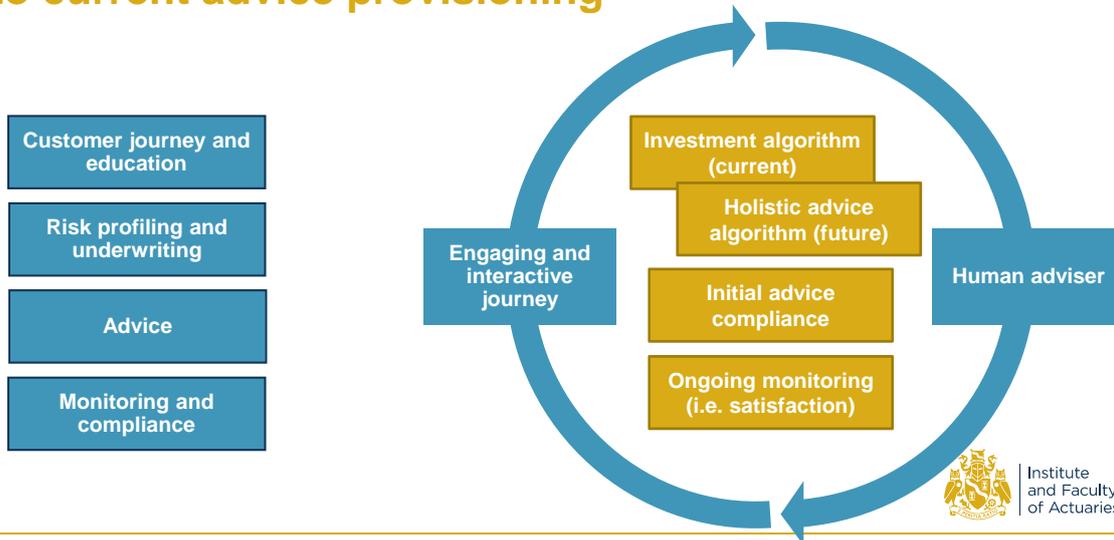
"A 50 year old today needs a financial plan for the next 40 years, given that annuities are no longer mandatory"

– Nick Dixon, Aegon



Institute
and Faculty
of Actuaries

High level activities and how they might be implemented into current advice provisioning

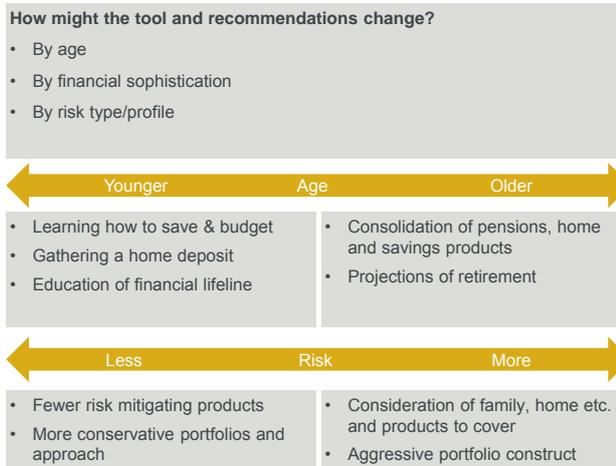


Is C3PO your next insurance agent?

19

Customer journey: support for everyone

A single customer journey is not right for everyone, just like a human financial adviser, it must be bespoke

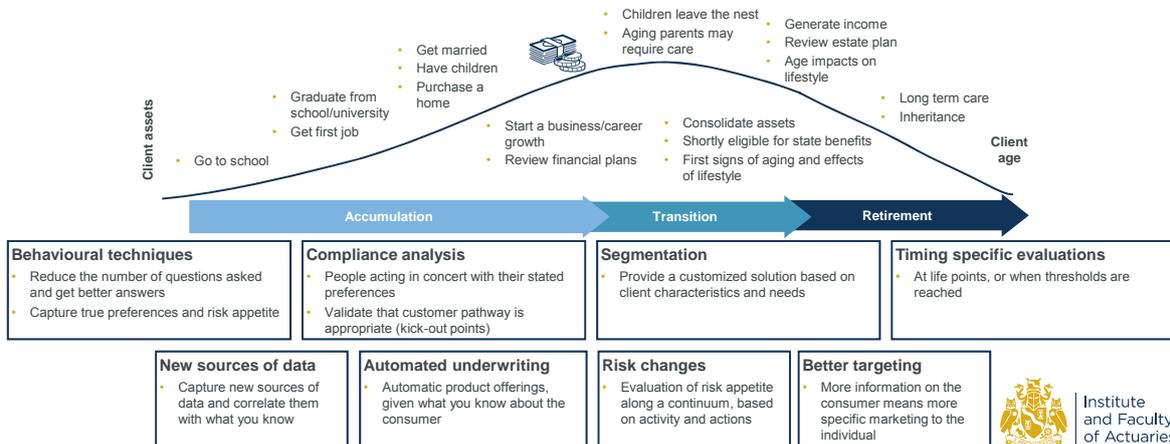


Is C3PO your next insurance agent?

20

Risk profiling and underwriting

Better customer engagement means continuous risk profiling and underwriting.



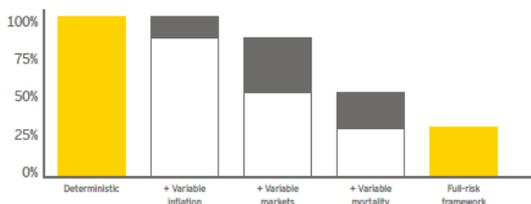
Is C3PO your next insurance agent?

21

Advice model considerations

- The models and tools will need to perform accurate projections based on customers profile and determine an appropriate personalised product.
- Optimisation of outcome, not just investment return, but true mitigation of risk:
 - Outcomes are highly uncertain, and as such robust modelling techniques are required to ensure that the outcomes that are produced are reliable and reflective of real-world likelihoods.
- Key risks which needs to be accounted for are:
 - Market fluctuation
 - Inflation uncertainty
 - Longevity
 - Catastrophic health care events
 - Tax

Degradation in likelihood of success: Deterministic retirement income plan exposed to risk variables



A plan set up with traditional, accumulation-based methodology can fail nearly half of the time when all risks are measured.

Is C3PO your next insurance agent?

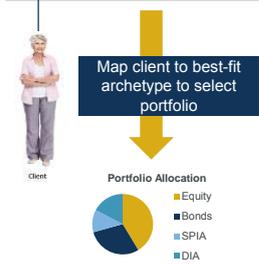
22



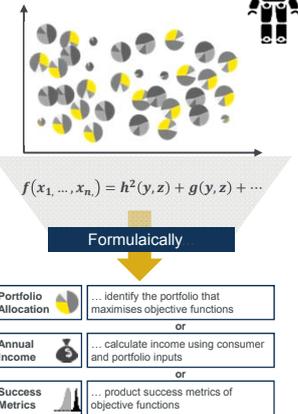
Advice model approaches

1 Segmented

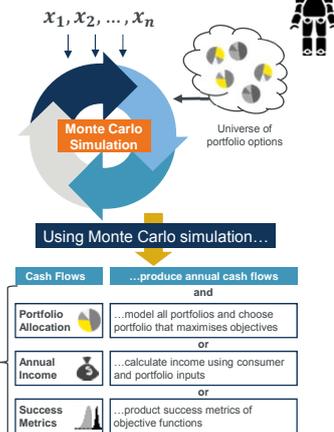
Gender	Age	Net Worth	Bequest	Portfolio
Male	65	MNW	0	
Joint	70	HNW	50%	
Female	60	ANW	0%	
...
...
...
...



2 Algorithm



3 Full simulation



Is C3PO your next insurance agent?



Monitoring and compliance

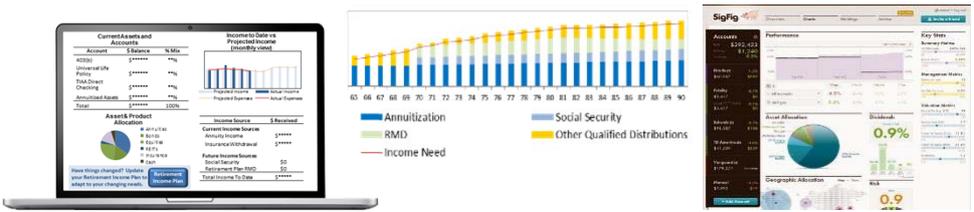
Company monitoring of the customer:

- Analytics across accounts and outcomes to make sure the consumer is on track (just like a human), including comparisons to peers
- Flagging issues, non-compliant products, or products that are less efficient than could be used to reach the desired outcome

Simplified and consistent client experience

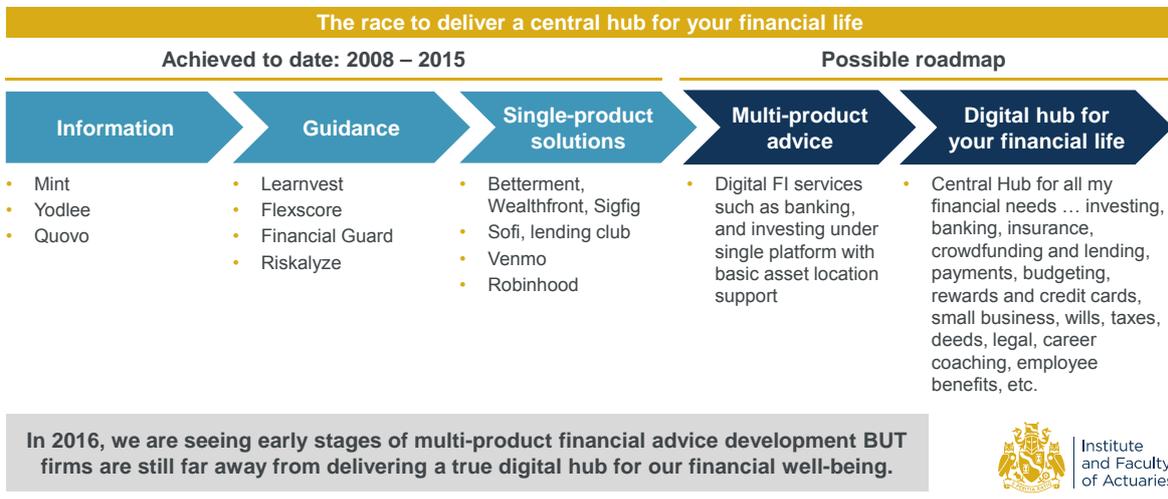
- Reports or a dashboard to monitor the performance of their goals, in real time, including comparisons to peers
- Provide a consolidated view on investment and retirement accounts, along with how they impact future goals and expectations
- Ability to analyse different scenarios, and research recommended advice

Retirement income illustrative dashboards



Is C3PO your next insurance agent?

Evolution of digital advice



Questions

Comments

The views expressed in this [publication/presentation] are those of invited contributors and not necessarily those of the IFoA. The IFoA do not endorse any of the views stated, nor any claims or representations made in this [publication/presentation] and accept no responsibility or liability to any person for loss or damage suffered as a consequence of their placing reliance upon any view, claim or representation made in this [publication/presentation].

The information and expressions of opinion contained in this publication are not intended to be a comprehensive study, nor to provide actuarial advice or advice of any nature and should not be treated as a substitute for specific advice concerning individual situations. On no account may any part of this [publication/presentation] be reproduced without the written permission of the IFoA [or authors, in the case of non-IFoA research].

