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DC Schemes: Stochastic Modelling for Financial Planning

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Agenda


- Issues facing DC schemes
- The role for stochastic planning tools (SPT)
- A template for a stochastic planning tool
- Example for the DC market
- Other considerations



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DC Schemes: The Players & their considerations

- Sponsors
- Trustees
- Members
- Product Providers/ Admin Platforms
- Advisers



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The Issues

- Defined Benefit to Defined Contribution
 - Underfunded
 - Investment Risk passed on to members
- Review
 - Is investment on-track?
 - Do we need to modify strategy?
- Need for Advice

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Advice: Problems with Conventional Model

- Not enough money in DC world
 - To support advice
- Investment advice is too difficult
 - And there is too much choice
 - More choice ≠ more investment!
- Can't scale investment advice consistently
 - So marginal costs are high
- Everyone is 'balanced'
 - But really cautious!

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Advice Needs for DC Market

- "Shrink-wrapped" investment process
 - To accommodate scaling and consistency of advice
- Effective and efficient delivery media
 - Web-based
 - Allows individuals to self assess
 - Automates review
- Batch processing
 - Identifies 'problem' cases
 - Automatic or real time review process
- Execution?

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Individuals & Investment Risk: Current Situation

- Fixed rate illustrations
 - 5%/7%/9%
 - Doesn't account for risk
- Common risk warnings
 - What does cautious mean?
- Low consumer knowledge
- Result
 - Low trust
 - Unrealistic expectations
 - Poor decisions

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Stochastic Modelling: Goals oriented planning

- Probability – based answers
- Given my current strategy.....
 - Investments/savings
- ...What is the chance of meeting my pension goal
 - Annuity/lump sum, Real/nominal/escalating
 - Single life/joint life
- How risky is my current strategy
- How do these answers differ if I change...
 - My goals & expectations
 - My savings
 - My investments

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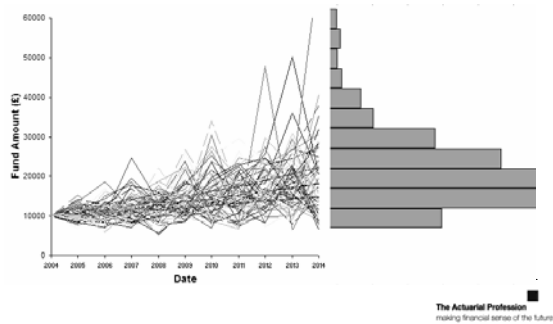
The Stochastic Model

- Economic Scenario Generators
 - Simulate economic/financial/demographic outcomes
 - Consistency
 - Calibration
- A Brief History
- UK Regulatory Background
 - Insurance (cornerstone of regulatory capital)
 - Illustration for individuals
 - restrictions

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Risk Methodology: Illustration

Projecting fund amount over 10 years



The Pension Advice Process

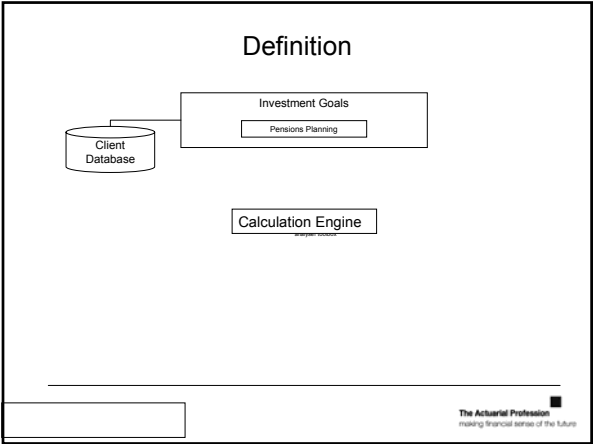
1. Needs Analysis – what pension when?
2. Resource determination – what can I afford?
3. Risk Profiling
4. Asset Allocation strategy
 - Reality check on 1 vs 2 vs 3
5. Fund selection
6. Playback
7. Review process

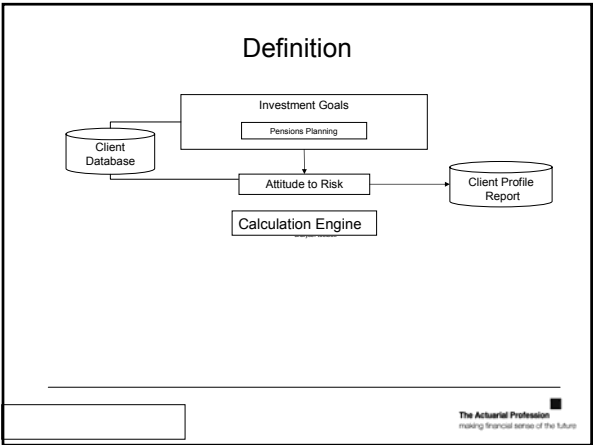
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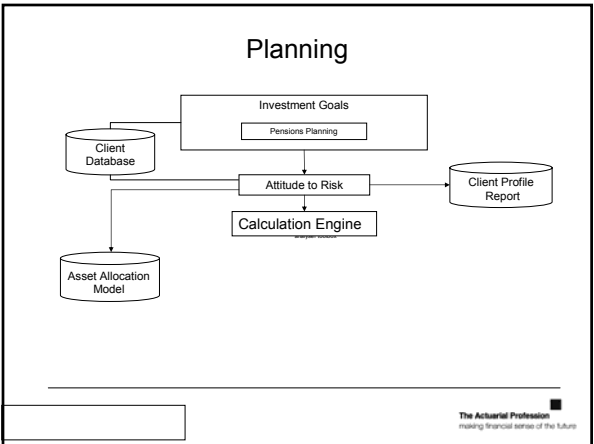
Online Financial Planning Process Overview

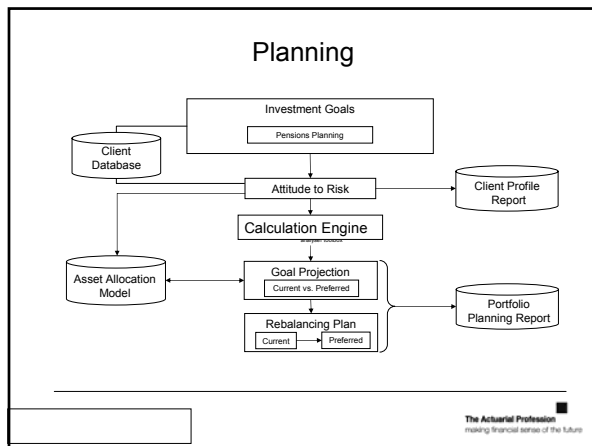
Calculation Engine

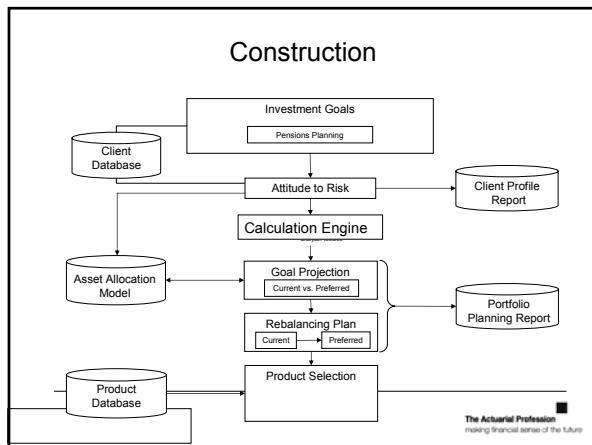
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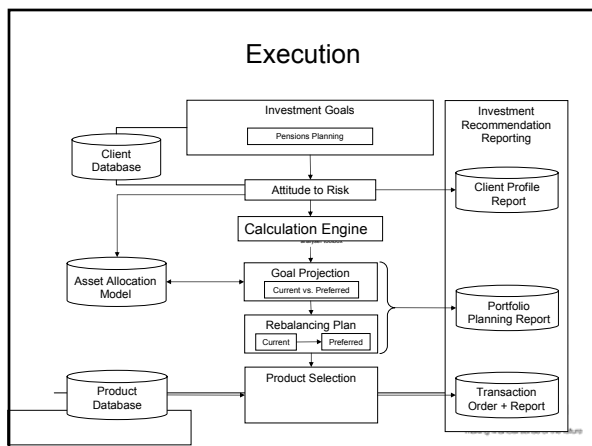












Technology

- Web-based platforms
- Data Links
 - Investments
 - Customer Data
 - Fund Data
 - Asset mix etc
- Execution
 - Online dealing
- Alerts
 - email

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Example: Winterthur Life

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The screenshot shows a web browser window with the URL "http://www.winterthur.ch/PortfolioBalancer/". The page title is "Portfolio Balancer". Below the title, there are tabs for "Home", "Client not selected", "Investment Plan not selected", and "HELP". The "Client not selected" tab is active. Under this tab, there are sub-tabs for "Clients", "Client details", and "Client details". The "Client details" sub-tab is active, showing a form with fields for "Client name", "Client reference", "Date", and "Date of birth (YYYYMM)". The "Client name" field contains "John". The "Client reference" field contains "123456789". The "Date" field contains "12/12/2012". The "Date of birth (YYYYMM)" field contains "12/12/1980". Below the form, there is a "Settings - charges" section with a "GET SETTINGS FOR CLIENT" button. At the bottom of the page, there is a disclaimer: "Winterthur offers products and services through independent financial advisers only. No advice on..." and the logo for "The Actuarial Profession making financial sense of the future".

The screenshot shows the Portfolio Balancer website. At the top, there's a navigation bar with 'Home', 'About Us', 'Contact Us', and 'Log In'. Below this is a header section with the company name 'Portfolio Balancer' and a tagline 'The Future of Financial Planning'. The main content area is titled 'Risk Assessment' and contains a quiz titled 'Which hypothetical retirement would most likely meet your client's objectives for income?'. The quiz has four radio button options, each with a table showing the 'Best year', 'Average year', and 'Worst year' for each option. The options are: 1) 2%, 4%, 2%; 2) -1%, 0%, 10%; 3) -1%, 0%, 20%; 4) -1%, 10%, 30%. The 'Worst year' column shows a clear upward trend from option 1 to option 4.

	Best year	Average year	Worst year
<input type="radio"/>	2%	4%	2%
<input type="radio"/>	-1%	0%	10%
<input type="radio"/>	-1%	0%	20%
<input type="radio"/>	-1%	10%	30%

At the bottom of the page, there is a disclaimer: 'We offer only pre and post-retirement products through independent financial advisors only. No advice on...' and a logo for 'The Actuarial Profession' with the tagline 'making financial advice of the future'.

Portfolio Balance

Client Name: Andrew's Pension Investment Plan: Default Plan

Buttons: [Previous] [Next] [Cancel] [Delete] [Save] [Print] [Refresh] [Help]

Goals

Type	Name	Amount	Percentage
Retirement Income	Andrew's Pension	£20,000	20.000000

Edit plan

Plan name:

Start date:

Payment frequency:

Target amount (£):

Rate target to receive:

Investment selected:

Start date (dd/mm/yyyy): in start year

Asset target (dd/mm/yyyy):

Scenario's target income:

Scenario's date of last contribution:

Tax rate (dd/mm/yyyy):

[Save] [Cancel] [Print] [Refresh] [Help]

Disclaimer: This application offers pre and post-retirement products through independent financial advisers only. No advice on

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Portfolio Balancer
 an investment by... 2002

Client Name: Andrew Investment Plan: Default Plan [Help](#)

Add cash to fund goals

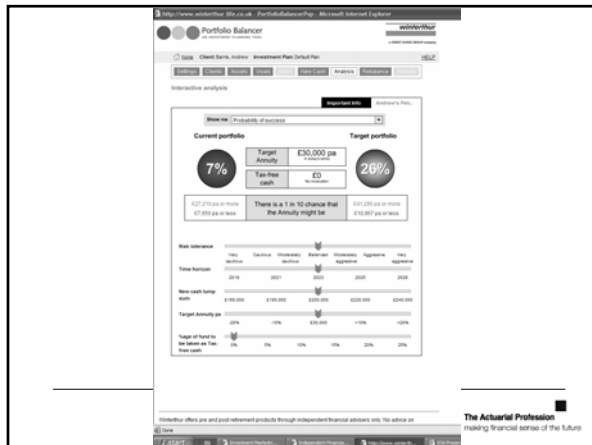
Andrew's Portfolio

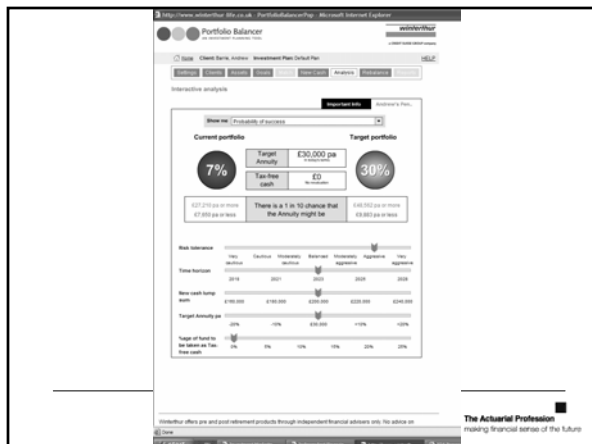
Account	Frequency	Investment	Start Date/Qty	Last Date/Qty
CD#100	Single	01/01/2000		add delete
CD#1	Monthly	01/01/2000	01/01/2002	add delete

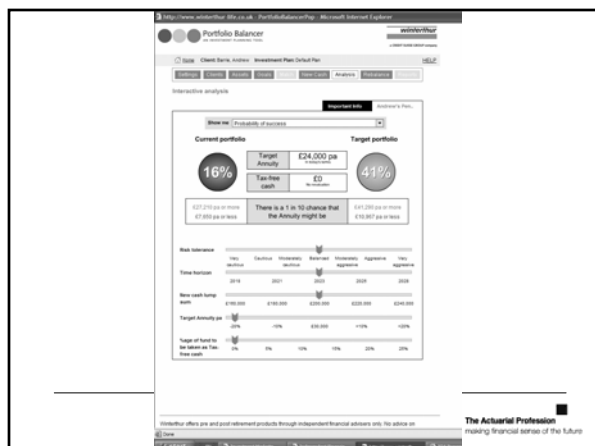
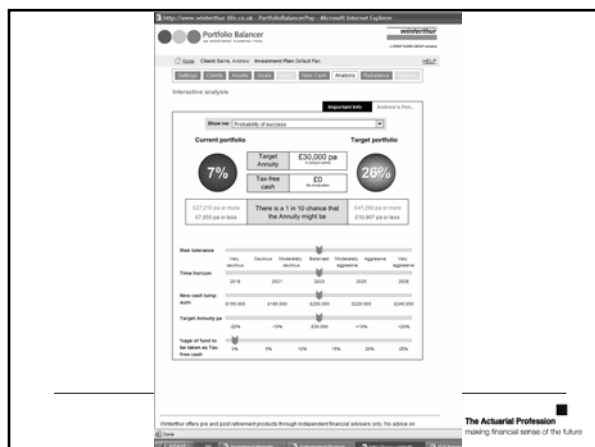
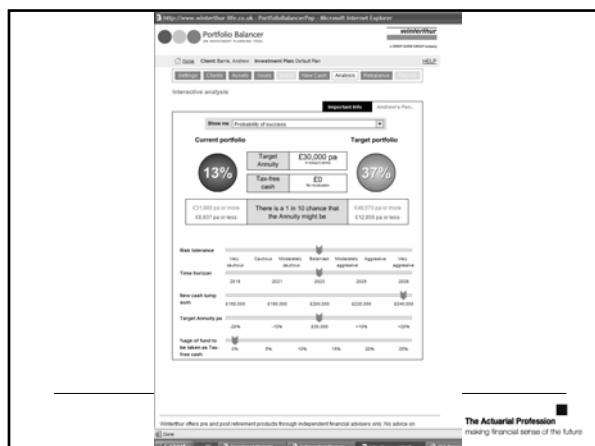
Add cash

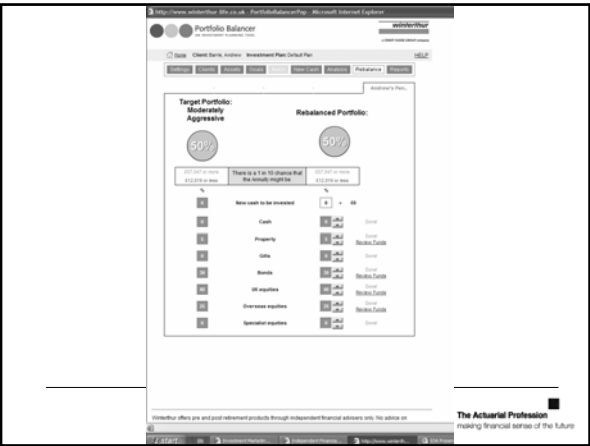
Andrew's Portfolio
 Cash name:
 Description (id):
 Payment frequency:
 Start date (YYYYMMDD): or

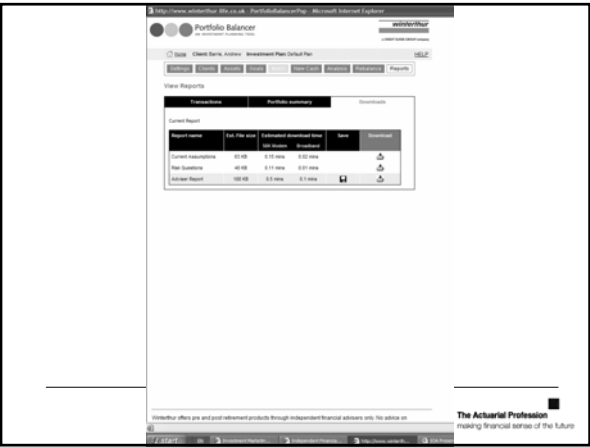


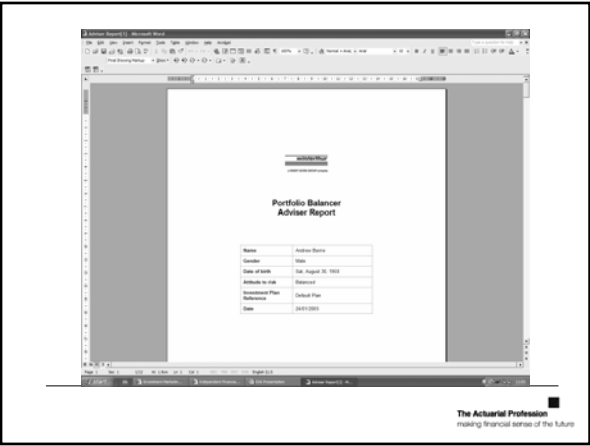












Success Factors

- A Process rather than a widget
 - Intuitive with a 'killer' screen
- Complements Governance
 - E.g. Manager selection, Risk mapping, investment strategy....
- Ongoing review
 - Automated/Real Time
 - Criteria

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Summary

- SPTs already form important part of advice in individual savings and pensions
 - Technology, regulation and models already there
- Migration to DC market happening slowly
 - Lack of incentive
- Will happen though, because...
 - Creates business opportunity
 - Advice needs to be addressed

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