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WillisTowers Watson IIIIIII

Underwriting Decision Support

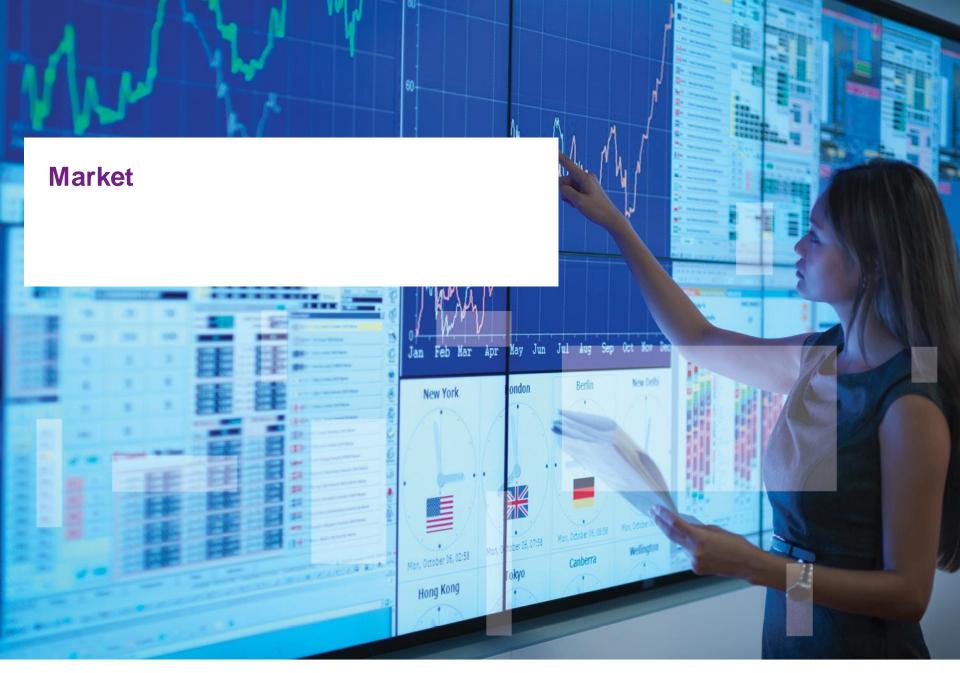
- Overview and Introduction
- What's happening in the market
- Future of underwriting
- Intelligent Underwriting Intervention
- Decision Support
- Underwriting Workbench



Analysis in Action

Learning Objectives

- Understanding where analytics can add value to case underwriting
- Supporting Portfolio Managers Steer portfolios where data is scarce
- Using machine learning and more traditional models to delivery operational efficiency



The Insurance Market

Market Themes

Low Growth Aggressive Competition Political Uncertainty Ageing IT Infrastructure Value Chain Compression

Commercial insurance is a complex transaction...

Performance Improvement Pillars

What is the underwriter thinking about? Commercial insurance is an experience based profession requiring complex decision making and judgement.

Will this customer really move their insurance?

Technically how do I get to the right price to win?

Is this risk one I really want on the books?

Should I instruct a survey?

Can I trust the Broker?

Who are my competitors and how are they likely to approach this?



Current Underwriting task allocation

Underwriting

| Read | Evaluate | Monitor | Complex Judgment | Interact/ Converse | Quality Check | Respond |
|---------------|--------------------|---------|---------------------|-----------------------|----------------------------|----------------------|
| Assess | Update | Approve | Research | Negotiate | Decide | Quote |
| Input Data | Chase | | | | ldentify | Fulfill/Issue |
| Allocate | Establish Needs | | SZ | | Instruct | Bind/Book |
| Retrieve Data | Select | ſ | X | | Relationship management | Estimate Max Loss |
| | | | Underwriting | • | | |

Illustrative

Underwriting task allocation - with robotic process automation (RPA)

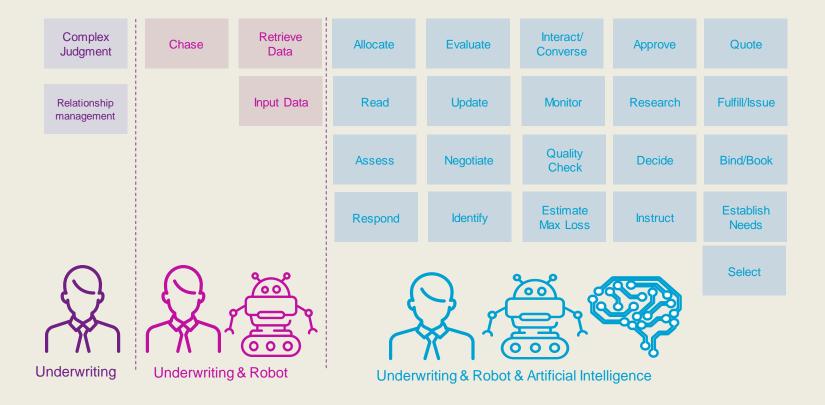
Underwriting

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| | | | | | | | Quote | Fulfill/ Issue | Bind/Book | Establish Needs |
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Illustrative

Underwriting task allocation – with RPA & Artificial Intelligence

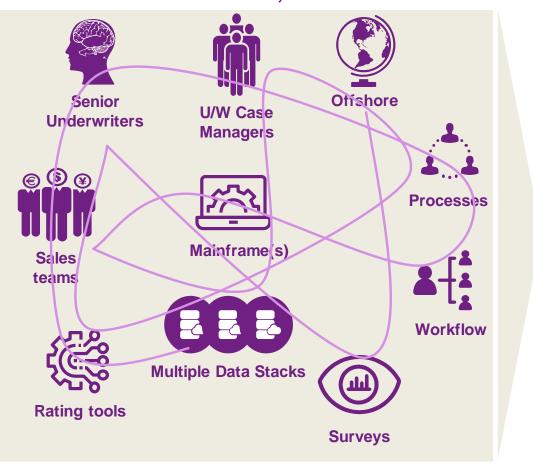
Underwriting



Illustrative

Challenge is how to overcome current ways of working

Difficult to optimise pricing, underwriting and risk selection



DISAGGREGATED PEOPLE, PROCESSES AND DATA

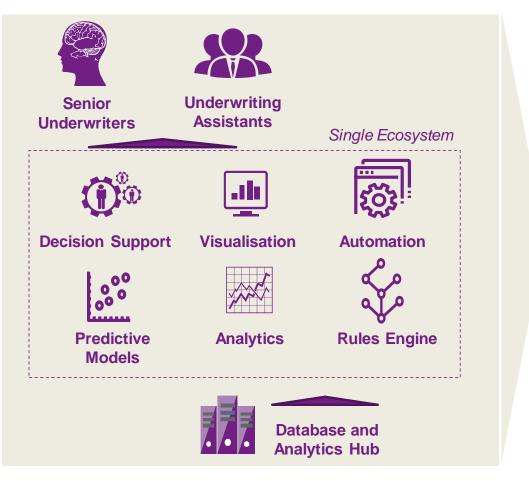
REDUCING UNDERWRITING PROFITABILITY

- Poor data integration
- Difficult to extract and master information
- Fragmented underwriting processes
- High variation and low control over underwriting decision making
- Underwriting leakage
- Silos operating across functions and geographies
- Inefficient and expensive to run

Operating model designed to improve top and bottom line

Delivering solutions that align decision making/accuracy to strategy

INTEGRATING PEOPLE, PROCESS AND DATA



IMPROVING ALL PARTS OF INSURANCE P&L

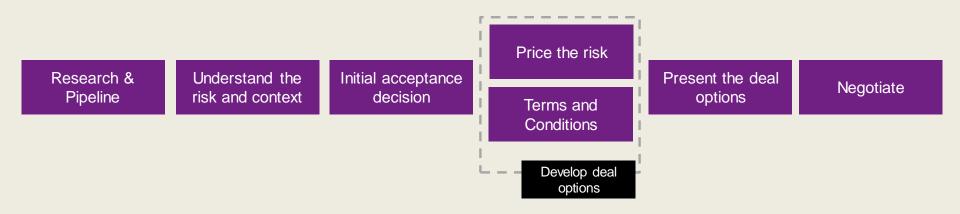
- High consistency in pricing and underwriting decisions – selection as well as routing
- Decision augmentation designed into processes
- Significant increase in both information and intervention points for management
- Active Portfolio Management
- Removes or reduces nonexpert processing which causes delays and traps expense
- Repatriating process no need for offshoring

Intelligent Intervention and decision support

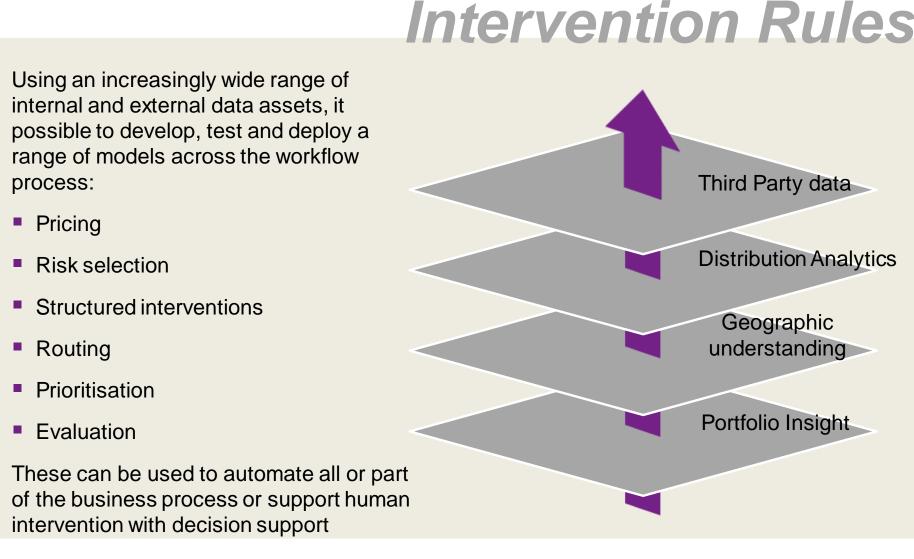


The importance of a process

An underwriting process

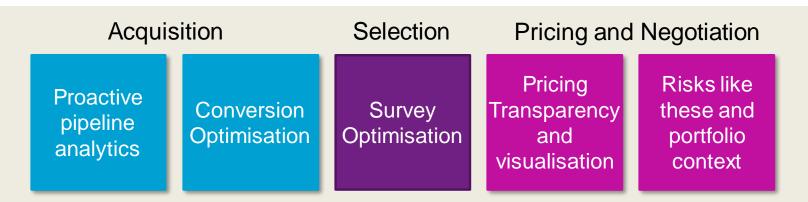


Injecting sophistication into decision rules



Decision support

Our view of the key elements of decision support across the value chain

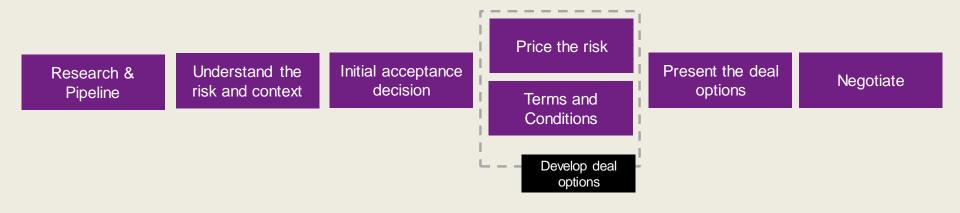


Pricing and Portfolio Management



Combining Insight and workflow

The underwriting process



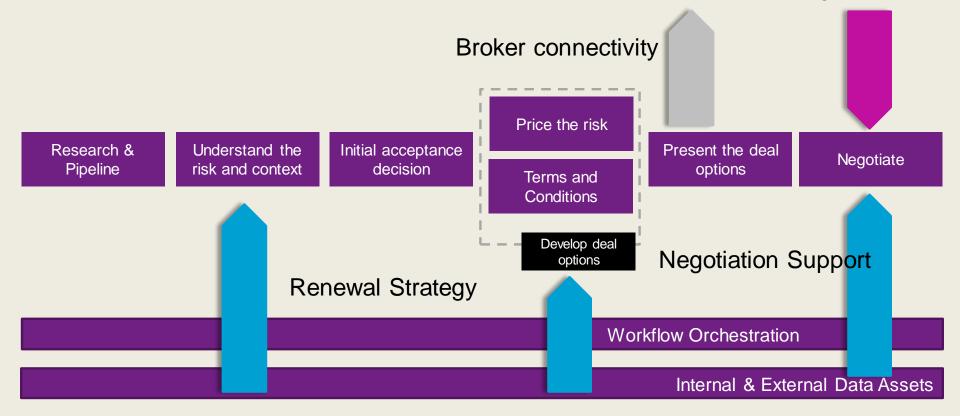
Workflow Orchestration

Internal & External Data Assets

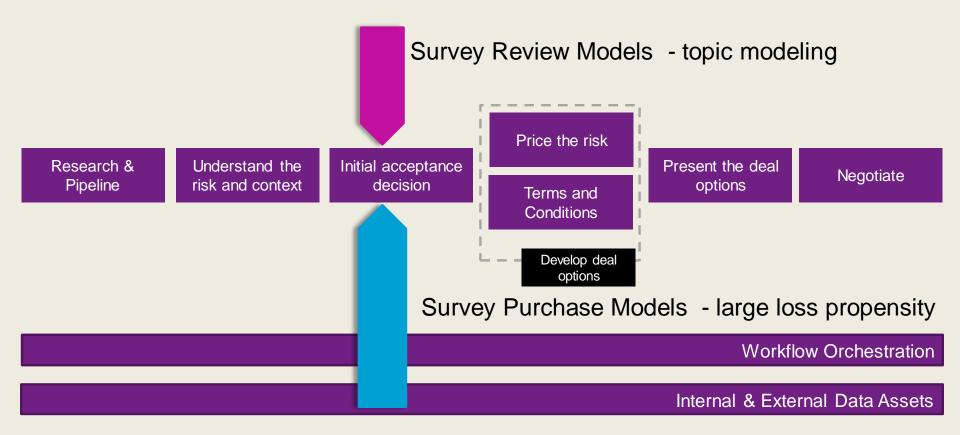
Example – Analytics, Operational Models & Decision Support

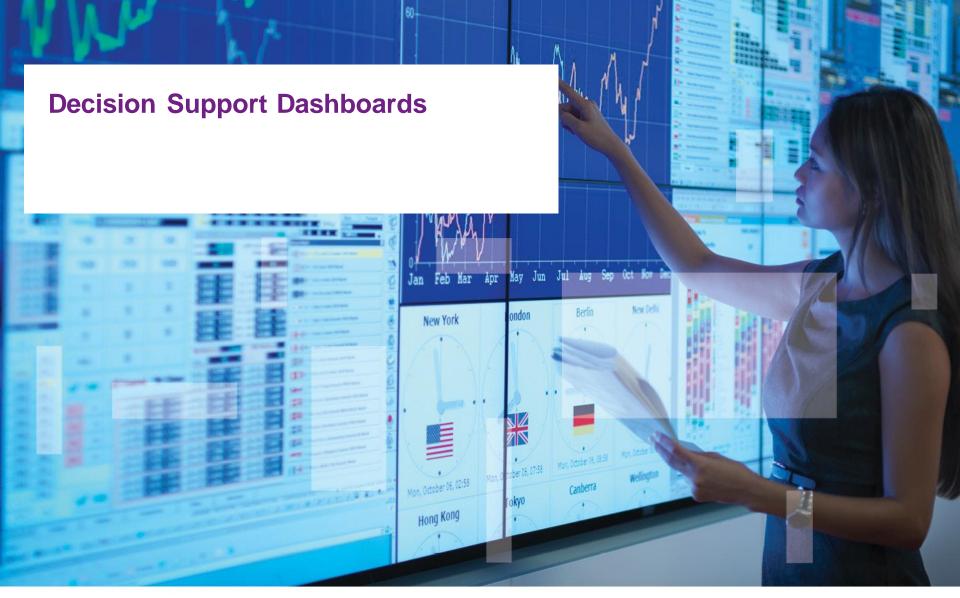
Renewal Optimisation

Broker automated Trading Rules



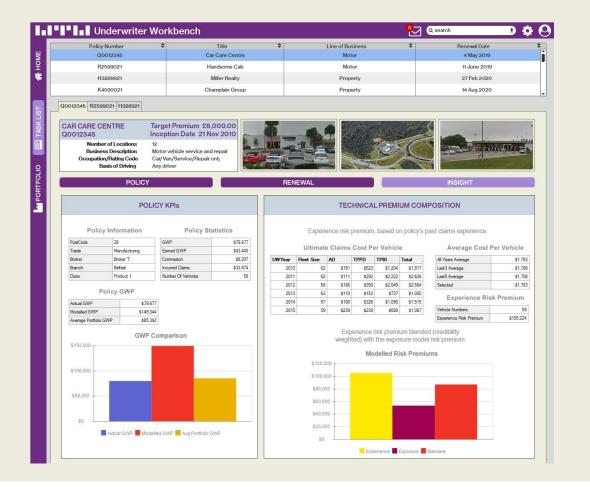
Example - Operational Models & Decision Support **Risk Selection Support**





Pricing Decision Support

Transparency

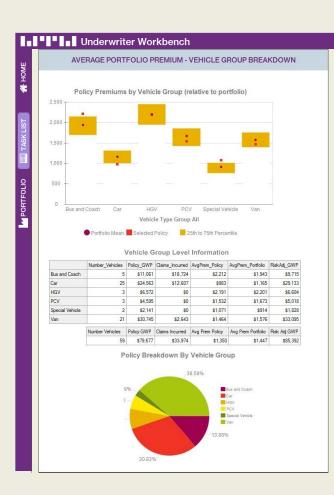


Developed Losses

Technical v Actual price

Transparent Components

Provide information to the underwriter to support the pricing and underwriting decisions **Portfolio Context**

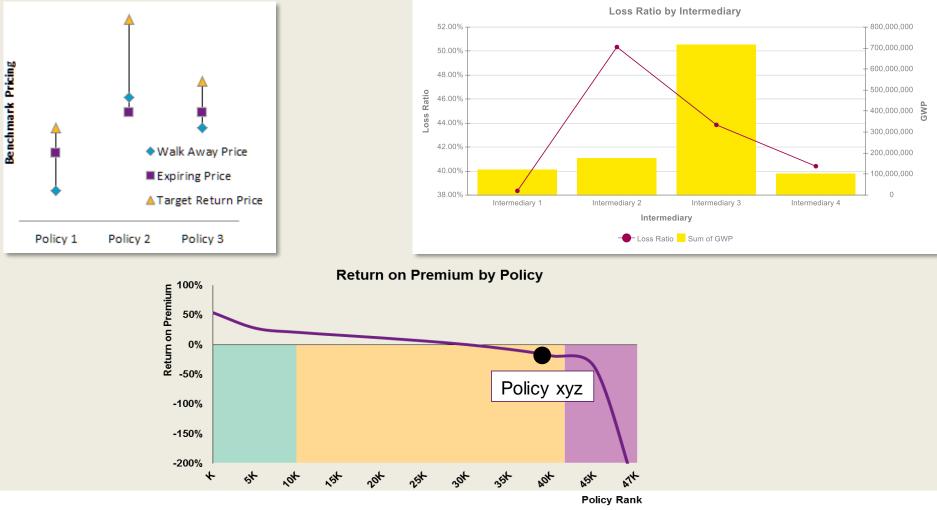


Average Portfolio Premium

Risk adjusted portfolio price comparisons

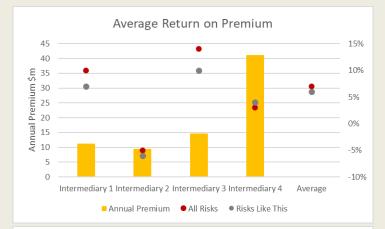
MI to support negotiation

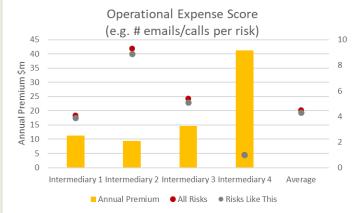
Negotiation



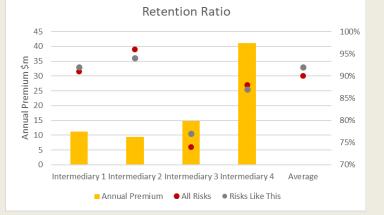
Enhanced MI to support negotiation

Highly Partnered Brokers





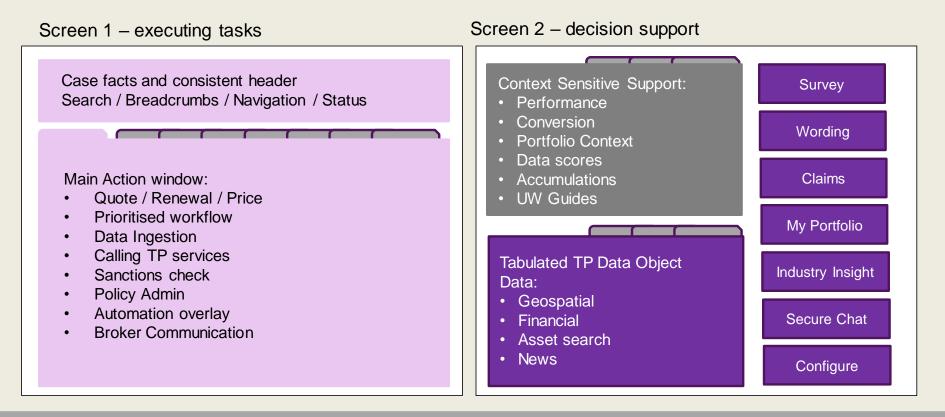






An Underwriter's Digital Environment

Underwriting Workbench



Data integration to mainframe, data warehousing, pricing and analytics hub, unstructured data. TP services and broker portals

An Underwriter's Digital Environment

Underwriting Workbench - workflow, analytical decision support and data integration

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