Transforming Underwriting Through Analytics

Analytics in Action
Intelligent Intervention
Underwriting Decision Support

March 2019

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Underwriting Decision Support

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

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

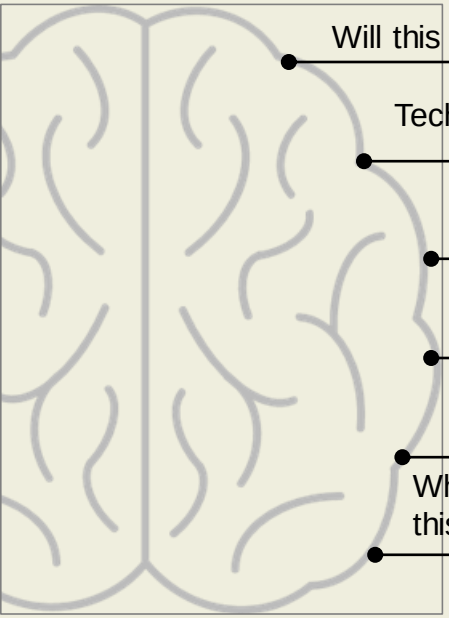
Market

Market Themes

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?

Data Strategy & Delivery

Analytics

Automation and Business Process Engineering

Technology

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				Identify	Fulfill/Issue
Allocate	Establish Needs				Instruct	Bind/Book
Retrieve Data	Select				Relationship management	Estimate Max Loss

Underwriting

Illustrative

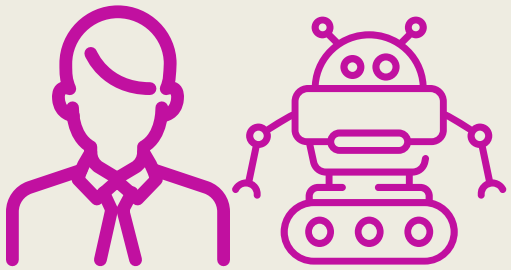
Underwriting task allocation – with robotic process automation (RPA)

Underwriting

Read	Evaluate	Monitor	Complex Judgment	Respond	Quality Check	Relationship Management
Assess	Identify	Approve	Research	Negotiate	Decide	Allocate

Underwriting

Chase	Interact/ Converse	Update	Estimate Max Loss
Interact/ Converse	Retrieve Data	Input Data	Instruct
Quote	Fulfill/ Issue	Bind/Book	Establish Needs
Select	Chase	Update	



Underwriting & Robot

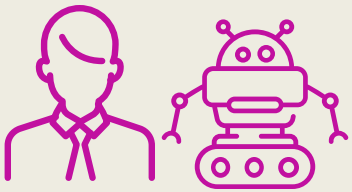
Illustrative

Underwriting task allocation – with RPA & Artificial Intelligence

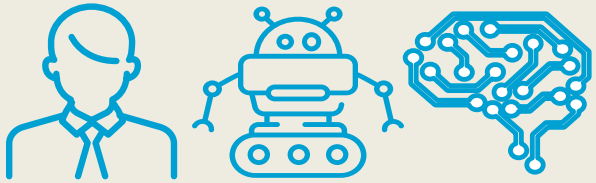
Underwriting

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

Underwriting



Underwriting & Robot



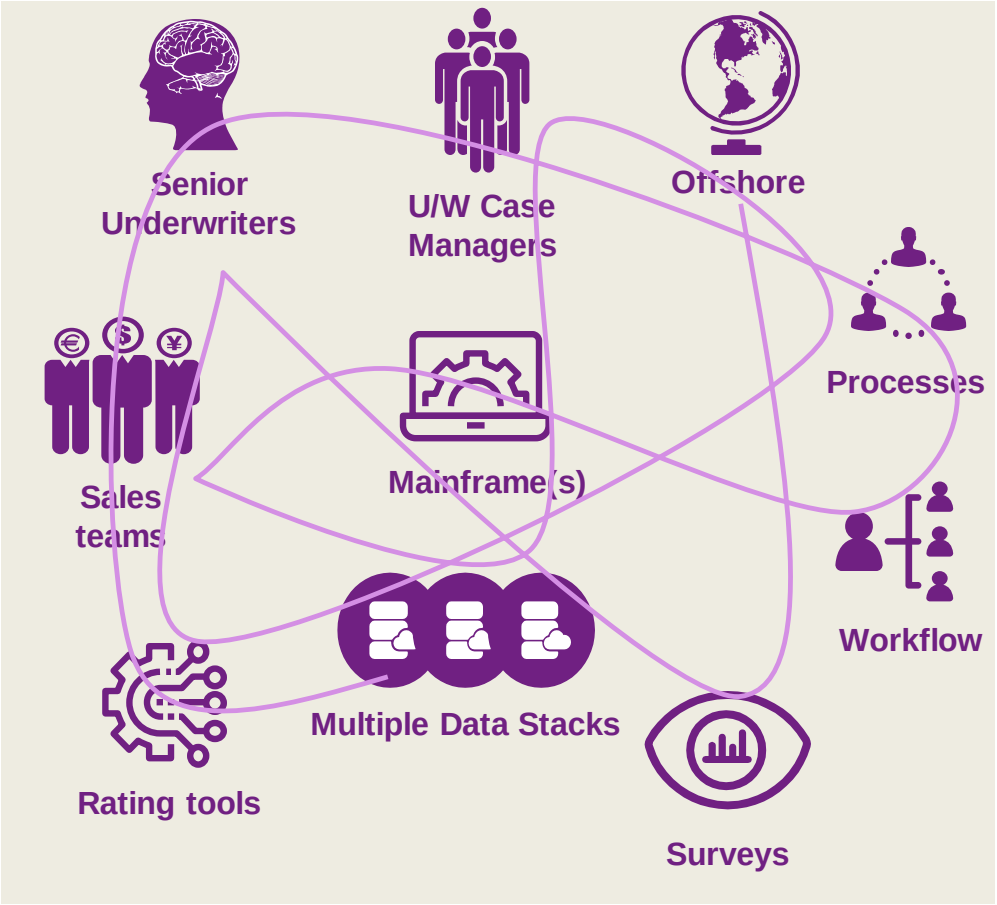
Underwriting & Robot & Artificial Intelligence

Illustrative

Challenge is how to overcome current ways of working

Difficult to optimise pricing, underwriting and risk selection

DISAGGREGATED PEOPLE, PROCESSES AND DATA



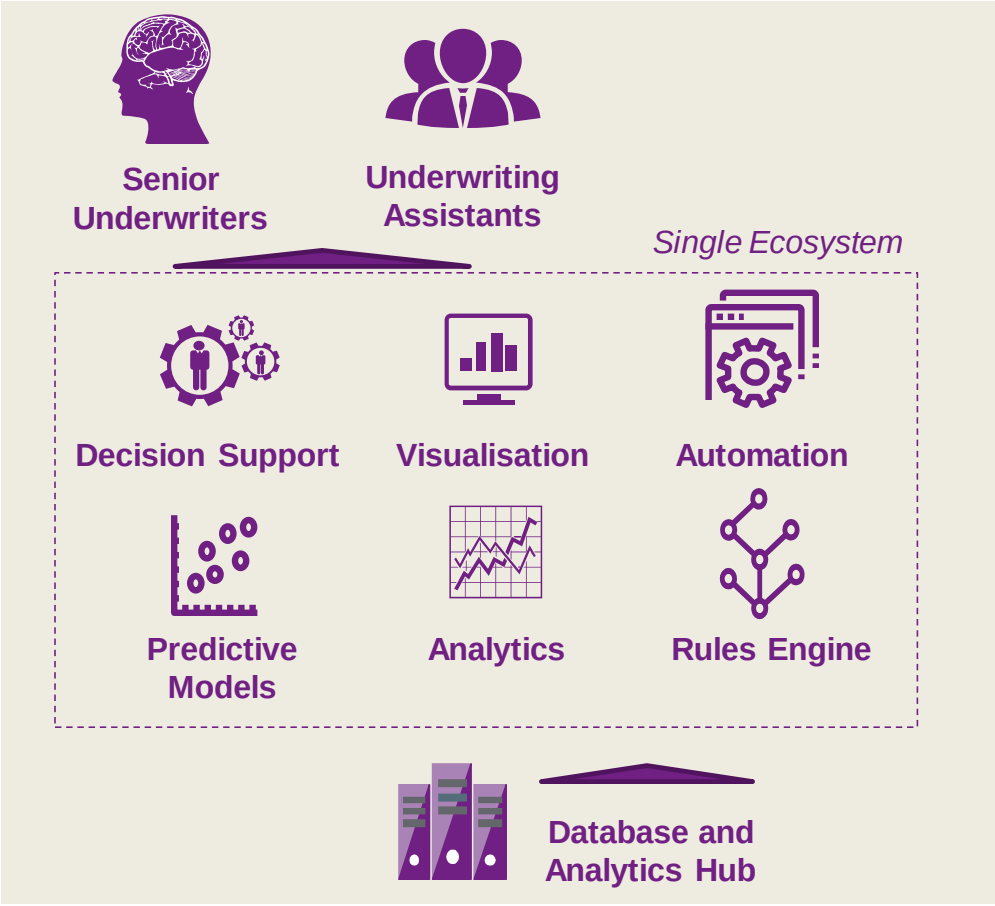
REDUCING UNDERWRITING PROFITABILITY

- 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



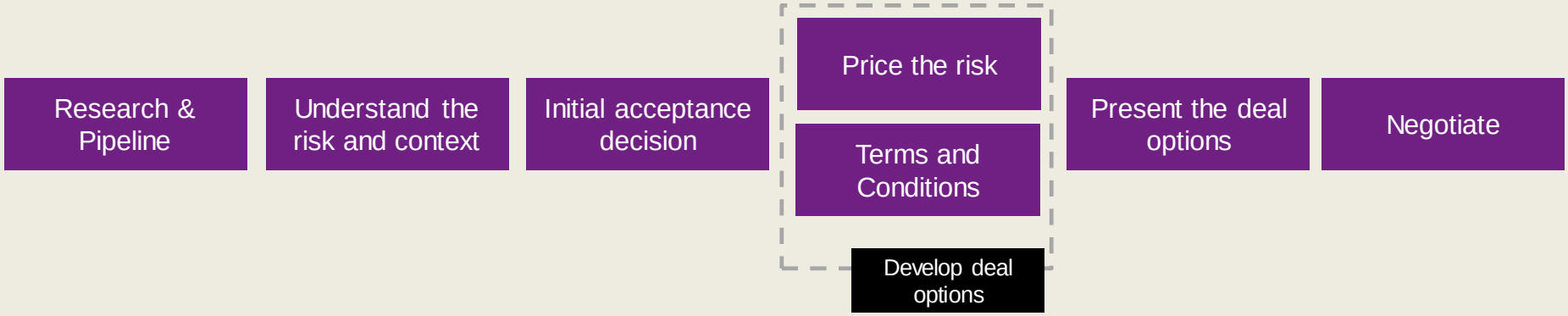
IMPROVING ALL PARTS OF INSURANCE P&L

- 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 non-expert 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



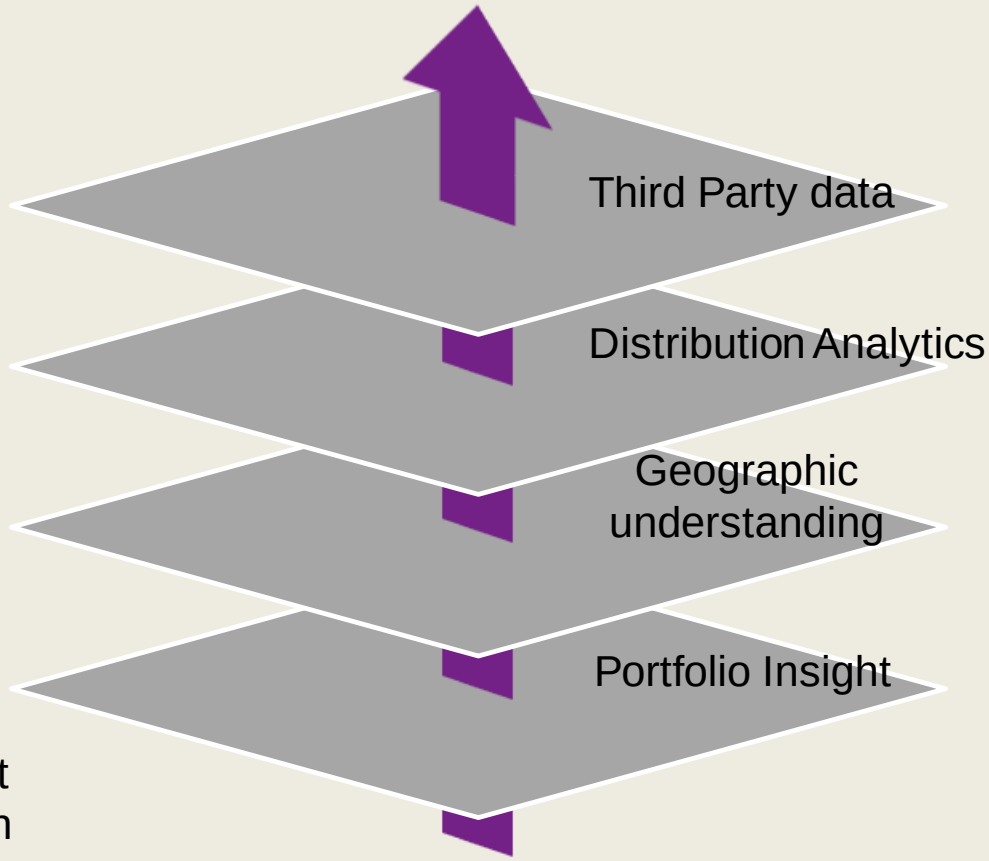
Injecting sophistication into decision rules

Intervention Rules

Using an increasingly wide range of internal and external data assets, it possible to develop, test and deploy a range of models across the workflow process:

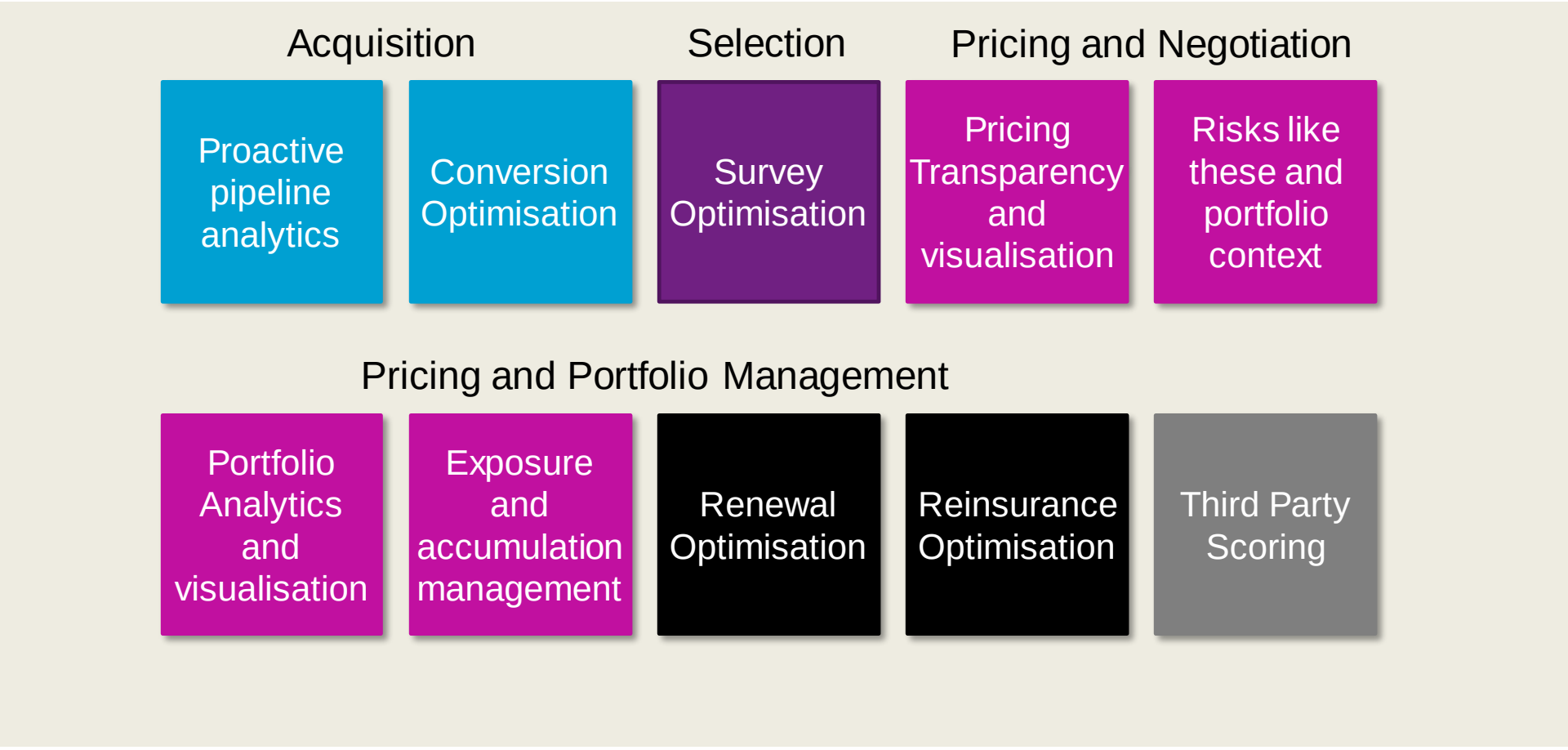
- Pricing
- Risk selection
- Structured interventions
- Routing
- Prioritisation
- Evaluation

These can be used to automate all or part of the business process or support human intervention with decision support



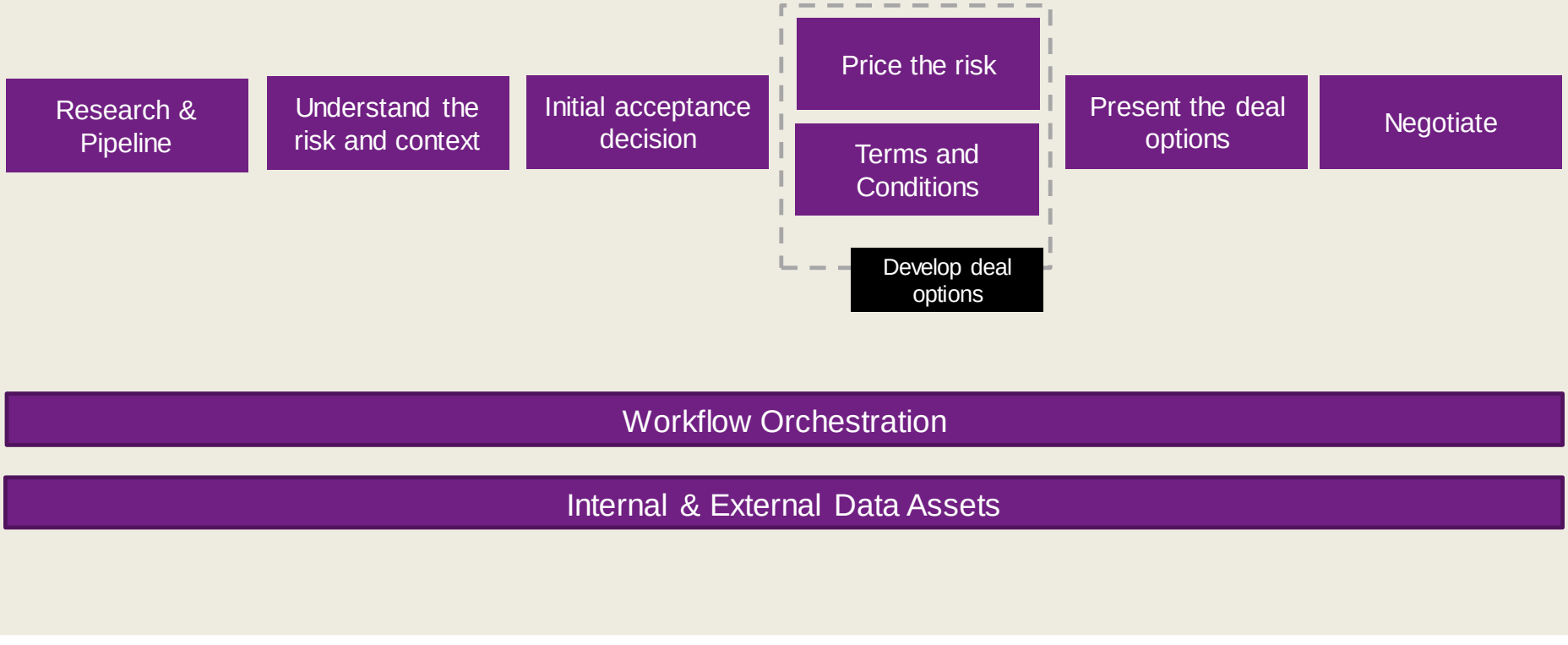
Decision support

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

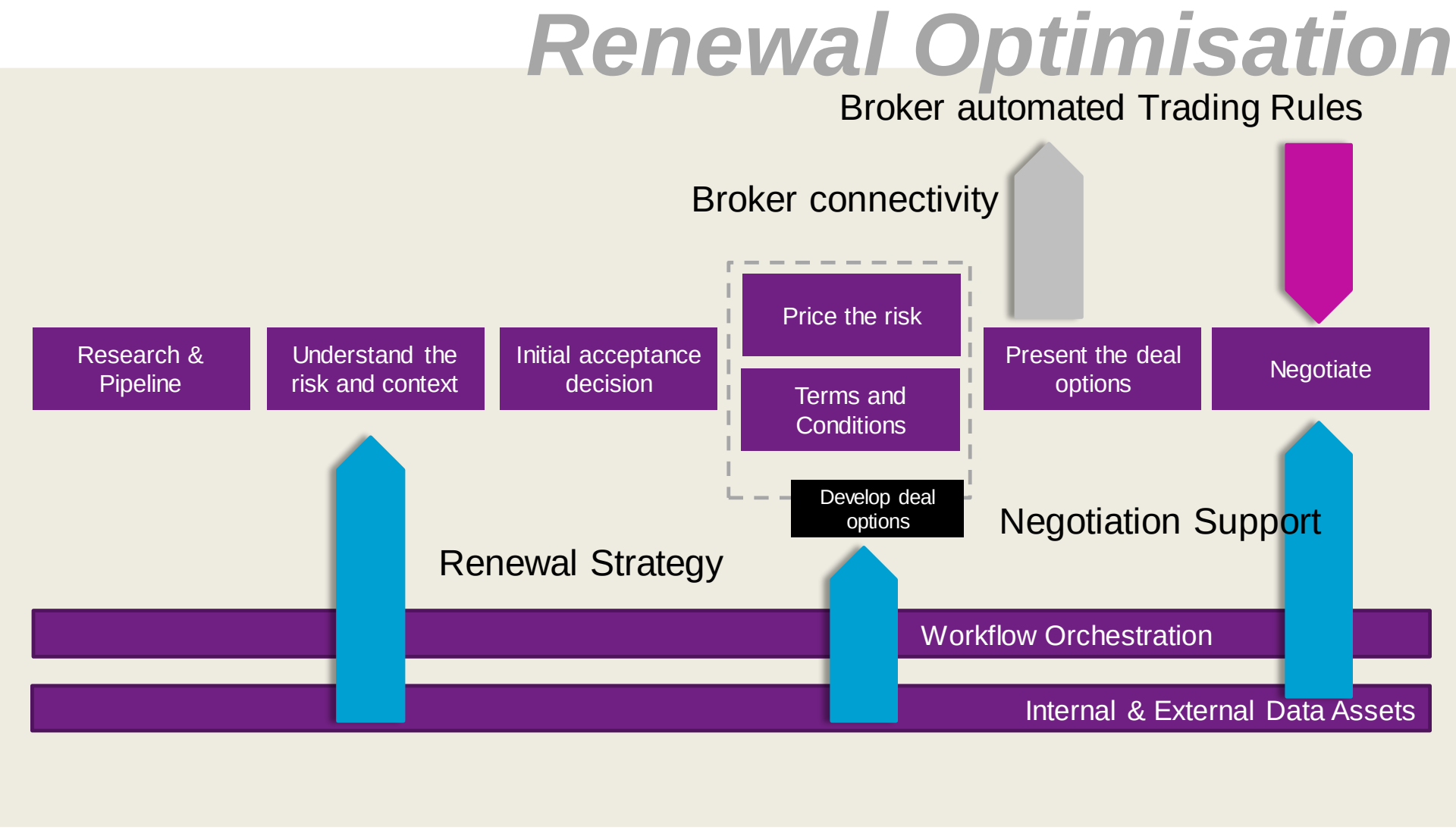


Combining Insight and workflow

The underwriting process

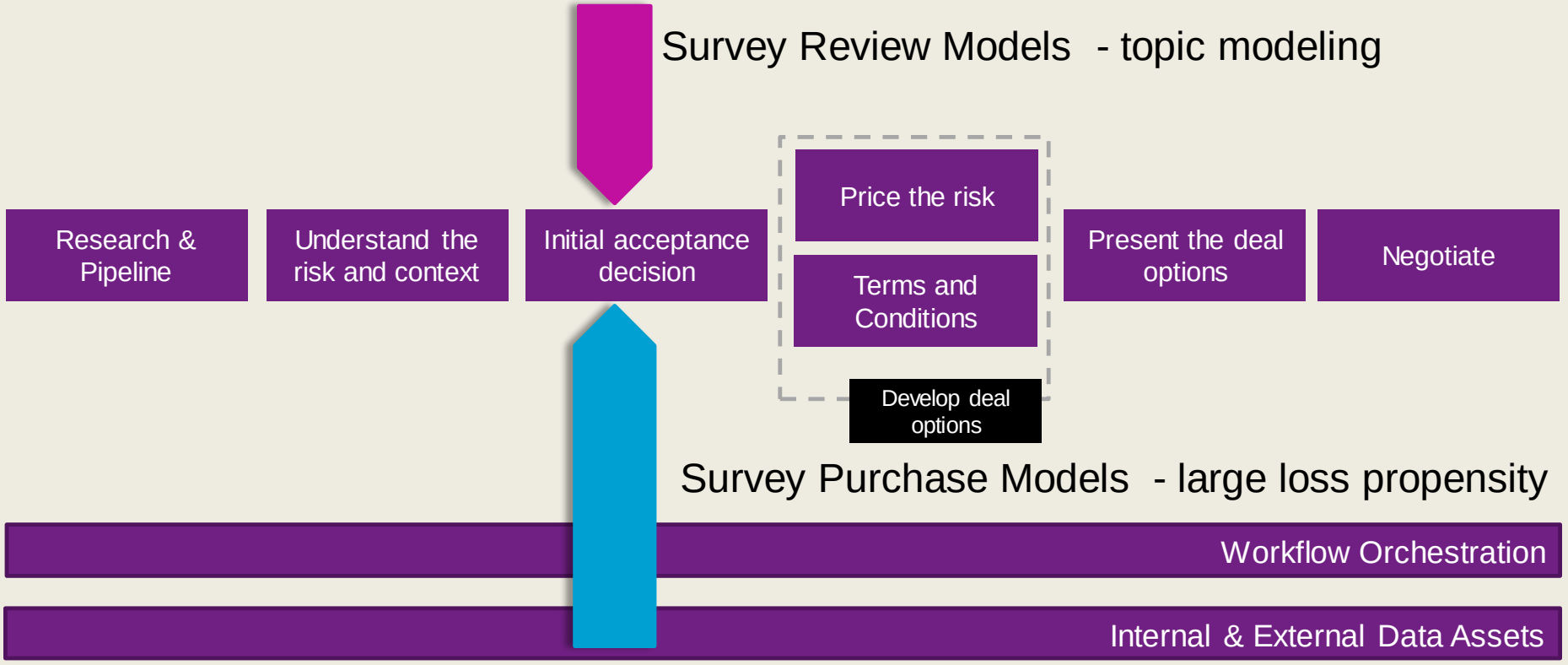


Example – Analytics, Operational Models & Decision Support



Example - Operational Models & Decision Support

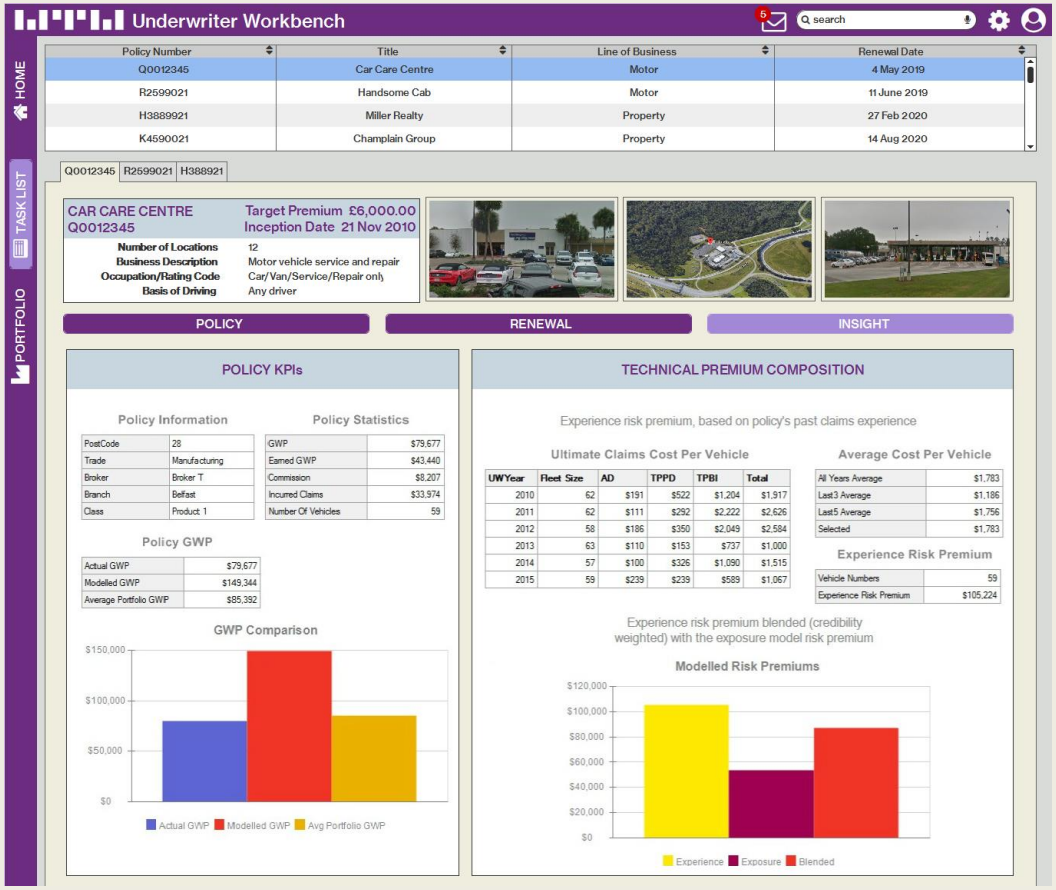
Risk Selection Support



Decision Support Dashboards

Pricing Decision Support

Transparency



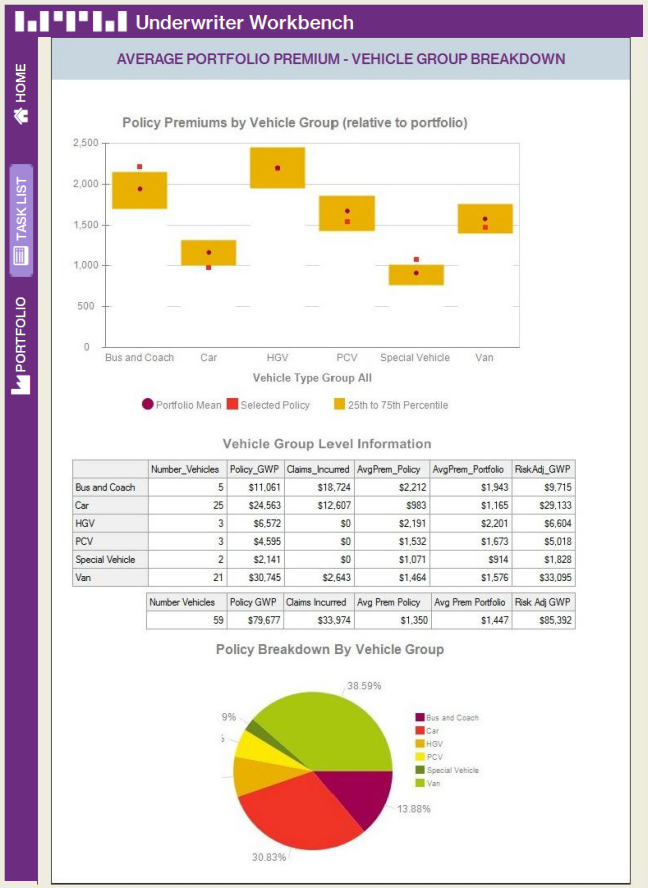
Developed Losses

Technical v Actual price

Transparent Components

Provide information to the underwriter to support the pricing and underwriting decisions

Portfolio Context

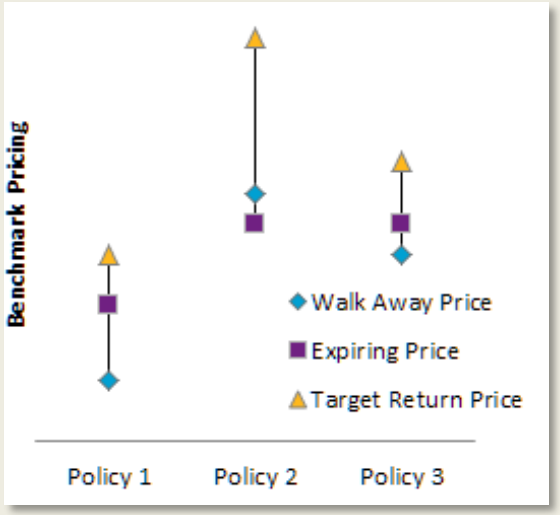


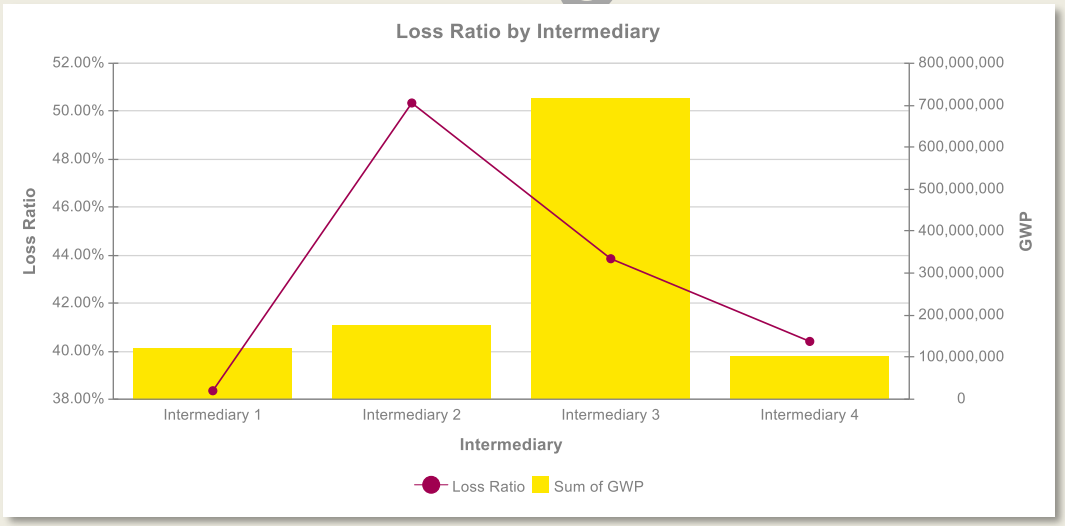
Average Portfolio Premium

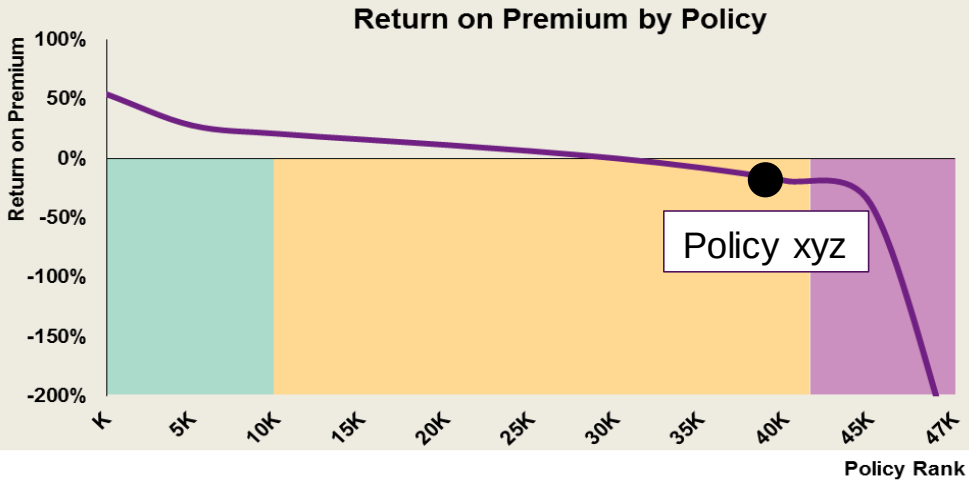
Risk adjusted portfolio price comparisons

MI to support negotiation

Negotiation

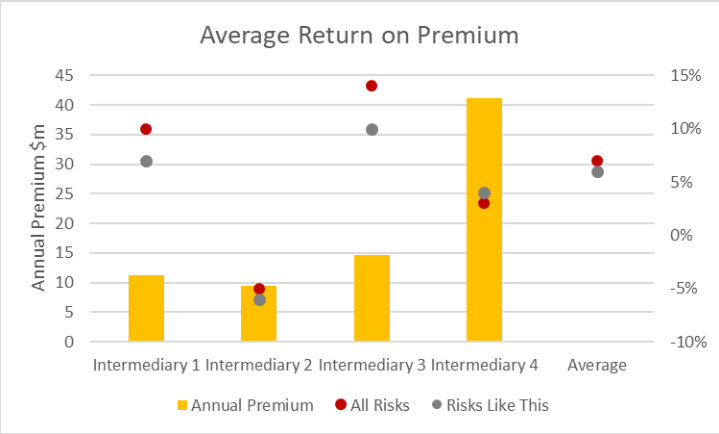


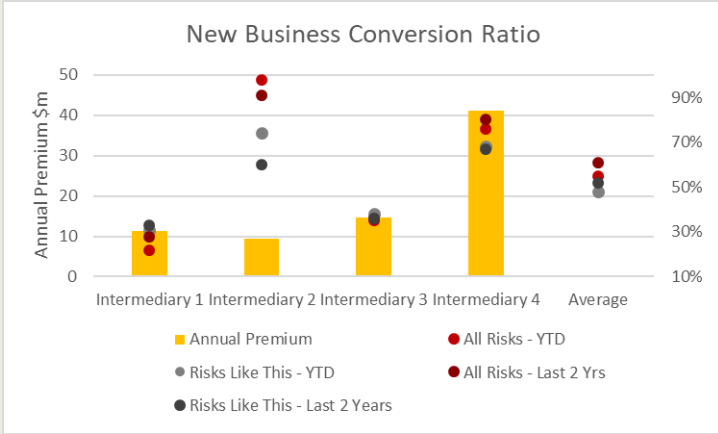


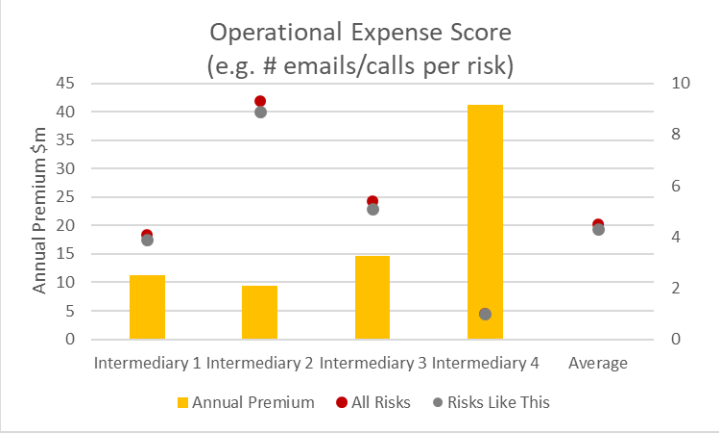


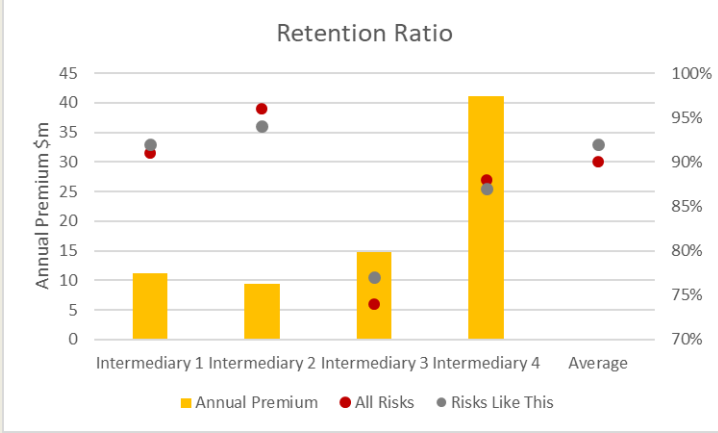
Enhanced MI to support negotiation

Highly Partnered Brokers









Underwriting Workbench

An Underwriter's Digital Environment

Underwriting Workbench

Screen 1 – executing tasks

Case facts and consistent header
Search / Breadcrumbs / Navigation / Status

Main Action window:
- Quote / Renewal / Price
- Prioritised workflow
- Data Ingestion
- Calling TP services
- Sanctions check
- Policy Admin
- Automation overlay
- Broker Communication

Screen 2 – decision support

Context Sensitive Support:
- Performance
- Conversion
- Portfolio Context
- Data scores
- Accumulations
- UW Guides

Tabulated TP Data Object Data:
- Geospatial
- Financial
- Asset search
- News

Survey

Wording

Claims

My Portfolio

Industry Insight

Secure Chat

Configure

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