bakertilly

Harnessing data and analytical tools for large complex economic damages

Agenda

- Introduction
- Key issues in complex claims
- Management of data
- Going beyond the data

Meet your presenters

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Principal
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Forensic accounting and analysts

Exposure analysis

Models

Model audit

Data analysis and case management

Detailed loss calculations

Expert witness work

Deposition / trial work

Current climate / key issues

- Getting a handle on claims data volume
- Damages – policy allocations
- Policies exhaustion – excess carrier concerns
- Business interruption claims and complex liability analysis
- Data management and analysis – transparency

Examples of use

Application of data analytics and data tools:

- Managing of insurance claim
  - Damages exposure, both claims management and litigation
- Internal reporting
  - Requesting authority
  - Setting reserves
  - Establishing settlement appetite
- Analyze reinsurance coverage - Who's POV?

Applications

- Product recall and liability cases
- Sexual abuse and other complex cases
- Wage and hour disputes
- Legal fee reviews
- Commercial / economic disputes

Case study

- Use of a “forever chemical” in manufacturing
- Resulted in adverse health effects for employees, end users and surrounding communities
- Estimated that thousands of lawsuits will be filed in MDL
- Hundreds of millions in both indemnity exposure and defense costs

Management of data

Where do I begin with no data?

- Claims - early phase - little to no data – options;
  - Examine policies in question
  - Study cases of similar nature
  - Use historical data and other publicly available information
  - Develop extrapolations from minimal data

Managing large data?

- Forensic technology and A.I.
- Streamlining review process - use of A.I. and other tools to extract and standardize data
- Provides analytical results and understanding of the makeup of the raw data before any further analysis is done
- Creation of platforms and tools to manage / compile data for ease of use

Going beyond the data

Building the model

Example case issues:

- Policy chart provided is 30+ years of coverage
- Complex tower of insurance that changed year-over-year
- Inclusion of defense costs
- Application of retentions and deductibles
- Application of policies as per-occurrence vs. aggregate
- Policy exclusions
- Allocation methodology
- Future claims
- Overlapping insurance

Building the model

- Analyze and understand the inner-workings of the coverage charts
- Review policy language
- Review legal guidance provided by counsel
- Review claimant data

Analyzing the data received

Building the model – what the client sees

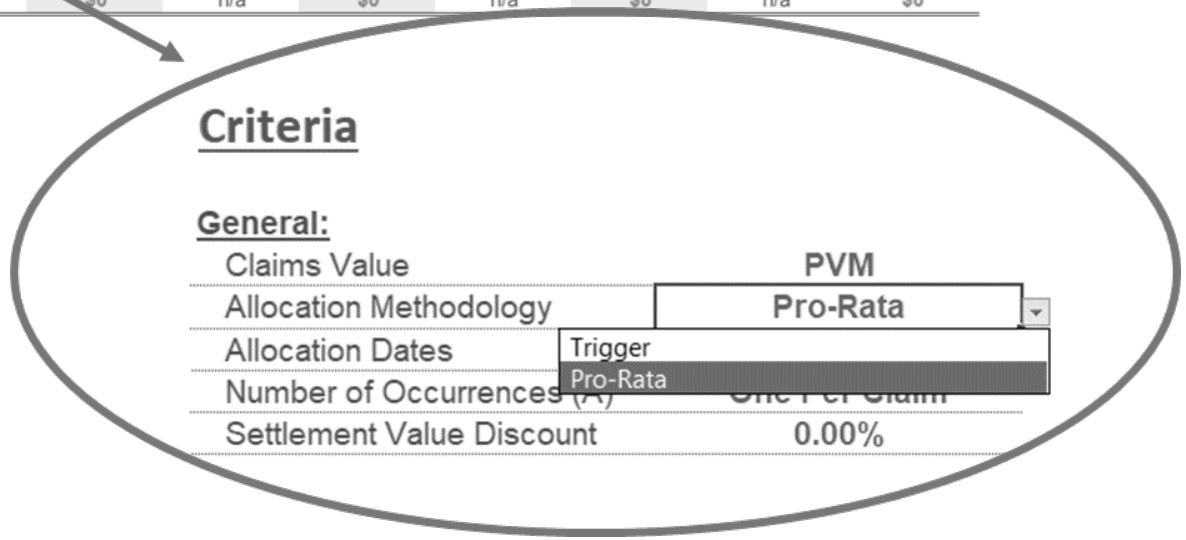
Criteria

General:	
Claims Value	PMV
Allocation Methodology	Pro-Rata
Allocation Dates	Mix
Number of Occurrences (A)	One Per Claim
1972 - 1975 Policy Allocation:	
Drop Down	No
Professional Liability (A)	No
Policy Application	Per Term
Policy Limit	Per Occurrence
1985 - 1986 Policy Allocation:	
Drop Down	No
Policy Limit	Per Occurrence
1991 - 1992 Policy Allocation:	
Drop Down	No
Policy Limit	Per Occurrence

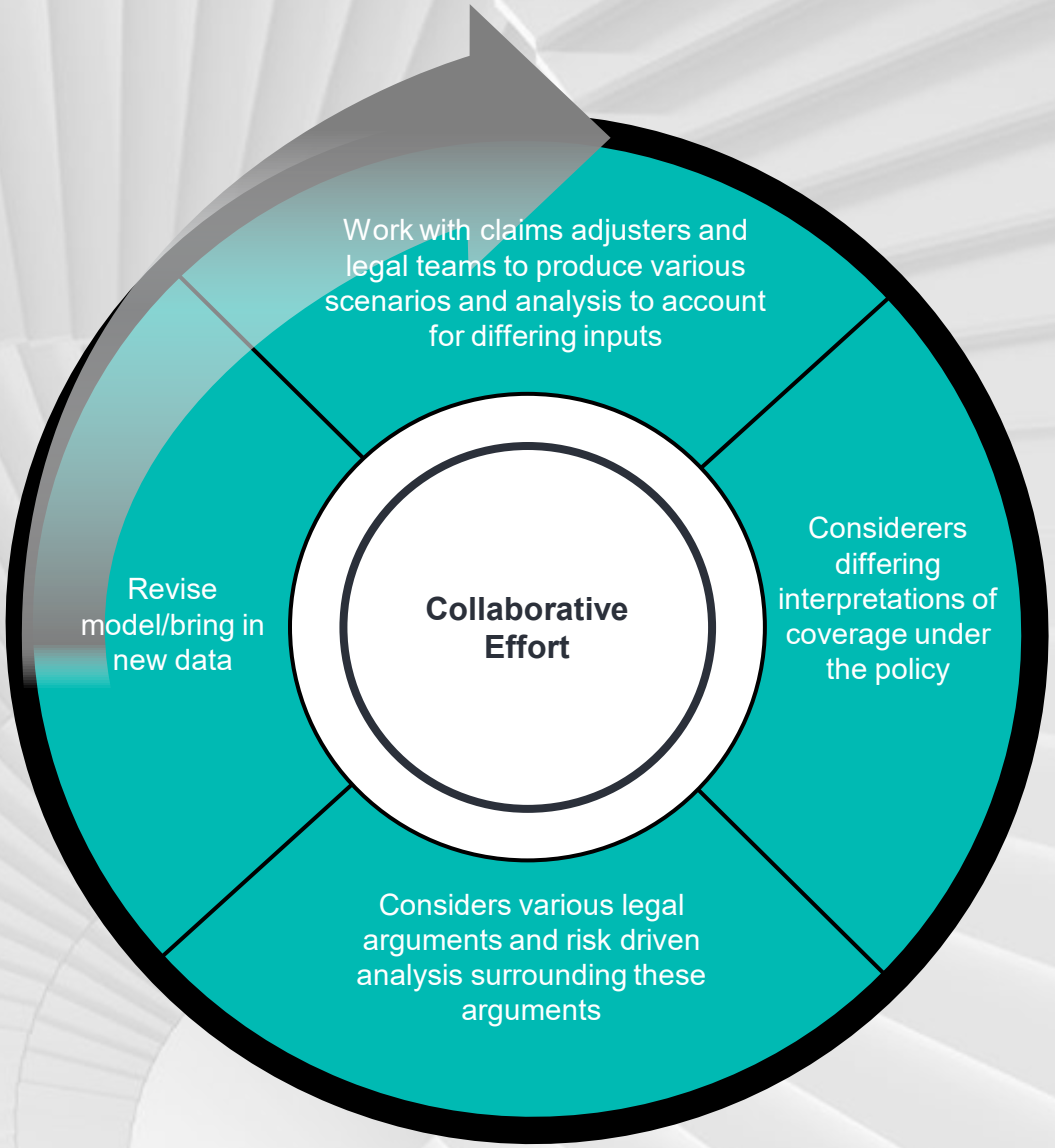
** User controlled fields are denoted in purple*

Key Results

Description	N/A	1/1/1961 to 7/14/1972	7/15/1972 to 7/1/1975	7/2/1975 to 7/31/1985	8/1/1985 to 7/1/1986	7/2/1986 to 6/30/1991	7/1/1991 to 7/1/1992	7/2/1992 to 12/31/2008	Total
Claim Count (B):									
Severe Abuse	0	34	27	75	22	40	21	46	265
Non-Severe Abuse	0	153	117	396	78	195	102	280	1,321
Total Claim Count	**0**	**187**	**144**	**471**	**100**	**235**	**123**	**326**	**1,586**
Total Exposure	**$0**	**$37,305,727**	**$21,438,327**	**$175,645,029**	**$12,190,920**	**$85,442,677**	**$18,498,173**	**$140,229,147**	**$490,750,000**
Of Which:									
Primary Policy	n/a	n/a	$21,438,327	n/a	$12,190,920	n/a	$18,498,173	n/a	
Excess Policy	n/a	n/a	$0	n/a	$0	n/a	$0	n/a	
Other Excess Policies	n/a	n/a	$0	n/a	$0	n/a	$0	n/a	
XXX Exposure	n/a	n/a	$0	n/a	$0	n/a	$0	n/a	$0



Collaborative effort



Modeling deliverables

All tools have pros and cons – and often a combination is best

- Great for rapid prototyping
- Broadly familiar

Excel

- Great for communicating insights on lots of data
- Can be shared in-browser

Tableau/PowerBi

- Enormously flexible and performant
- Specialized

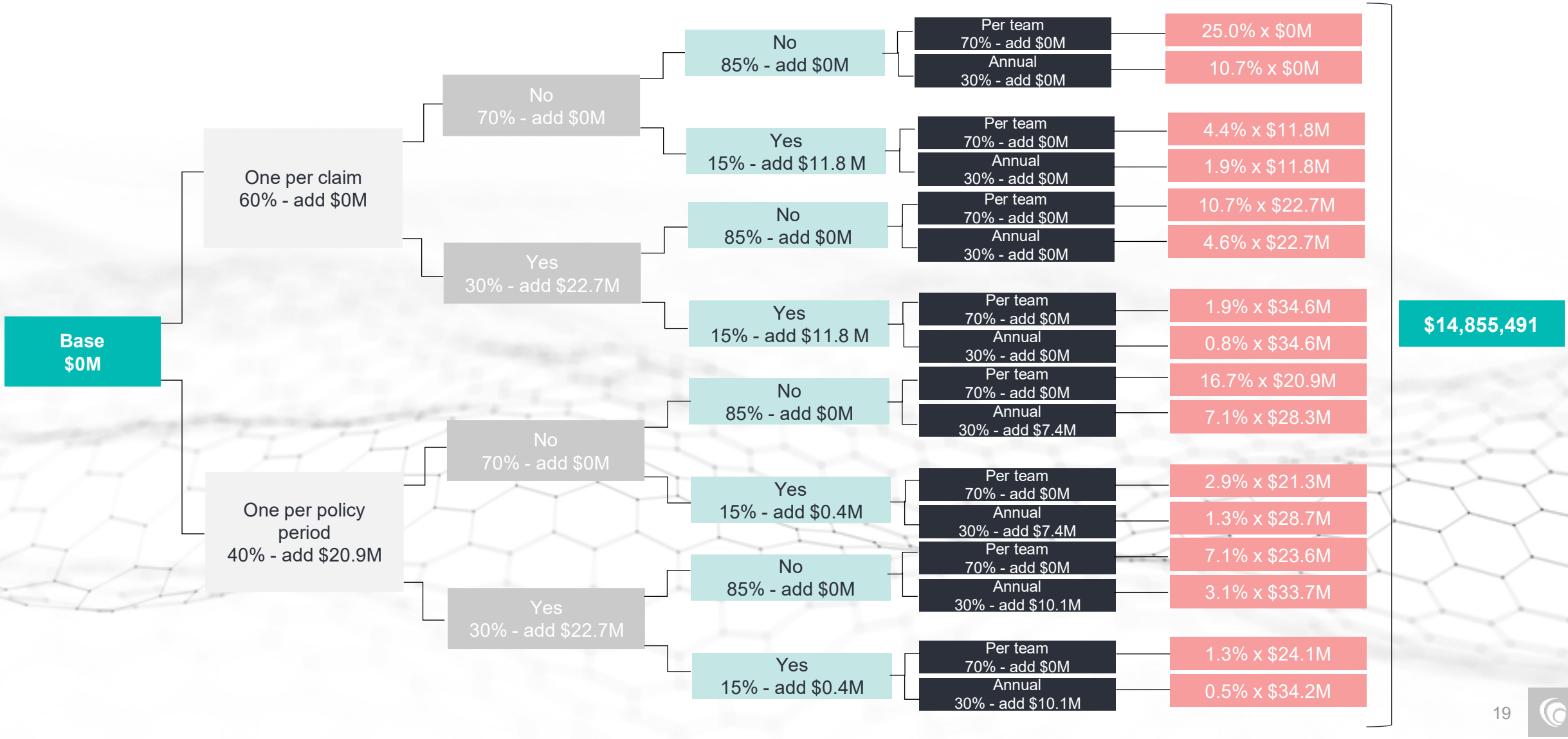
Python/R

- Provides client-available inputs and controlled access for specialized tools

Cloud Hosting

Decision tree analysis

Example decision tree



Questions?