

# RiskIntegrity™ Insight Webinar An innovative strategic tool that leverages AXIS™

# Today's Presenters

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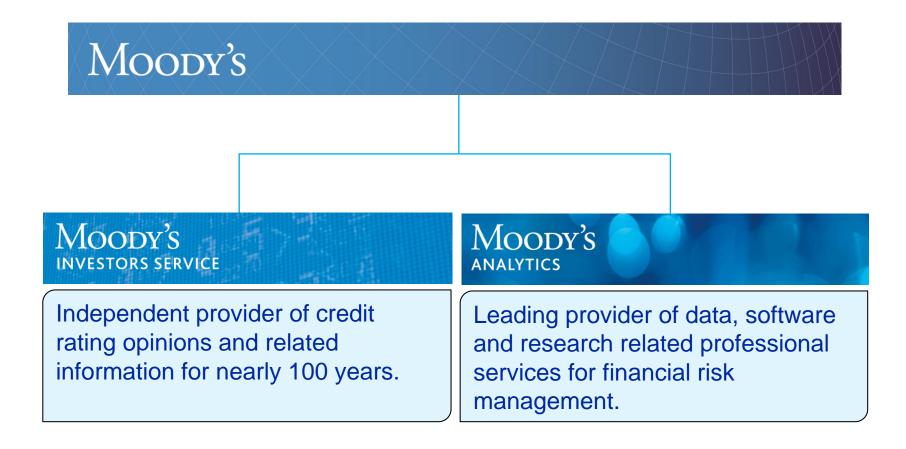
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# Moody's Analytics helps our global clients measure, understand, and mitigate risk – beyond ratings



# Agenda

- 1. Trend Towards Delivering Better Insight
- 2. RiskIntegrity Insight & AXIS
- 3. Practical Insights

# Trend Towards Delivering Better Insight

#### Demand for business insight from senior leaders

An analytical approach to gap analysis

Information

What insight does management need?

**Timing** 

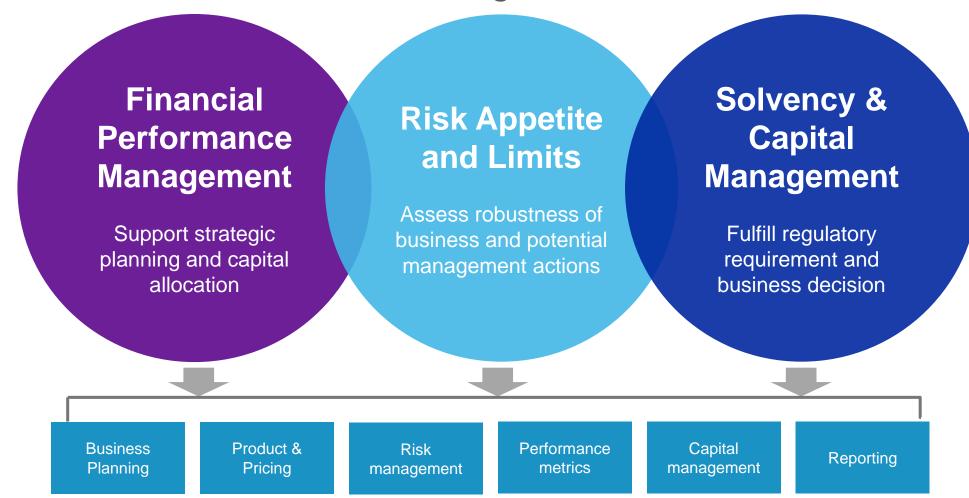
How quickly does management need it?

Credibillit

How credible is the insight?

#### What insight does management need?

Increase demand for business insights from different lenses



# What insight does management need?

#### Evolution of stress & scenario testing

Embedding a stress testing framework allows insurers to translate qualitative expressions into meaningful metrics.

#### **Qualitative only**

- 1). No linkage to business process
- 2). Absent of governance

# Shock based stress (point in time)

- 1). Linkage to key business process
- 2). Governance in place
- 3). Limited linkage between Group risk limit to BU risk limit

# Integrated scenario stress

(forward looking)

- 1). Linked to majority of business process
- 2). Well establish governance and oversight
- 3). BU risk limits and metrics tightly aligned with group

<sup>&</sup>quot;Integrated scenario stress testing" - a projection of financial statements and most importantly, a projection of available and required capital over a multiyear planning timeframe (including the new business).

# How quickly does management need insight?

Real time needs are challenging due to the complexity in the products, modelling, processes, and organizational culture.

#### Real time means hours rather than weeks

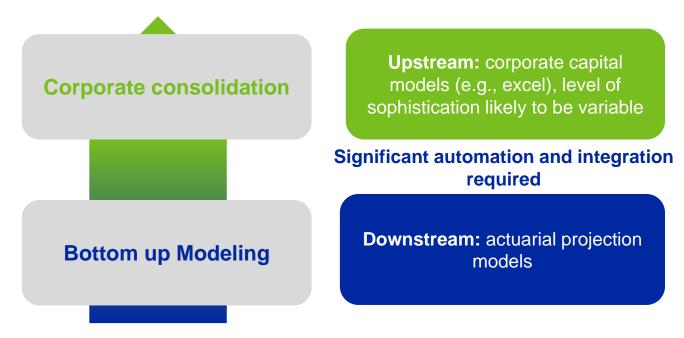
Illustration: a typical bottom-up forecasting process (1-3 months) **Asset** Investment Forecast GOE model **Transaction** NB Assumption Q1 Q2/Q3 Q4 Board gives guidance Bottom-up business planning Board approves the plan

## How credible is the insight?

# Define the optimal tradeoff between the top-down and bottom-up approaches

- » Current approach: not easy for senior management to use or access, significant reliance on the heavy model re-runs
- » "Improvise" the corporate model: hard for management to justify the results





#### But timely answers are challenging...

#### Common hurdles for management to receive timely results



#### **Multiple Stakeholders**

Multiple stakeholders involved with different perspectives/needs.



#### **Data & Model Integration**

Multiple model and data sources may not well integrated



#### **Model Ownership**

Difficult to re-run heavy models if ownership sits elsewhere.

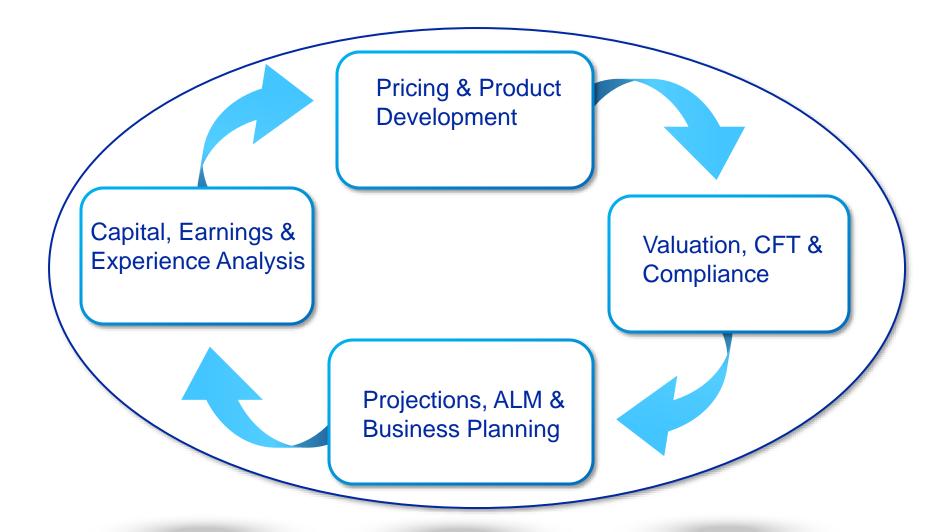


#### **Spreadsheets**

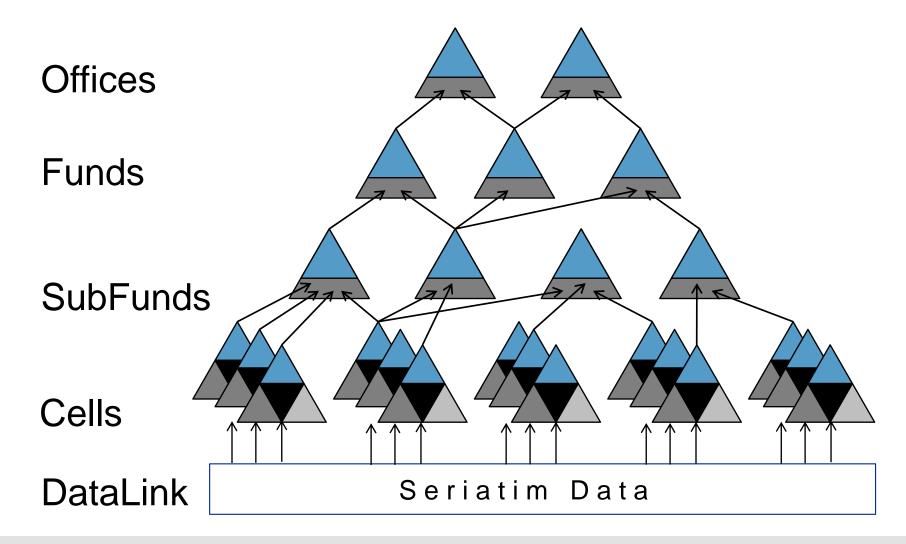
Heavy reliance on complex spreadsheets to manage results.

# RiskIntegrity Insight & AXIS

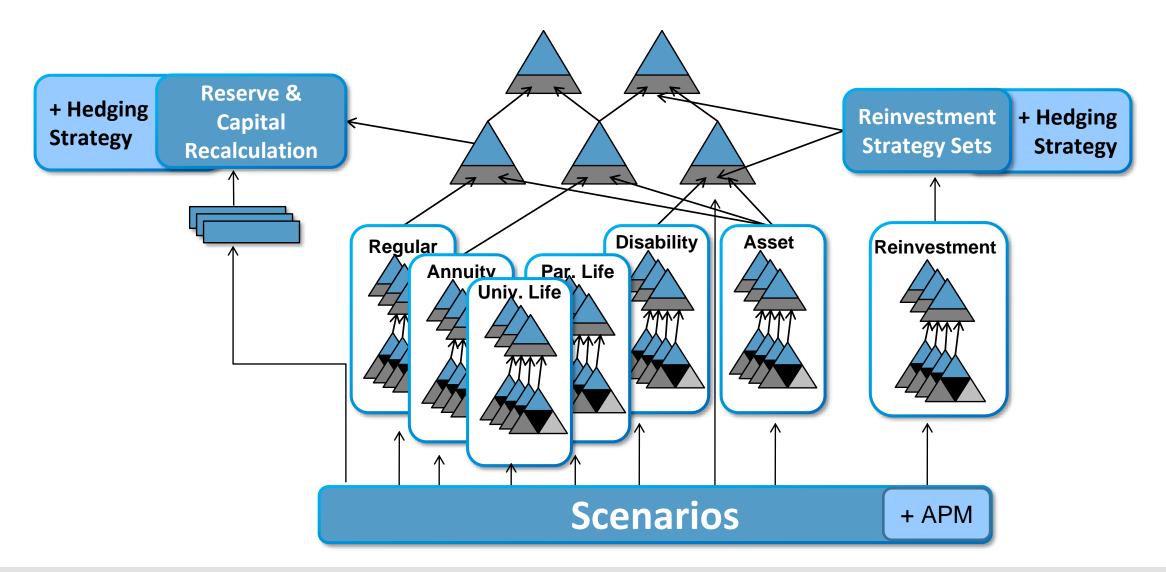
## AXIS is an integrated multiple purpose system



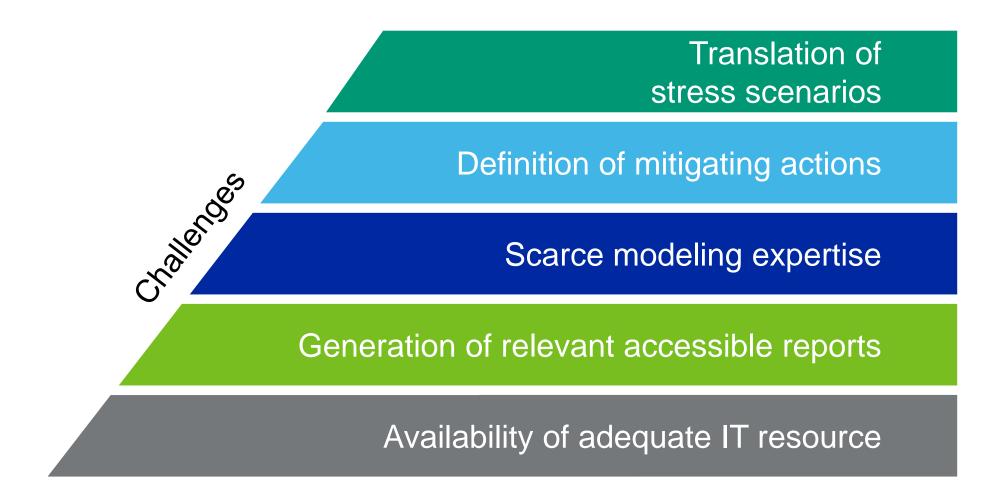
# Bottom up modelling in AXIS



## Dynamic aggregate reserves and capital



# Challenges of timely management insight



# Why RiskIntegrity Insight with AXIS?

Designed to deliver insight to management.

2 Leverages AXIS capabilities.

Enables access across the organization.

# RiskIntegrity Insight

#### Empowering the business

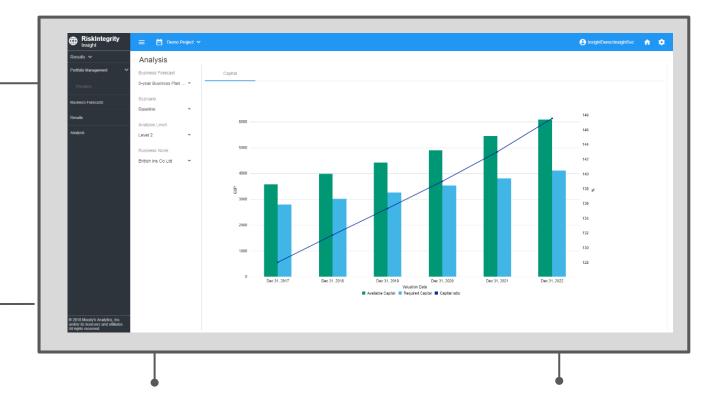
# Strategic 'What-If' Solution

Modelling & analytics platform designed to support:

- Scenario & Stress Testing
- Planning & Analysis
- Etc.

# Financial Statements & Metrics

Consolidates and projects financial statements and user-defined metrics under different what-if scenarios.



#### Data Management & Control

Leverage data from **existing modelling** infrastructure and manage via robust analytical data repository.

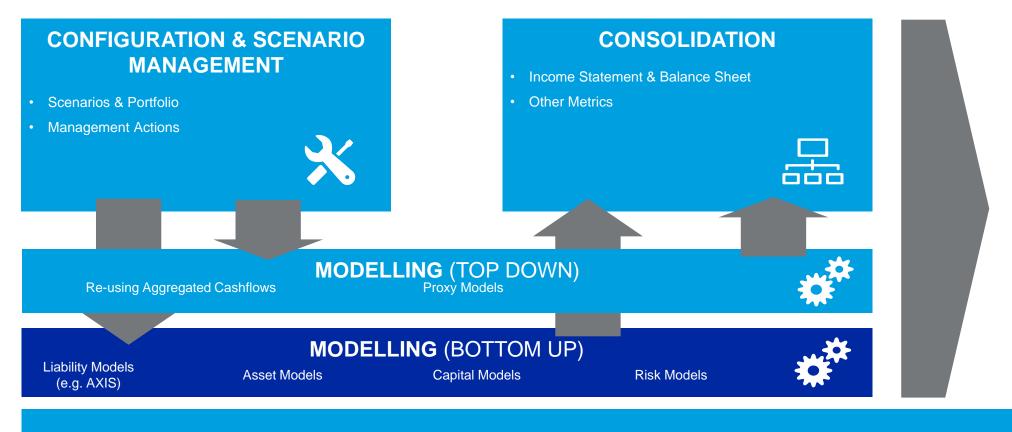
#### **Layered Analytics**

Drill down analysis via **flexible dashboard** and comparison analysis.

# RiskIntegrity Insight

#### Modelling framework





#### **ANALYTICS**

- Business Metrics & KPIs
- Risk Appetite & Limits
- Historical & Forward looking



**ANALYTICAL DATA REPOSITORY** 



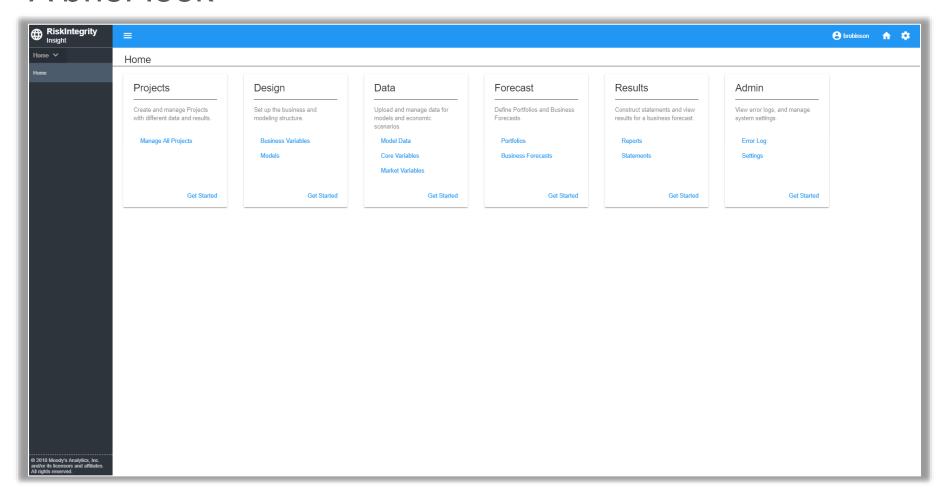
## RiskIntegrity Insight & AXIS

Getting more from AXIS through integration



# RiskIntegrity Insight

#### A brief look



# RiskIntegrity Insight – key benefits

Support senior stakeholder decision-making with forward looking strategic tool.



What-If Analysis



Integrated with AXIS



Reduces Use of Spreadsheets



Flexible Statements & Analytics



Faster Insights with Less Costs

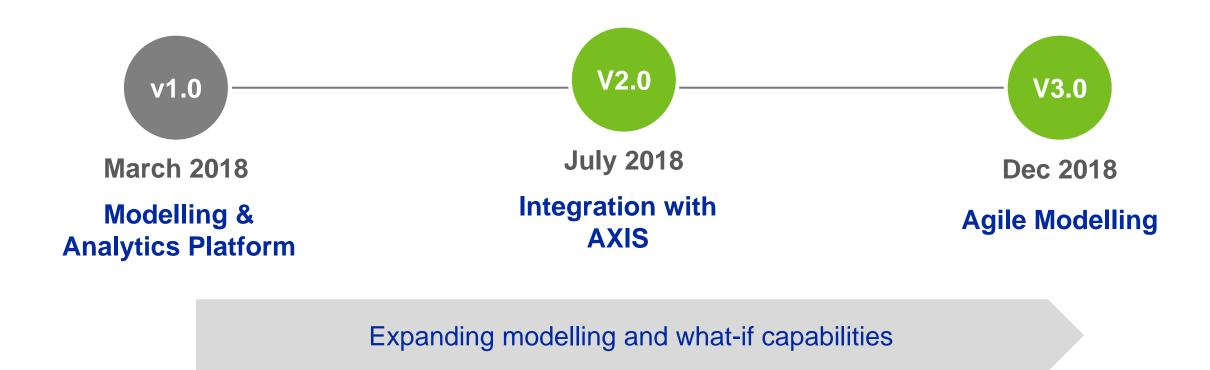


Data Management



## RiskIntegrity Insight

#### Roadmap highlights



# 3

# **Practical Insights**

# Risk Scenario & Analysis tool for US insurer

#### Overview

#### **Client Needs**

Risk function requires a Risk Scenario and Analysis Tool ('Challenger Model') that allows them to carry out what-if analysis over a multi-year time horizon.

#### **Challenges**

- » Risk do not own AXIS models.
- Reliance on actuarial function who are already resource constrained.
- » Lack of drill-down & analytics capabilities within risk function.

#### Why Moody's Analytics?

- » RiskIntegrity Insight solution is aligned with CRO vision.
  - Deliver business insight
  - Support effective challenge
- » RiskIntegrity Insight leverages client's existing AXIS implementation.

# Risk Scenario & Analysis tool for US insurer

#### Scope & deliverables

#### **Project Scope**

- » Projection of the Balance Sheet & Income Statement over a multi-year time horizon under multiple bases:
  - US GAAP
  - NAIC Stat
- » Scope covers 50+ product groupings and asset classes.
- » Users to specify what-if scenarios and configure and re-run AXIS models to reflect specified stresses/management actions.

#### **Deliverables**

- » RiskIntegrity Insight solution integrated with AXIS.
- » RiskIntegrity Insight deployed as Softwareas-a-Service.
- » Uses AXIS bursting via Cloud using GridLink-as-a-Service (GlaaS).

## Typical project approach

#### Objectives

#### Discovery

- Develop understanding of client's asset and liability portfolio
- Define broader business requirements and agree project scope.

#### Solution Configuration

Configure RiskIntegrity Insight/AXIS solution to meet project scope.

#### Deployment & UAT

- Deploy solution on Moody's Hosted environment for Client access
- Complete UAT and Solution sign off.

3 staged project approach combined with leveraging existing AXIS datasets supports a **streamlined** implementation process

#### Typical project approach

#### Key Moody's activities

#### **Discovery**

- Analysis of Clients AXIS datasets, reporting output, bases, metrics and "What-If" assumptions
- Document project requirements and scope

# **Solution Configuration**

- Tag Client's AXIS datasets (configures granularity and what-if capabilities).
- Configure GridLink as a Service (GlaaS)
- Create RiskIntegrity Insight configurations to meet project scope

#### **Deployment & UAT**

- Create and test production environment
- Deploy Insight software solution and Client configurations
- Support Client with UAT process

**Knowledge Transfer** –Moody's will provide ongoing training to ensure users are comfortable owning the Solution at the end of the project.

#### Practical points of note

#### Ability to deliver with minimal impact on existing resources

#### **Support from Client**

- » Minimal impact on Clients business and technology resources
  - Provide necessary AXIS datasets via secure portal
  - Available for discussions on business requirements
  - Undertake UAT with Moody's support

#### **Hosted Environment**

» Moody's handles installation which reduces set up costs and impact on technology resources

#### **Impact on existing AXIS systems**

- Insight does not change existing AXIS results
- » Leveraging existing AXIS data sets provides consistency with current product coverage, aggregation and reporting output

#### **GridLink As a Service (GlaaS)**

Supports Cloud bursting of AXIS for runtime performance

"Proof Of Concept" can be delivered in 4-6 weeks with minimal client input.

Wrap Up

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