Article from

The Modeling Platform

December 2015
Issue 2

Results of the First Modeling Section Survey

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The results are in from the first Modeling Section Survey. Thank you to the 254 respondents who provided invaluable insights and feedback into the composition and interests of our section. Based on your feedback, we now have many great ideas and potential volunteers for future newsletters and educational sessions for our members.

SUMMARY OF RESULTS

As actuaries, we have a strong desire to boil things down to a simplified representation of reality, so I will do my best to uphold this tradition. The average respondent is a North American life practice manager with 15 years of modeling experience, who uses models for a variety of analysis and reporting. As a collective group, we think the generalized definition of modeling is a simplified representation of reality, which encompasses the development, maintenance, and use of a combination of data, assumptions, and algorithms to produce a predictive, quantitative estimate for various business insights. However, generalizations can't begin to cover this diverse and enthusiastic group. Below are the tables to show the responses to the survey.

Table 1

What Is Your Primary Practice Area?

Primary Practice Area	No. of Respondents
Academic	1
Accounting and Finance	31
General Insurance/Property and Casualty	8
Health	43
Investment/Asset and Liability Management	32
Life	163
Retirement	16
Risk Management	49
Retired Actuary	1
Other	21

Table 2

How Many Years of Experience Do You Have Modeling (e.g., Designing, Developing, Operating, Maintaining, or Controlling Actuarial Models)?

Years of Modeling Experience	No. of Respondents
0–2 years	11
3–5 years	25
6–10 years	56
11–15 years	41
16+ years	92

Table 3

Which of the Following Best Reflects Your Work in Modeling?

Type of Modeling Work	No. of Respondents
Vendor/Consultant	37
Actuarial Systems Model Developer—System Code Updates	41
Manager/ Senior Actuary—Use Model Results	69
Model User—Run Models and Update Data and Tables	45
Auditor—Model Vetter and Model Risk Oversight	11
Academic	4
Other	18

Table 4

Which of the Following Types of Modeling Software Do You Use?

Type of Model Software Used	No. of Respondents
Vendor Platform, Open Source Code	89
Vendor Platform, Closed Source Code	70
Microsoft Office	88
Home-Grown or Other	31

Table 5

Check Each Ultimate Application of the Models with Which You Currently Work or Are Most Interested in as a Vendor, Consultant, Auditor, or Academic

Ultimate Model Application	No. of Respondents
Financial Reporting	23
Pricing	16
Risk and ALM	23
Hedging	5
Asset/Reserve Adequacy	15
Capital	14
Corporate Planning	13
Other	12

The group that responded to the survey is involved in a wide variety of modeling work and activities. Model uses include the following:

- Valuation on Multiple Accounting Bases

- Asset Adequacy Analysis

- Solvency and Capital Analysis

- Planning and Forecasting

- Asset Liability Management

- Own Risk and Solvency Assessment (ORSA)

- Policy Illustration and Regulatory Testing

- Pricing and Rate Setting

- Ad-Hoc Analysis

- Dividend Scale Setting

- Underwriting

- Predictive Modeling

- Stress Analysis

- Mergers and Acquisitions (M&A)

Modeling functions include the following:

- System Conversion

- Model Development and Maintenance

- Validation, Audit and Review

- Assumption Setting

- Scenario Generation

FUTURE TOPICS OF INTEREST

The most informative questions were related to topics of interest for our members. The Modeling Section Council has been reviewing the responses and reaching out to individuals willing to speak on these areas of interest. As seen in the following table, the top choices were Model Validation, Modeling Best Practices, Model Governance, Assumption Development, and Data Management; however, many other areas of interest are being explored as special interest topics as well.

Check All Topics That Most Interest You for Future Articles/ Presentations

Future Topic Interests	No. of Respondents
Model Governance and Controls	138
Data Management	111
Best/Leading Practices on Modeling (Including ASOPs)	141
Model Efficiency—Cell Reduction	98
Model Efficiency—Scenario Reduction	83
Model Validation	160
Assumption Development	110
Production Modeling	70
Product-Specific Modeling Challenges	79
Mortality/Longevity Modeling	47
Scenario Generation	73
Predictive Modeling	101
Other	7

The first survey was a success because of the thoughtful responses of our members. For those of you who provided contact information during the survey, we appreciate your willingness to volunteer your time and knowledge to speak at meetings or write articles to help us make this a successful section. For anyone who did not respond but would like to volunteer or offer additional suggestions for topics of interest, please contact a member of the Modeling Section Council. The list of the section members can be found under the SOA Modeling Section webpage: https://www.soa.org/Professional-Interests/modeling/2015-modeling-leadership.aspx. We are so excited for the future of this section and in bringing more insights into the fascinating world of Actuarial Modeling. ■

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