Research Call for Proposals

**Cross impact between Predictive Analytics and Actuarial Transformation initiatives**

BACKGROUND and PURPOSE

As the insurance industry gears-up to embrace the US GAAP Long Duration Targeted Improvements (LDTI) and/or IFRS 17, a lot of actuarial organizations are using this as an opportunity to transform and modernize their technology infrastructure and data processes. Some of the companies which had realized the value of actuarial modernization early-on have already made good progress in this regard while others started late.

Simultaneously, the rise of Predictive Analytics and/or Artificial Intelligence increase the need for further modernization of the data used by analytical department.

There are multiple paths that an organization could take to achieve the state objectives. Identifying the industry best practices will help late starters, smaller organizations in setting-up standards to accelerate the process.

This project seeks to commission a survey to identify what actuarial organizations across the insurance industry are undergoing to modernize their actuarial organization. Some of the key questions should be addressed include:

* What are the technology solutions being used to modernize the actuarial process, data platform?
* What is the actuarial process being prioritized in actuarial modernization journey?
* Is actuarial modernization driven by companies’ technology or business? Is actuarial modernization included as part of broader Enterprise or Finance organization modernization?
* Do people or operating model need also to be modernized along with technology and processes?
* Are there any standard data models being used; how do these vary by lines of business?
* Did the rise of predictive analytics and artificial intelligence change initial designs?
* Do companies uncover synergies between the financial reporting needs and the predictive analytic needs?

The survey should include select interviews with participants and be distributed to various professionals, including company and consulting actuaries, executives, mid-level associates and others.

RESEARCH OBJECTIVE

The Actuarial Innovation & Technology Steering Committee (AITSC) is seeking researchers to produce a report highlighting where various actuarial organizations are in their efforts to transform/modernize the data sources, pipelines, streamlining of their valuation and/or their predictive analytic processes. This report should provide a comprehensive framework to capture the transformation/modernization life-cycle holistically, highlight the industry best practices, bottlenecks, obstacles, learning – technology, process and people related – at each stage and then compare the journey of various organizations w.r.t. the developed framework.

PROPOSAL

To facilitate the evaluation of proposals, the following information should be submitted:

1. Resumes of the researcher(s), including any graduate student(s) expected to participate, indicating how their background, education and experience bear on their qualifications to undertake the research. If more than one researcher is involved, a single individual should be designated as the lead researcher and primary contact. The person submitting the proposal must be authorized to speak on behalf of all the researchers as well as for the firm or institution on whose behalf the proposal is submitted.
2. An outline of the approach to be used (e.g. literature search, model, survey, interviews etc.), emphasizing issues that require special consideration. Details should be given regarding the techniques to be used, collateral material to be consulted, reusability and possible limitations of the analysis.
3. A description of the expected deliverables and any supporting data, tools or other resources. Consideration should be given to the preference for externalized data that can be included in the AITPSC’s data repository.
4. Cost estimates for the research, including computer time, salaries, report preparation, material costs, etc. Such estimates can be in the form of hourly rates, but in such cases, time estimates should also be included. Any guarantees as to total cost should be given and will be considered in the evaluation of the proposal. While cost will be a factor in the evaluation of the proposal, it will not necessarily be the decisive factor.
5. A schedule for completion of the research, identifying key dates or time frames for research completion and report submissions. The AITPSC is interested in completing this project in a timely manner. Suggestions in the proposal for ensuring timely delivery, such as fee adjustments, are encouraged.
6. Other related factors that give evidence of a proposer's capabilities to perform in a superior fashion should be detailed.

SELECTION PROCESS

The AITPSC will appoint a Project Oversight Group (POG) to oversee the project. The AITPSC is responsible for recommending the proposal to be funded. Input from other knowledgeable individuals also may be sought, but the AITPSC or POG will make the final recommendation, subject to SOA leadership approval. SOA will provide staff actuarial support to develop and publish the final material.

**Questions**

Any questions regarding this RFP should be directed to David Schraub, SOA Senior Research Actuary (phone: 847-706-3560; email: dschraub@soa.org)

Notification of Intent To Submit Proposal

If you intend to submit a proposal, please e-mail written notification by July 16, 2021 to Korrel Crawford (kcrawford@soa.org).

SUBMISSION OF PROPOSAL

Final proposals for the project should be sent via e-mail by July 30, 2021 to Korrel Crawford at kcrawford@soa.org.

**Note: Proposals are considered confidential and proprietary.**

Conditions

The selection of a proposal is conditioned upon and not considered final until a Letter of Agreement is executed by both the Society of Actuaries and the researcher.

The SOA and AITPSC reserve the right to not award a contract for this research. Reasons for not awarding a contract could include, but are not limited to, a lack of acceptable proposals or a finding that insufficient funds are available. The SOA and AITPSC also reserve the right to redirect the project as is deemed advisable.

The SOA and AITPSC plan to hold the copyright to the research and to publish the results with appropriate credit given to the researcher(s).

The SOA and AITPSC may choose to seek public exposure or media attention for the research. By submitting a proposal, you agree to cooperate with the SOA and AITPSC in publicizing or promoting the research and responding to media requests.

The SOA and AITPSC may also choose to market and promote the research to members, candidates and other interested parties. You agree to perform promotional communication requested by the SOA and AITPSC, which may include, but is not limited to, leading a webcast on the research, presenting the research at an SOA meeting, and/or writing an article on the research for an SOA newsletter.