

## Article from

## **Predictive Analytics and Futurism**

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## Back to the Futurism

By Ben Wolzenski

he Society of Actuaries once had a Futurism section; that section has seen its name changed twice in the past seven years, but Futurism has remained part of its name, through Forecasting and Futurism to Predictive Analytics and Futurism. A major reason lies in the persistent utility of a technique whose origins date to the middle of the last century, and which rightfully falls under the heading of Futurism: the Delphi method.

The Delphi method (or technique) is an interactive forecasting method that relies on a panel of experts who are provided anonymous feedback to their answers to a series of questions in multiple "rounds." It has been found particularly useful where other, traditional forecasting techniques have struggled. Knowledge about, and assistance in using, the Delphi method has, within the SOA, always resided in the section with Futurism as part of or its entire name. Way back in the 1940s the Army Air Force wanted a forecast of the future effect of technology on warfare. Existing forecasting methods were found to be inadequate. Project RAND was established, which led to the creation of the non-profit RAND Corporation in 1948 and the Delphi method during the 1950s. It has been used for scientific and technology research since the 1960s, and for other fields such as public policy research since the 1970s.

The first recorded use of the Delphi method by the Futurism section was the 1989 Delphi Project, in which members of the Futurism section were asked about "a number of important issues and changes facing our profession and the industry." Participants were asked to opine on what would "most likely be the situation in the year 2000." This led to the development of a "Standard Scenario" for the "Actuarial World of the Year 2000." Among other things, that report predicted that, "Actuaries, still almost exclusively employed by insurance companies and consulting firms, will be faced with more stringent professional standards of conduct ... " and that "... all in all, actuarial training will be much the same as in 1989."

The Futurism section sponsored its second Delphi study in 1999 called "Delphi Study 2000." This time there were 25 multiple-choice questions "on varied topics of interest to actuaries" who were "asked to make estimates of future values 10 years from now (2010) and 50

years from now (2050). When the results were published, a media kit was sent to journalists. *The Wall Street Journal* put a business bulletin about it on its front page, and then dozens of articles in the lay and industry press picked up the story. Among the best 2010 predictions were the improvement in mortality and growth of life insurance in force in the U.S.; the worst prediction failed to anticipate the substantial drop in AIDS mortality.

Then in 2005, the Futurism section and the Investment section joined SOA committees to publish "A Study of the Use of the Delphi Method, A Futures Research Technique for Forecasting Selected U.S. Economic Variables and Determining Rationales for Judgments." The selected variables were the annual increase in the Consumer Price Index, 10-Year Treasury spot yields, the S&P 500 total rate of return, and Corporate Baa spot yields. In addition to producing forecasts for the year 2024, the publication contained a list of the events that Delphi panelists thought were mostly likely to influence the outcomes and a blueprint for conducting future Delphi studies.

Another threshold was crossed in 2009 with the publication of "Blue Ocean Strategies in Technology for Business Acquisition by the Life Insurance Industry," co-sponsored by the Futurism, Technology and Marketing and Distribution sections. This was the first SOA Delphi study to ask its panel of experts (most of whom were not SOA members) to answer essay questions. After three rounds of questions and responses, the strategies foreseen ranged from the mundane "paperless processing" to the ethereal "virtual world insurance."

Most recently, 2014 saw the publication of "Land this Plane": How the U.S. should deal with the pending LTC crisis, sponsored by the LTC Think Tank and the Forecasting and Futurism section. The objective was no less than producing a consensus about how America should deal with the pending LTC crisis with a comprehensive, integrated solution. Thanks to its members and contacts, the LTC Think Tank recruiting an outstanding panel of experts from the industry, academia, public policy organizations and the SOA. The final report identified six principles for addressing the crisis.

By the time of this newsletter publication, the newly renamed Predictive Analytics and Futurism section will have sponsored a real time Delphi session at the SOA Annual Meeting. Futurism continues to be relevant to actuarial work; our section expects that to continue, into the future.



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