



Article from

Forecasting and Futurism

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Forecasting & Futurism's Article Anthology

By Dave Snell

Issue	Date	Page	Author	SOA Member	Article	Comments
1	9/2009	3	Dave Snell	Y	Forecasting & Futurism Newsletter —A New Name and a New Dimension for Our Section	overview of the issue, with editorial on reason for the new name of the section
		5	Ben Wolzenski, Alan Mills	Y,Y	Introducing the New Forecasting and Futurism Professional Interest Section	new mission of the new section
		6	Alan Mills	Y	Introduction to Forecasting Methods for Actuaries	comparison of various forecasting methods (including predictive modeling)
		10	Scott McInturff	Y	The Delphi Method	detailed description of Delphi method with an actual case study
		17	Alan Mills	Y	White, Gray and Black Swans-Identifying, Forecasting and Managing Medical Expenditure Trend Drivers in a Complex World	tail events: identifying and predicting them
		22	Dave Snell	Y	Fortune's Formula: The Untold Story of the Scientific Betting System That Beat the Casinos and Wall Street—by William Poundstone	dangers of implicit belief in mathematical models
		23	Alan Mills	Y	Should Actuaries Get Another Job? - Nassim Taleb's Work and Its Significance for Actuaries	why forecasts fail, and how to avoid the classic mistakes
2	7/2010 ¹	3	Dave Snell	Y	Judgmental Methods, Collaboration, Contests and More!	overview of the issue, and editorial on judgmental forecasting methods
		5	Alan Mills	Y	Want to Win an iPad?	forecasting contest
		6	Alan Mills	Y	Best Methods and Practices in Judgmental Forecasting	summary of types of bias, and comparison of various judgmental forecasting results
		14	Ben Wolzenski	Y	Future Opportunities in the Life Insurance Industry—Views of a Delphi Study	summary of the extensive (250+ page) F&F Blue Ocean Delphi study
		19	Scott McInturff	Y	The Wisdom of Crowds by James Surowiecki	review of book explaining that crowds can often give more accurate predictions than experts
		23	Dave Snell	Y	Complexity: A Guided Tour by Melanie Mitchell, Ph.D.	review of intro book on complexity sciences
		25	Mike Lindstrom	Y	Forecasting Judgment: The Netflix Prize and Collaborative Filtering	discussion of models to predict preferences of movie rental customers

CONTINUED ON PAGE 50

Issue	Date	Page	Author	SOA Member	Article	Comments
		27	John L. Petersen	N ²	A New End, A New Beginning - Preparing for Life as We Don't Know It	a futurists view of how we need to change our thinking to embrace the future
		32	Ben Wadsley	Y	Living with Actuarial Black Swans—a Discussion with Nassim Nicholas Taleb	Taleb's views of the futility of predictive models
3	7/2011	3	Dave Snell	Y	Look! Up in the Sky! It's Super Actuary!	issue overview and an editorial on the need for cross-functional perspectives
		5	Ben Wadsley	Y	Moving the Ball Forward	advantages of volunteering
		6	Ben Wadsley	Y	Are Genetic Algorithms Even Applicable to Actuaries?	genetic algorithms used to determine optimal bond portfolio mix
		12	Min Deng	Y	Complexity Science Enters the Actuarial Classrooms	description of complexity science classes at Maryville University
		14	Doug King	Y	Judgmental Forecasting in Determining Policyholder Behavior Assumptions	judgmental forecasting and dynamic lapse assumptions
		16	Frank Grossman	Y	An Alternate View of Future Mortality	reasons why mortality may not continue to improve
		18	Scott McInturff	Y	The Perfect Swarm: The Science of Complexity in Everyday Life By Len Fisher	book review of book on swarm intelligence (locusts, ants, bees)
		22	Dave Snell	Y	Complexity Sciences—Simplified!	short descriptions of deterministic chaos, behavioral economics, predictive modeling, fractal geometry, genetic algorithms, network theory, cellular automata
4	1/2012	3	Dave Snell	Y	Actuaries: Do We Know Our Limits?	how to recognize and extend our limits in modeling and forecasting
		5	Ben Wadsley	Y	Volunteerism is Rewarding!	benefits of volunteering
		6	Donald Krouse	Y	Exploring, Growing, Learning ...	basic applications of complexity
		7	Ben Wolzenski	Y	Delphi Studies Past, Present and Future	predictions from an SOA F&F Delphi study from 2004 are compared with amazing results
		12	Charles Brass	N ²	Investigating the Future: Lessons from the "Scene of the Crime"	how a futurist is like a crime scene investigator (CSI)
		16	Frank Grossman	Y	Hidden in Plain Sight	anamorphoses - looking at problems from different perspectives
		18	Dave Snell	Y	Standing Room Only! Complexity Grows at Annual Meeting	four sessions on complexity sciences get packed attendance
		21	Ben Wadsley	Y	F&F 2nd Annual iPad 2 Forecasting Competition	contest competition problem and rules - civilian unemployment rate

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		23	Dave Snell	Y	When Algebra Gets Chaotic	how deterministic chaos can surface in a seemingly simple equation
		27	Brian Grossmiller	Y	Linked: How Everything Is Connected to Everything Else and What It Means for Business, Science, and Everyday Life by Albert-Laszlo Barabasi	book review on network theory
5	7/2012	3	Dave Snell	Y	"What's in a Name?"	new names gaining popularity: complexity sciences, predictive modeling, etc.
		5	Donald Krouse	Y	Future = Unknown = Risk = Opportunity	thoughts from Life & Annuity Symposium
		6	Brian Grossmiller	Y	Artificial Intelligence: What Is It and How Can I Use It?	key definitions of AI and a source for more education
		8	Richard Xu	Y	How to Win an iPad2	refresher on regression and time series models
		12	Donald Krouse	Y	Challenging Old Paradigms—What Are You Going to Do?	retirement schemes - how to plan for your retirement
		16	Kurt Wrobel	Y	The Actuarial Profession and Complex Models: Knowing the Limits of Our Knowledge	changes in the business environment have impacted our ability to ensure that our organizations make appropriate decisions
		20	Ben Wolzenski	Y	Growing Artificial Societies: Social Science from the Bottom Up, by Joshua M. Epstein and Robert Axtell	a description of Sugarscape - one of the first examples of active agent modeling
		21	Dave Snell	Y	Bad Science, by Ben Goldacre	a good primer on how clinical studies should and should not be conducted; and on how statistics are used and misused to manipulate public opinion
6	12/2012	3	Dave Snell	Y	Sugar and Spice, and Everything Nice!	issue overview and link to the infamous Target predictive modeling debacle
		5	Clark Ramsey	Y	The Times They Are A-Changin'	summary of F&F accomplishments during the year
		7	Dave Snell	Y	Genetic Algorithms—Useful, Fun and Easy!	genetic algorithms with minimal genetics
		17	Min Deng, Guangwei Fan	Y	Actuarial Communication at a University	written and oral communication classes for actuaries
		19	Brian Grossmiller	Y	Futurism in the Workplace	futurism tools: Delphi, Cross-Impact Analysis, Decision Modeling, Environmental Scanning, Futures Wheel, Gaming and Simulation, Relevance Trees, Scenarios, System Dynamics, Trend Impact Analysis, Visioning

CONTINUED ON PAGE 52

Issue	Date	Page	Author	SOA Member	Article	Comments
		25	Ben Wolzenski	Y	Artificial Society Modeling with Sugarscape	Insurance application of Sugarscape, from Growing Artificial Societies
		28	Mark S. Dion	N ³	Predictive Modeling, A Life underwriter's Primer	Predictive Modeling from the perspective of a life underwriter
		36	Glenda Maki	N ⁴	What Is Complexity Science?	Interview with six complexity science pioneers
7	7/2013	3	Dave Snell	Y	"If I only had a brain"	issue overview and sources for education on artificial intelligence
		6	Jeff Heaton	N ⁵	Bayesian Networks for Predictive Modeling	an introduction to Bayesian Networks and how to train them for predictive modeling
		12	Richard Xu	Y	Predictive Modeling	Predictive Modeling: basics of PM and types of models in common use
		18	Brian Grossmiller, Doug Norris	Y,Y	Hidden Markov Models and You	putting Hidden Markov Models to work solving insurance problems
		24	Clark Ramsey	Y	Dark Side of the Moon	essay on how the new complexity science tools are like being able to finally see the dark side of the moon
		26	Scott McInturff	Y	The Signal and the Noise: Why So Many Predictions Fail—but Some Don't - by Nate Silver	review of book on the techniques of Nate Silver, a forecaster of amazing accuracy
		28	Ben Wolzenski	Y	Delphi Study 2000—Predictions for 2010 and 2050	Delphi study where the prediction for total life insurance in force was correct (in trillions of dollars) to two decimal places!
		30	Alberto Abalo	Y	Forecasting & Futurism Third Annual iPad Contest: Build a Genetic Algorithm	rules for the F&F genetic algorithm contest
		32	Jon Deuchler	Y	Global Trends 2030: Alternative Worlds - Report by the National Intelligence Council summary	several scenarios of the future, from a coalition of 17 U.S. government agencies
		33	David Wheeler	N ⁶	Behavioral Economics: Implications for Actuarial Science and Enterprise Risk Management	how the human mind can be tricked into jumping to CONCLUSIONS vs GQNSLHSIQNS
		35	Mike Lindstrom	Y	The 10th Speculative Fiction Contest Forecasting and Futurism Section Prize Winner - The Weight Of Certainty—Selected Stories Of Steve Mathys	fiction from the winner of the actuarial speculative fiction contest
		36	Darrick Fulton	N ⁷	Spreadsheet Controls ... How to Prevent a Fire	A CPA and Auditor discusses prudent controls to manage spreadsheets
		38	Dave Snell	Y	I Held a Human Brain!	educational opportunities for actuaries - both distance learning and very hands on local opportunities
8	12/2013	3	Dave Snell	Y	Embrace the Future—But Beware the Smug	essay on the need to keep the classical tool set even though the new complexity tools seem shiny and great

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		7	Alberto Abalo	Y	The Future Ain't What It Used to Be	what newborn son can teach us about the need for insurance and proper risk management
		9	Ben Wolzenski	Y	A Return Visit to the Sugarscape	When you give the model a mind of its own, you might be surprised by its thoughts!
		12	Brian Grossmiller, Doug Norris	Y,Y	Hidden Markov Models and You, Part Two	a really deep dive into the intricacies of Hidden Markov Models
		24	Jeff Heaton	N ⁵	A NEAT Approach to Neural Network Structure	Neuroevolution of Augmenting Topologies (NEAT) - what it is and how it is useful
		30	Richard Xu	Y	Predictive Modeling in Insurance: Modeling Process	flow diagram of the predictive modeling process ... and an example application
		35	Ben Wolzenski	Y	"Land This Plane"—A Delphi Study about Long-Term Care in the United States	Only 10% of Americans 50+ have LTC coverage - Delphi study to find solutions
		40	Paula Hodges	Y	Delphi Study in Real Time—Life and Annuity Products and Product Development	Delphi study with new twist: instant feedback and quick path to next round
		41	Dave Snell	Y	Genetic Algorithms Revisited—A Simplification and a Free Tool for Excel Users	article describes a free Excel workbook that gives you a genetic algorithm shell
		46	Alberto Abalo, Doug Norris	Y	And the Winner Is ...	Jeff Heaton wins iPad for best genetic algorithm (next article)
		47	Jeff Heaton	N ⁵	Diagnosing Breast Tumor Malignancy with a Genetic Algorithm and RBF Network	uses genetic algorithm to devise a radial basis function and predict malignancy of breast tumors
		51	Steve Epner	N ⁸	Are Spreadsheets Sabotaging Your Accuracy?	spreadsheets may be everywhere; but we must learn to control and manage them.
9	7/2014	3	Dave Snell	Y	If More Precision Is Always The Answer, Have We Forgotten The Question?	issue overview and discussion of precision vs. accuracy
		7	Alberto Abalo	Y	What's In A Name?	discussion of the section name and what it means
		8	Geof Hileman	Y	Roughly Right	discussion of the dangers of precision
		10	Charles Brass	N ²	The Past Is No More Certain Than The Future - Decision-Making In The Face Of Unavoidable Uncertainty	one crime, two unanimous jury decisions - except they don't agree!
		14	Doug Norris	Y	Forecasting & Futurism Fourth Annual Contest: How do YOU Forecast?	contest rules for the 2014 forecasting contest

CONTINUED ON PAGE 54

ARTICLE ANTHOLOGY ... | FROM PAGE 53

Issue	Date	Page	Author	SOA Member	Article	Comments
		17	Jeff Heaton	N ⁵	An Introduction to Deep Learning	intro to the machine learning approach made famous by IBM's Watson
		22	Richard Xu, Dihui Lai	Y, N ⁹	Big Data in Life Insurance: Does it exist? If so, how should we handle it?	ways to deal with the mounting challenges of capacity and speed as data scales up rapidly in size.
		26	Ben Wolzenski, Ron Hagelman	Y, N ¹⁰	A Conversation About the Delphi Study on Long-Term Care Financing Solutions	discussion of a collaboration with LTC section and non-actuaries
		28	Dave Snell	Y	Warm and Fuzzy ... And Real!	part one of a primer on Fuzzy (versus classical Boolean, or 'crisp') logic
		35	Jeff Heaton	N ⁵	Fuzzy Logic in R	example of how fuzzy logic can be utilized in R
10	12/2014	3	Dave Snell	Y	Master of Accurate Calculations ... Really?	issue overview and editorial on the need to embrace new forecasting tools or risk obsolescence
		6	Doug Norris	Y	Five Years Is A Lifetime - (Personal Forecasting)	summary of the rapid rate of changes impacting actuaries and their opportunities
		8	Ben Wolzenski	Y	Predictably Irrational, by Dan Ariely - The Hidden Forces that Shape our Decisions	review of best selling Behavioral Economics book, with chapter-by-chapter synopses
		12	Kurt Wrobel	Y	Risk Management and the Power of Simplicity	reprint from <i>The Actuary</i> on dangers of overreliance on models - particularly complex models
		15	Brian Holland	Y	Unsupervised Methods: An Overview for Actuaries	application of dimension reduction techniques to better visualize data clusters and facilitate predictive models
		22	Richard Xu, Dihui Lai	Y, N ⁹	Predictive Modeling Series: Data Clustering and Its Application in Insurance	introduction to predictive modeling clustering procedures and the associated feature extraction, proximity measures, and risk segmentation
		26	Geof Hileman, Claire Bobst	Y, N ¹¹	A Nearest Neighbors Approach To Risk Adjustment	using R to perform k-nearest neighbors analysis for health risk adjustment models
		31	Jeff Heaton	N ⁵	Agent Based Modeling With RePast Py	how to create a simple agent based model with the Recursive Porous Agent Simulation Toolkit (RePast) for Python
		36	Jeff Heaton	N ⁵	Modeling With Python and Scikit-Learn	ScikitLearn examples of basic linear regression, decision trees generation, and visualization
		41	Doug Norris	Y	Parables And Prophecies Prevent Proper Predictive Prowess (human biases in forecasting)	description of human biases and how they influence of predictions ... also mitigation ideas
		44	Dave Snell	Y	Warm and Fuzzy ... and Real! – Part 2	second part (with underwriting examples and R code) of primer on Fuzzy Logic
		51	F&F Council	Y	Forecasting & Futurism 4th Annual Contest	rules and criteria for the F&F Predictions and Forecasting contest

Issue	Date	Page	Author	SOA Member	Article	Comments
11	7/2015	3	Dave Snell	Y	Forecasting & Futurism – “One of the Best Kept Secrets of the SOA”	issue introduction with summaries of all articles - theme is behavioral economics
		7	Doug Norris	Y	Can't Win for Losing	chairperson article - describes winner's curse
		9	Ben Wolzenski	Y	Review: Why Smart People Make Big Money Mistakes and How to Correct Them: Lessons from the New Science of Behavioral Economics, by Gary Belsky and Thomas Gilovich	book review of behavioral economics book
		13	Tyson Mohr	Y	Review: Thinking Fast & Slow, by Daniel Kahneman	book review of behavioral economics book
		17	Mary Pat Campbell	Y	What I've Learned from the Good Judgement Project	summary of predictive modeling project under Office of Anticipating Surprise
		23	Brian Holland	Y	SVD of Weighted or Missing Data	how to use singular value decomposition when dealing with weighted or missing data
		25	Shea Parkes, Brad Armstrong	Y, Y	Calibrating Risk Score Model with Partial Credibility	description of ridge regression and its usage with specific portion of a larger data population
		30	Richard Xu, Dihui Lai, Minyu Cao, Scott Rushing, and Tim Rozar	Y	Appendix B: How to Build a Model	a single appendix from the research paper: Lapse Modeling for the Post-Level Period – a Practical Application of Predictive Modeling
		36	Doug Norris	Y	Simple Rating Systems: Entry-level sports forecasting	an intuitive approach to predictive modeling using progressive layers of sophistication
		40	Bryon Robidoux	Y	Stepping Out	an actuary's perspective on the 2015 Predictive Analytics World (PAW) conference
		43	Jeff Heaton	N ⁵	What Big Data is, and How to Deal with It	tools and techniques (e.g., Vowpal Wabbit) for processing Big Data
		46	Charles Tsai	Y	A 'Hot Date' with Julia: Parallel Computations of Stochastic Valuations	description of a programming language with inherent parallel processing capability
		49	Dave Snell	Y	Index of all F&F articles: September, 2009 through July, 2015	this anthology



Dave Snell

ENDNOTES

- ¹ Electronic Only
- ² Futurist
- ³ Underwriter
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