

SUMMARY**ERM THOUGHT LEADER**

Globally-recognized ERM thought leader with 30 years of experience in measuring and managing risk, with broad functional experience, deep technical knowledge and experience in variety of sectors and geographies

SKILLS

Leadership • Business management • People management, training & development • Communication skills
Quantitative / modeling • Innovative problem-solving • Project management

EXPERIENCE

Industry – corporate *and* business segment
Consulting – within various cultures: management consulting, audit, brokerage and pension consulting

EXPERTISE

Enterprise Risk Management • Value-Based Management • Strategic Planning • M&A
Capital Management • Balanced Scorecards • Change Management • Retail Financial Planning

MARKET SECTORS

Insurance • Banking • Credit Cards • Technology • Consumer Goods • Biotech • Telecomm • Hospitality
Energy • Services • Timberland • Education & Research • Non-Profits • Government Agencies

ERM QUALIFICATIONS

- Author of *Corporate Value of Enterprise Risk Management* (Wiley, March 2011), adopted as required reading on the syllabi of the SOA and leading universities in such countries as the U.S., Canada, the U.K., Australia, China (the book has been translated into Chinese), Italy, Croatia, and Egypt.
- Director of ERM Programs at Columbia University, 2014 – present
- Host of *Risk Radio*[™], a weekly radio show featuring ERM discussions and interviews, 2011-present
- Inaugural chair of Risk committee of Society of Actuaries (SOA), leading ERM program, 2009–2011
- Recognized for pioneering *value-based ERM* – a synthesis of ERM and value-based management
- One of 40 awarded CERA for “thought leadership and significant contributions to the practice of ERM”
- Chief editor, *Risk Management* (quarterly international ERM publication), 2008–2009
- Professional speaker, author of articles, and source of media quotes on ERM
- Member, SOA faculty for ERM credentialing seminar (CERA EPP), 2008-2009
- Member, Syllabus committee for SOA ERM exam (AFE/ERM), 2008
- Member, ERM Symposium Program committee, 2007–Present
- Member, International ERM Credential working group, 2008

EXPERIENCE

2010 – Present	SimErgy Consulting, President and Founder
2014 – Present	Director of ERM Programs, Columbia University
2008 – 2010	Towers Watson (formerly Watson Wyatt), US Leader of ERM Services, IFS Practice
2007 – 2008	Aon Corporation, Managing Director, Global Risk Consulting – ERM Practice
2002 – 2007	Deloitte Consulting, Senior Manager, Actuarial & Insurance Solutions
2001 – 2002	First Manhattan Consulting Group, Senior Engagement Manager, Insurance Practice
1985 – 2001	MetLife, Assistant Vice President and Actuary

EXPERIENCE

2010 – Present SimErgy Consulting New York, NY
 President and Founder

- Consulting firm specializing exclusively in enterprise risk management (ERM)
- Assists clients in a variety of industry sectors in implementing and advancing all aspects of their ERM programs, including:
 - Risk identification (risk categorization and definition; qualitative risk assessment; and emerging risk identification)
 - Risk quantification (building quantitative ERM models; developing risk scenarios using the Failure Modes and Effects Analysis (FMEA) technique; quantifying individual and enterprise risk exposures)
 - Risk decision making (defining risk appetite and risk limits; managing exposures to within risk tolerances; integrating ERM into routine decision making including strategic planning, strategic and tactical decision making, and transactions)
 - Risk messaging (integrations ERM into (a) internal communications; (b) business performance analytics; (c) incentive compensation; and (d) communications to external stakeholders, including investors, rating agencies, and regulators)
 - Risk framework (design of ERM program activities, processes, and interactions)
 - Risk governance (roles and responsibilities; organizational structure; and policies/procedures);
- Hosts Risk Radio – a weekly radio show featuring interviews and discussion on ERM-related topics; in first 3 years, grew audience to over 500 registered listeners
- Hosts SimErgy ERM Boot Camp, an annual executive training seminar
- Conducts ERM research studies

2014 – Present Columbia University New York, NY
 Director of ERM Programs

- Responsible for development and implementation of ERM Masters curriculum, ERM Certificate, and executive education programs, including designing content and recruiting professors
- Supporting marketing efforts to employers and directly to potential students

2008 – 2010 Towers Watson (formerly Watson Wyatt) New York, NY
 US Leader of ERM Services, IFS Practice

- Responsibilities: Product development; marketing; sales; project management; eminence-building
- Watson Wyatt CEO adopted my ERM approach for global expansion into non-financial services sector, significantly expanding my role beyond U.S. insurance market
- Trained consulting staff in U.S., U.K and China on enterprise risk management tools and techniques
- Watson Wyatt Board of Directors hired me to implement ERM for Watson Wyatt itself
- Directed ERM issue of global research publication “Horizons,” successfully published Dec 2009
- Significantly enhanced Watson Wyatt presence in ERM market through general and target marketing, including \$132K of free full-page advertising in Harvard Business Review and CFO magazine

2007 – 2008 Aon Corporation New York, NY
 Managing Director, Global Risk Consulting – ERM Practice

- Responsibilities: Product development; marketing; sales; project management; eminence-building
- Developed enterprise risk management service offering for all sectors of U.S. market
- Member of global team to evaluate technology vendors’ capabilities in enterprise risk management
- Sold and led engagements in several sectors, including energy, entertainment, insurance and government

EXPERIENCE (CONTINUED)

2002 – 2007 Deloitte Consulting New York, NY
 Senior Manager, Actuarial & Insurance Solutions

- Responsibilities: Product development; marketing; sales; project management; eminence-building
- Developed ERM service offering for U.S. insurance market; unique value-based approach garnered attention from insurance and non-insurance clients, the SOA and the media
- Successfully adapted value-based ERM approach to penetrate non-insurance sectors, including manufacturing, credit cards, technology and telecommunications; including successfully building internal bridges between departments
- Sold and led numerous engagements, ranging from ERM to embedded value to Sarbanes-Oxley
- Designed and implemented Economic Capital survey of top U.S. insurance companies
- Assisted actuarial portion of GAAP and statutory audit of MetLife
- Developed Deloitte U.S. Point-of-View on embedded value and Economic Capital
- Developed a value-based management approach for a major online bank; achieved first successful global effort to adapt the Deloitte insurance modeling system (Prophet™) for bank products
- Designed and implemented actuarial portion of a financial reporting risk management framework (Sarbanes-Oxley 404) for a top-3 U.S. insurer & audited actuarial portion for another top-3 U.S. insurer
- Led project management of Sarbanes-Oxley 404 project for small insurer, involving 50 people
- Assisted development of industry-leading approach applying actuarial techniques to stochastic retail financial planning, incorporating investment *and* insurance risks and products

2001 – 2002 First Manhattan Consulting Group (FMCG) New York, NY
 Senior Engagement Manager, Insurance Practice

- Developed and sold Economic Capital engagement to a top-5 U.S. health insurer
- Developed and sold customer segmentation and marketing approach to a top-10 U.S. insurer; achieved first successful effort to adapt FMCG banking approach for insurance

1985 – 2001 MetLife New York, NY

2000 – 2001 Assistant Vice President & Actuary, Corporate Actuarial – Pricing and Reinsurance

- Responsibilities: Corporate supervision of Institutional pricing; establish corporate reinsurance unit
- Developed practice standard for reinsurance, including reinsurer risk-assessment
- Performed risk analysis on reinsurer concentration risk; developed consolidated enterprise-wide risk profile (25 MetLife subsidiaries, 500 reinsurers and \$1 trillion in risk)
- Modified corporate policies and procedures for pricing, to reflect proper linkage between Economic Capital, GAAP capital and regulatory capital

1998 – 2000 Assistant Vice President and Actuary, Demutualization / IPO Team

- Led IPO Eligibility team to identify all 14 million policies eligible for voting rights, fixed shares and equity shares; led multi-disciplinary team of 150 people, worked with 80 administrative systems, facilitated three simultaneous audits and led key presentations to the N.Y. Insurance Department

1996 – 1998 Senior Actuarial Associate, Corporate Actuarial – Capital Management

- Assisted implementation of Economic Capital (EC), helping achieve first such successful effort by a U.S. insurer; advised senior management on impacts to key financial metrics; integrated EC into pricing and strategic planning processes; developed and provided training/communications for financial staff

EXPERIENCE (CONTINUED)

- Developed the capital plan and integrated it into the strategic planning process
- Built dynamic strategic planning model, quantifying impact on key financial metrics
- Developed an M&A pricing model to standardize capital treatment enterprise-wide

1985 – 1996 Miscellaneous Assignments

- Worksite Marketing: Devised creative technology-based approach to identify product-channel opportunities with highest profit potential; led successful funding pitch to senior management
- Small Group Medical: Developed an exit strategy for small group medical business, involving state-specific strategy, including financial, legal and logistical implications
- Pensions: Priced option for new GIC-derivative product, facilitating \$25 million in sales; developed PC-based GIC quote system, preventing sales disruption after mainframe crash
- Corporate Actuarial: Developed DAC model for retail universal life product
- Personal Insurance: Developed distribution profitability model to quantify earnings impact of changes to agent compensation; produced sales office profitability model, rolled-out to all 1,000 sales offices

EDUCATION AND CREDENTIALS

- B.A., Mathematics, Wayne State University, Detroit, Michigan, May 1985; 3.96 GPA (*summa cum laude*); merit scholarship of four years tuition; Phi Beta Kappa
- Fellow of the Society of Actuaries (FSA), 1995
- Chartered Enterprise Risk Analyst (CERA), 2007; one of 40 people globally awarded the CERA based on “thought leadership” and “significant contributions to advance the practice” of ERM

BOARD SERVICE HIGHLIGHTS

- Society of Actuaries, 2006 – 2011
 - Vice president, 2009 – 2011
 - Director, 2006 – 2009
- Actuarial Society of Greater New York, 1999 – 2003
 - President, 2002 – 2003
 - President-elect, 2001 – 2002
 - Vice president, 1999 – 2001

INDUSTRY COMMITTEES

- Member, ERM Symposium Planning Committee, 2007 – Present
- Member, Continuing Education Committee, ASNY, 1997 – Present
- Vice Chair of ERM Applications Committee of Canadian Institute of Actuaries, 2012 - 2015
- Inaugural Chair of SOA Risk Committee, leading ERM program design and implementation, 2009-2011
- Vice President, Board of Directors, Society of Actuaries (SOA), 2009 – Present (elected position)
- Inaugural Chair, Risk Committee (implementing ERM for the SOA itself), SOA, 2009 - 2011
- Faculty, CERA Experienced Practitioner Pathway (EPP) Seminar (biannual), SOA, 2008 - 2010
- Editor, *Risk Management* (a quarterly international ERM publication), 2008 – 2009
- Member, Board of Directors, SOA, 2006 – 2009 (elected position)
- Vice Chair, Leadership Development Committee, SOA, 2007 – 2009
- Member, Committee to Redraft Syllabus for Advanced Finance/ERM SOA Exam (AFE), 2008
- Member, International ERM Credential Working Group, 2008
- Member, Strategic Planning Task Force, 2008
- Member, Leadership Development Committee, SOA, 2004 – 2007
- Member, Editorial Board, *The Actuary* (a bimonthly international publication), 2005 – 2006
- Lead Actuary, Advancing Student Achievement at Vanguard HS, Actuarial Foundation, 2004 – 2006
- Chair, Management and Personal Development Section, SOA, 2002 – 2003

- Member, Management and Personal Development Section, SOA, 2001 – 2004 (elected position)
- President, ASNY (largest actuarial club in the world), 2002 – 2003 (elected position)
- Vice President – Continuing Education, Board of Directors, ASNY, 1999 – 2001 (elected position)
- Supervisor and Proctor for several SOA exams, 1997 – 2005
- Member, Committee to Draft F590 SOA Exam, 1997

PUBLISHED ARTICLES AND RESEARCH (PARTIAL LIST)

- Research study: *Front-Page Risks: Risks Commonly Occurring and Reported in the Canadian News*, a joint publication of the Casualty Actuarial Society, the Canadian Institute of Actuaries, and the Society of Actuaries, Apr 2015
- Research study: *Regulatory Risk and North American Insurance Companies: A Company Perspective*, a joint publication of the Casualty Actuarial Society, the Canadian Institute of Actuaries, and the Society of Actuaries, Feb 2015
- *Top 10 Questions Boards Should Ask About Enterprise Risk Management*, Carrier Mgmt, Jun 12, 2014
- Cover Story: *How Model Risk Devastated an Organization*, The Actuary magazine, Jun-Jul 2013
- Research study (co-authored): *Risks & Mitigation for Health Insurance Companies*, commissioned by Society of Actuaries, Jan 2013
- *ERM Framework for Decision Making*, commissioned by Society of Actuaries, Jan 2013
- *Margin Call is a Whitewash*, Forbes, Oct 26, 2011
- *The Fed's Stress Tests Are No Good*, Forbes, Dec 1, 2010
- *Viewpoint: Stress Tests Miss Many Bank Risks*, American Banker, Aug 31, 2010
- *Sleeping Under A TARP With One Eye Open*, Forbes, July 6, 2010
- *IMPACT Study: Focusing on Risks That Matter to You...and to the Media*, Horizons: A Global View of Enterprise Risk Management, Watson Wyatt publication (global distribution), Dec 2009 (coauthor)
- *Rethinking the Role of Stock Analysts*, Horizons: A Global View of Enterprise Risk Management, Watson Wyatt publication (global distribution), Dec 2009 (coauthor)
- *Risk Identification: A Critical First Step in Enterprise Risk Management*, Risk Management, Aug 2008
- *A Higher Level of Abstraction* (Editorial), The Actuary, Dec 2006
- *Unlocking the Value in Economic Capital*, Deloitte publication (global distribution), Jul 2006 (coauthor)
- *Defining Risk Appetite*, Risk Management, Jul 2006
- *ERM ≠ EC²*, Risk Management, Mar 2006
- *An Actuarial Vision for Homeland Security* (Editorial), The Actuary, Mar 2006
- *Value-Based ERM: The Key to Unlocking ERM Potential*, Corporate Finance Review, Jan 2006
- *Opportunities for Actuaries in Broader Financial Services* (Editorial), The Actuary, Jul 2005
- *Protecting the Future Image of the Actuary* (Editorial), The Stepping Stone, Oct 2004
- *Using Embedded Values for Better M&A Pricing and Management*, Perspectives, a Deloitte publication (global distribution), Feb 2003

BLOG COMMENTS

- New York Times DealBook, *Banks Face Big Test in New Capital Rules* (Heidi Moore), Nov 24, 2010
- Wall Street Journal, *Risk Officers Come in from the Cold* (Peter Davy), Oct 6, 2010
- Forbes, *Sarbox Says: Dodd-Frank Will Fail* (Neil Weinberg), Sep 21, 2010
- Harvard Business Review, *Fail the Stress Test? You're Fired.* (Michael Schrage), Jul 9, 2010

PRESENTATIONS (PARTIAL LIST)

- *Building Buy-In: Case Study on Overcoming the #1 Obstacle to Effective ERM*, CAS Annual Meeting, Philadelphia, Nov 16, 2015
- *Applying ERM Concepts to Cyber Security: Twitter Case Study*, Canadian Institute of Actuaries webcast, Aug 20, 2015
- *Case Study: Keys to Successful ERM Program Design & Implementation*, CIA webcast, Aug 20, 2015
- *ERM Defenses Against Disruption*, SOA Life & Annuity Symposium, New York, May 5, 2015
- *Seminar in Enterprise Risk Management*, Commercial Association of Rio de Janeiro, Columbia University Global Center, Rio de Janeiro, Apr 29, 2015

- *Seminar in Enterprise Risk Management*, Instituto Euvaldo Lodi, FIRJAN, Columbia University Global Center, Rio de Janeiro, Apr 28, 2015
- *Keynote: Applying ERM Technical and Communication Concepts to the Leadership Challenges of Army Acquisition*, Army Acquisition Leadership Preparation Course, Leesburg, VA, Apr 16, 2015
- *ORSA Insights: Requirements, Activities, Expectations, and Challenges*, JRMS webinar, Apr 1, 2015
- *An Overview of Enterprise Risk Management*, H. Wayne Snyder Distinguished Guest Speaker, Sigma Chapter, Gamma Iota Sigma, Temple University, Feb 18, 2015
- *Are We Looking at the Right Risks?*, ERM Symposium, Chicago, Sep 30, 2014
- *ERMAC: Advancing Actuaries Through ERM*, CIA annual meeting, Vancouver, Jun 18, 2014
- *Fourth Annual SimErgy ERM Boot Camp*, New York, Jun 9-10, 2014
- *ERM and ORSA for Insurance Companies*, ACUMEN training seminar, May 27-28, 2014
- *Killer Risks: Torpedoes in the Water*, CAGNY fall meeting, New York, Dec 5, 2013
- *Satisfying the ORSA Requirements*, SOA annual meeting, San Diego, Oct 22, 2013
- *Killer Risks*, CAS In-Focus seminar, Chicago, Oct 1, 2013
- *Risks and Mitigation for Health Carriers*, SOA webinar, Sep 30, 2013
- *ORSA Implementation Challenges*, Canadian Institute of Actuaries, Montreal, Jun 21, 2013
- *Third Annual SimErgy ERM Boot Camp*, New York, Jun 24-26, 2013
- *Building Better Economic Risk Scenarios*, ASNY, New York, May 23, 2013
- *Satisfying the ORSA Requirement*, CEFLI ERM/ORSA Summit, Chicago, May 16, 2013
- *The Risk of Suboptimal Risk Disclosures*, ERM Symposium, Chicago, Apr 23, 2013
- *Satisfying the ORSA Requirement*, ERM Symposium, Chicago, Apr 23, 2013
- *Tailoring the ERM Framework to Fit the Organization*, ASNY Annual Meeting, NY, Nov 28, 2012
- *ERM for Non-Corporate Entities*, ERM Symposium, Washington D.C., Apr 19, 2012
- *ERM Implementation (1-day seminar)*, ERM Symposium, Washington D.C., Apr 18, 2012
- *The 10 Key ERM Criteria*, Canadian Institute of Actuaries webinar, Mar 28, 2012
- *Ten Key ERM Criteria: Best Practices for Benchmarking an ERM Program*, Global ERM Webcast, Dec 7, 2011
- *Killer Risks: Torpedoes in the Water*, SimErgy Webinar, Oct 26, 2011
- *Financial Crisis: A Failure of ERM Theory or Practice?*, SimErgy webinar, Aug 24, 2011
- *Value-Based ERM: A Best Practice Approach*, SimErgy Webinar, Jul 27, 2011
- *Non-Insurance Risks*, Canadian Institute of Actuaries Annual Meeting, Ottawa, Jun 29, 2011
- *Five Keys to Successful Risk Identification*, SimErgy Webinar, June 22, 2011
- *The 10 Key ERM Criteria*, SimErgy Webinar, May 25, 2011
- *Ten Key ERM Criteria: Best Practices for Benchmarking an ERM Program*, ERM Symposium, Chicago, Mar 16, 2011
- *Integrating ERM into Strategic Planning and Company Culture: A Case Study*, ERM Symposium, Chicago, Mar 15, 2011
- *ERM Implementation (1-day seminar)*, ERM Symposium, Chicago, March 14, 2011
- *ERM Management Workshop*, Korean Insurance Institute, Seoul, August 19-21, 2010
- *Quantifying Operational and Strategic Risks*, Canadian Institute of Actuaries, Vancouver, Jun 30, 2010
- *Meeting the Challenge: How to Implement ERM*, Wolters Kluwer Webinar, Jun 22, 2010
- *ERM: The Next Step in the Evolution of Business Management*, Asia-Pacific Development Society, Columbia University, Apr 22, 2010
- *Determining Risk Appetite*, ERM Symposium, Chicago, Apr 14, 2010
- *The Keys to Successful Risk Identification*, ERM Symposium, Chicago, Apr 13, 2010
- *Quantifying Operational and Strategic Risks*, ERM Symposium, Chicago, Apr 13, 2010
- *Quantifying Operational and Strategic Risks*, ERM Symposium Seminar, Chicago, Apr 12, 2010
- *ERM: Protecting Enterprise Value and Preventing Another Financial Crisis*, AACMI, Dec 8, 2009
- *ERM and the Financial Crisis*, Global Best Practices in ERM Webcast, Dec 1, 2009
- *Operational Risk Metrics*, CERA EPP Seminar, Chicago, Nov 19, 2009
- *Actuaries: Risk Is Opportunity*, Columbia University, SOA Outreach Program, New York, Oct 8, 2009
- *Enterprise Risk Management: The Holistic View to Risk Management*, Watson Wyatt Risk and Value Management in Action Seminar, Beijing, Jun 11, 2009
- *Enterprise Risk Management: The Holistic View to Risk Management*, Watson Wyatt Risk and Value Management in Action Seminar, Shanghai, Jun 9, 2009
- *Lessons from the Financial Crisis*, SOA Meeting, Denver, May 18, 2009

- *ERM: The Next Step in the Evolution of Business Management*, ReFocus, Las Vegas, Mar 2, 2009
- *Value-Based ERM: Taking the Next Step*, ABA Insurance Risk Management Conference, Jan 2007
- *Defining Risk Appetite and Enterprise Shock Resistance*, Global Institute for Management, Nov 2006
- *Value-Based Enterprise Risk Management*, LIMRA, Oct 2006
- *ERM Strategies for Insurers: Gaining Credibility*, Deloitte webcast (300 participants), Aug 2006
- *An ERM Framework for Driving Strategic Decisions*, American Strategic Mgmt Inst. (ASMI), Jul 2006
- *A New Approach to ERM Navigates Obstacles*, LOMA, May 2006
- *Advancing Student Achievement*, SOA Presidential Luncheon (1,700 attendees), New York, Oct 2004

MEDIA COVERAGE (PARTIAL LIST)

- Featured as a CERA, ceranalyst.org (current)
- *Inadequate Shareholder Disclosure and Other Killer Risks*, Carrier Management, Jan 15, 2014
- *Talent Risk: A Killer Torpedo?*, Carrier Management, Dec 31, 2013
- *Connecting Risk and Value*, Canadian Institute of Actuaries e-Bulletin, Nov 2012
- *Exploring the ABCs of ERM*, Actuary of the Future Magazine, Nov 2011
- *Marginal Movie Offers Risk Reminder*, CFO Magazine, Oct 2011
- *Enterprise Risk Management – Implementing the Value-Based Approach*, Rough Notes, Jun 2011
- Interview (video), *Enterprise Risk Management for Non-Corporate Entities*, MASH Risk Television, Jun 7, 2011
- Interview, *Enterprise Risk Management - Establishing the Value Proposition*, Rough Notes, April 2011
- Interview (video), *The 10 Key ERM Criteria*, MASH Risk Television, Feb 22, 2011
- Blog comment, StirRisk, Feb 16, 2011
- Quote, *Fast and Loose* (cover story), Global Finance Magazine, Feb 2011
- Interview, *Enterprise Risk Management - Dominating the Conversation*, Rough Notes, Nov 2010
- Interview, *Stress Tests Seen as Too Narrow*, Wall Street Journal, Jun 18, 2010
- Interview (video), *Quantifying Operational and Strategic Risks*, Mash Risk Television, Dec 2009
- Interview, *Pioneer: Creating Something New*, The Actuary, Jun-Jul 2009
- Quote, *S&P Boosts ERM*, Treasury & Risk, Jun 2009
- Interview (video), *Best Practices in Risk Identification*, Mash Risk Television, Jun 2009
- Featured in CERA advertisement, Harvard Business Review (May 2009) & CFO magazine (Mar 2009)
- Interview (video), *World Class Risk Management*, Mash Risk Television, Jun 2008
- Interview (video), *Making Enterprise Risk Management Actionable*, Mash Risk Television, Apr 2008
- Interview, *Subprime Fallout*, Rough Notes, Apr 2008
- Quote, *S&P Considers Enterprise Risk Management Impact*, National Underwriter, Jan 10, 2008
- Quote, *S&P Wants to Bring Enterprise Risk Into Its Ratings*, Financial Week, Oct 22, 2007
- Interview, *Enterprise Risk Management - ERM Certification*, Rough Notes, Oct 2007