Alain Paul Martin

Professional Vitae

- Harvard-MIT-Concordia Trained Leader, Educator and Strategic Advisor
 Meta-Innovation Scientist and Serial Innovator
- Chief Architect, Harvard University Global System™ Experienced Workshop Leader: Co-elevating Team Leadership, Negotiation, Project & Risk Management, Full Innovation Cycle (Ideation, Discovery, Gen. Al, Validation, Acceptance... Delivery)

"Mr. Martin tirelessly invests his energy to leverage his successes and networks into solutions that have a direct, positive impact on the poor... [His] management background and extensive experience in advising global leaders, alongside his motivation to eradicate poverty and its ill effects, qualify him to make a uniquely valuable contribution to addressing inequity on a societal level. With demonstrated skills in entrepreneurship, negotiation, and issue analysis, he is precisely the sort of thoughtful, versatile leader we need to advocate on behalf of the poor and underserved."

Prof. Paul Farmer, Chair, Global Health & Social Medicine, Harvard Medical School (page 4: Pro-Bono Innovations)

"Alain has a long and valued relationship with Teck Metals." Note: 2015 & 2019 praises, in full, at www.eharvard.org/martin

Dr. Rob Stephens, PhD (Nanotechnology), Director, Applied Research & Technology

Teck Resources (Canada's largest diversified resource firm) "Alain [Martin] delivered, over a 4-year period, 'Advanced Project and Risk-Management' workshops to our nuclear project managers and executives at Ontario Power Generation [OPG] ...Including myself, the sessions were taken by approximately 200 OPG project managers, senior engineers and executives. Feedback from all sessions were excellent. Course materials and instruction exceeded all of the requirements established by OPG."

Mark Arnone, V.P. Nuclear Refurbishment, Ontario Power Generation

"[We] are a Canadian trade union with a progressive approach to labour relations. We are strong advocates of Alternate Dispute Resolution and Interest-Based Negotiation... For nearly two years, Mr. Martin has acted as a strategic advisor and a seminar leader, first working with our executive committee, and subsequently with our national board representing 28 branches across the country. The focus of our professional work has been on exemplary leadership, strategy, governance, strategic alliances, interest-based negotiation, conflict resolution and risk mitigation. Although these topics were effectively addressed in the past, Alain Martin was the first to bring to light the intricate dynamics between them with the support of Harvard University Global System's extensive library of templates and roadmaps.

We at APOC are fortunate to work with Alain Martin and delighted to recommend his exemplary leadership and negotiation-excellence seminars, as well as his coaching and consulting services."

Guy Dubois, National President, The Association of Postal Officials of Canada (APOC)

About Alain Paul Martin's book "Harnessing the Power of Intelligence, Counterintelligence & Surprise Events":

"This is an extraordinarily thoughtful and well written book on a topic of great contemporary importance. Its advice is detailed, practical and completely on target."

Professor Warren McFarlan, Harvard Business School

"I have used the framework described in this remarkable book successfully for several years, first, to orchestrate the turnaround of North America's fastest growing casualty-insurance company, and subsequently, to craft a vision and strategic direction of a \$75 billion financial institution."

John Harbour, Former President, Desjardins, and CEO, SAAQ (see Desjardins & SAAQ on page 3 for details) "Alain Martin integrates strategic planning, competitive analysis, and risk management tools into a powerful framework that provides valuable theoretical and practical approaches to strategy formulation and business risk management... [He] shows how the ethical and responsible use of competitive intelligence can prepare an organization for unprecedented changes in the external environment. This practical book is well worth the busy executives' time."

Dr. Peter B. Corr, Senior Vice President, Science & Technology, Pfizer Inc. More feedback at <u>www.eharvard.org/martin</u>



1. Current Mission: Advance leadership and innovation: I lead PDI, a catalyst in co-elevating leadership and collaborative innovation, thanks to a diverse team of scientists, engineers, economists, assistants and clients. We distill the knowledge and best practices of innovation science, leadership, cognitive neuroscience, psychology, organization development, generative AI and system thinking to spearhead innovations that expand the pie; maximize long-term user value, sustainability (SDG/ESG) and bottom-line results. Expertise in facilitating the creation and scaling of high-impact innovations; and delivering webinars and management tools for teams in fields ranging from biotechnology to aerospace, banking, finance, mining, energy, intelligence and security for business and government.

• Leader and Strategic Advisor, pro-bono innovations on 5 continents (see #2 below)

• Chief Architect, Harvard University Global SystemTM (for which PDI is Harvard University's licensee): I led this System's design and a software version, used by Skanska (Finland, Germany, Norway, Sweden, UK) to manage projects (\$1M to multi-billions). The System facilitates the creation of competitive, ecologically sustainable and user-centered products and the acquisition of critical skills in innovation and project management.

• Faculty Chair: I deliver professional-development workshops on co-elevating leadership and collaborative innovation, (idea generation, cross-pollination, structured creativity, discovery (incl. generative AI), logistics, prototyping, strategy, negotiation, development, delivery, leadership) for scientists, engineers, policy makers and team leaders, in English and French (www.eharvard.org/. I also lead intensive leadership workshops for executive and administrative assistants (description & video: www.eharvard.org/EA).

I taught graduate leadership and change-management courses; and delivered hands-on workshops to ASEA,

APO (Asia), Bertelsmann, Cap-Gemini, Engineering Advancement Association (ENAA, Japan), EON, Framingham University, GE-Jet Engines (Canada, France, U.S.), Harvard University, the Ivy-League's Leadership Summit, MD Robotics, Mohammed VI Polytechnic Univ., OCP Group, OPG Nuclear Power, Procter & Gamble, Teck (Applied Research & Technology), Textron Bell Helicopter, UN University (Tokyo), Université du Québec and governments.

2. Pro-Bono Innovations to Eradicate Poverty, Exclusion & the Gender Gap Worldwide

Active in civil society, I strive to eradicate poverty exclusion and the gender gap through innovation and complexity reduction, progressive governance, co-elevating leadership, principled-negotiation and novel partnerships in equitable inclusion, diversity and access to education and funding. I served for 10 years as a director of two Harvard University's alumni clubs. Elected, for 6 years, as a Harvard Business School's club president, I led public-private partnerships and educational events that funded public-health research, high-school students, tsunami victims in Japan and some of the poorest communities (Africa, Canada, Haiti). I led CHEO children's hospital funding, food banks and teamed-up with the French Embassy and Washington's alumni clubs (Chicago, Harvard and Wharton) to support the Red Cross.

Inspired by Drs. <u>Paul Farmer</u> and Jim Kim, I led a Harvard-alumni team that created Partners In Health (pihcanada.org) to harness Canadian generosity. To enable tax-deductible donations, we proposed to incorporate a charitable <u>PIH Canada</u>; yet harness PIH's (Boston) management skills and proximity work, while subjecting Canada-funded projects to independent Canadian auditing. Thus, we proved to the regulator (CRA) the differentiation-integration merits of PIH and PIH Canada: minimizing admin costs and leveraging PIH-proven strategic and field expertise, to maximize the impact on the beneficiaries, by delivering the finest healthcare to the poor; all in compliance with Canada's tax laws.

During the COVID pandemic (2019-2022), I chaired international-foresight panels, including "Antidotes to Exclusion, Disinformation and Inequality", "Preparing for the New Pandemics: Lessons from Science & Policy", and "Sustainable Growth and Scaling through Innovation and Strategic Alliances".

3. Multi-Sectorial Innovation Experience in Business, Governments and Education

In the mining, energy and manufacturing sectors, I advised the directors of Applied Research & Technology at Teck, Canada's largest resource corporation (12 years). At Ontario Power Generation, I led, for 4 years, advanced intensive nuclear project and risk-management workshops, training 200 nuclear-power executives, scientists and engineers. At Bombardier/Canadair (now Airbus), I was recognized for my contribution to manufacturing improvement of multirole fighter jets, amphibious aircrafts (water bombers and search & rescue SAR derivatives) and General Dynamics' electric boats. At Du Pont and Domtar, I led advanced IT system design and programming.

In finance and banking, Desjardins' President John Harbour, whom I advised for 12 years, praised my role, as the main strategic advisor, in crafting "the vision and strategic direction of Desjardins", "the world's 2nd strongest bank", (Bloomberg's ranking at the time). I also coached the executive team to turn Desjardins' general-insurance subsidiary from a laggard into a leader through strategic innovations, leapfrogging Zurich and ING; as "North-America's fastest-growing general insurer in five years", quadrupling sales and raising profit tenfold (video in French: <u>eharvard.org/2022/harbour.mp4</u>). Desjardins and Skanska were the proving grounds for Harvard[®] System.

In the public service, I teamed-up, twice, with Mr. John Harbour to contribute to the creation of Quebec financialmarkets' regulator (AMF) and to reform the SAAQ, an agency saddled with a \$489 million debt, fast-rising deaths and severe injuries, due to highway accidents. I coached the SAAQ strategic team whose decisions saved thousands of lives, in less than 5 years; reducing the death toll (-35%) and severe bodily-injury accidents (-43%), despite a 15% highway-traffic growth; while turning the \$489 million debt into \$20 million surplus. Mr. Harbour described my 12-year contribution, to Desjardins and the SAAQ, in strategic thinking and innovation, in the above video.

I advised prime ministers, cabinet secretaries and United Nations' leaders on strategic policies. I served as a nonpartisan Executive Member of the Prime Minister's Committee on Government Reform. I also advised the UNESCO's director general on "*Overhauling the UNESCO and Strengthening Its Essence*". I led advanced project-management workshops for the Communication Security Establishment (CSE). I led sensitive multi-party negotiations (bilateral trade, energy, mining, infrastructural engineering, passenger-inspection system and policies at airports), including:

- The creation, with Dr. Brian Morrissey, of the Canadian Food Inspection Agency to restore public trust in the inspection system, improve food security, and position the country among the safest and trusted exporters;
- Advising the Northwest Territories' (NWT) government on large-scale environmental risks in energy and mining, from complex mine reclamations to potential oil and gas disasters in the Territories and the Arctic.
- Drawing lessons from UK's Mad Cow (BSE) and variant Creutzfeldt-Jakob (vCJD) diseases, Dr. Morrissey and I led a retreat to prepare public-health scientists and executives nine months before BSE was diagnosed in Canada.
- A proposal accepted by Canada's Prime Minister to empower the best scientist to defuse the growing tensions with Japan, China and other Asian trade partners, following mad-cow disease (BSE) discovery. Reference: www.eharvard.org/martin/Advice-to-PM-for-Science-Advisor.pdf

- Coaching Arctic-circumpolar leaders (First Nations, NWT government, Russia's Sakha Republic) in principled negotiation skills and Harvard[®] tools to explore strategic options to resolve intra and inter-government issues;
- Directed infrastructural-engineering projects in Africa (660km-highway engineering funded by the World Bank and 2800km microwave-communication infrastructure by CIDA). Gender equity was a critical factor.

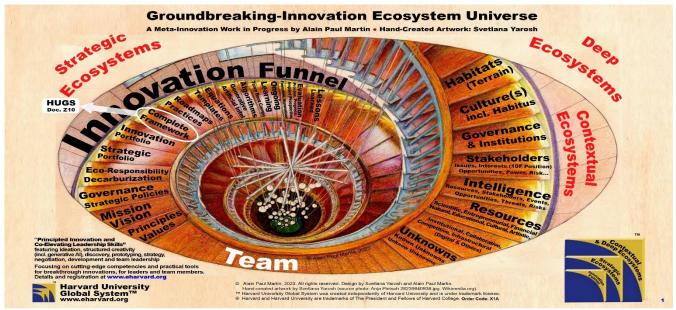
In public broadcasting, building on research of news delivery in democratic countries, I led the creation and of CBC Radio Canada's (SRC) news-equity system and provided user support in a Federal-election's test run. Our goal was to excel in impartial delivery and timeliness of news and public-affairs programs, across six time zones; especially during elections, when accuracy and timely reporting are *sine qua non* conditions for transparency and effectiveness. The operations-research based system enhanced quality assurance; protected SRC against frivolous suits; and strengthened the independence that is critical to the public-broadcaster's non-partisan mission.

In primary and secondary education, building on a pilot experiment with leaders and educators of Massachusetts' school boards and schools, I led workshops focused on system-thinking applications in the education of science, technology, engineering, arts and mathematics (STEAM), enhanced by a decision-literacy module ("STEAM+D") with inter-disciplinary applications; centering on increasing the science capital (Pierre Bourdieu), reducing complexity and learning to build trust and consensus. Thus, teachers can now gradually prepare K-12 learners to:

- Validate goals, facts, perceptions and biases; make assumptions explicit; and opt for rational decisions by weeding out pseudo facts; seeking evidence and logic, as close as possible to users and the source(s) of expertise;
- Learn to develop empathy for all stakeholders; hold the high moral ground; seek sustainable and just solutions; address the ever-changing risks and resistance to change inherent in complex issues;
- Learn, before seeking approvals, to plan with rigor, equity mindfulness, candor, humility, and constructive arguments that resonate with and inspire the trust of decision-makers and other constituencies with vested interests in the issue(s), including not only those with the power to veto controversial decisions, but also the poor and voiceless parties, including minorities and people with a disability;
- Acquire project-planning, organizational and execution skills with a pragmatic and proven framework.

4. Recognitions, Awards & Applied Research (Science, Engineering & Social Innovations)

- **Recognition and Awards:** I am recognized by Harvard University's president for my "Leadership, Vision and Service" and PMI for "outstanding contribution to the state-of-the-art of project management". I am a **patent recipient** (U.S., Canada and Japan), a production-innovation inventor at Peugeot and the recipient of two aerospace awards from Bombardier-Canadair (now Airbus) for improving aircraft manufacturing. I have also created sustainable organizations (in business, government and NGOs), and practical tools for innovators, decision-makers and other professionals (details below and under Experience). Our Institute (PDI) is a recipient of a Canada's Awards for Excellence's Certificate.
- Harvard University Global SystemTM' (used in small as well as multi-billion dollar decisions and initiatives)
 - The Complete Framework: Vision, strategy, policy formulation and project management, and practical templates
- Innovation Ecosystem Universe: A work in progress to bring to light innovation complexity and opportunities.



- Framework for Sustainable-Innovation & Start-Up Leadership: A framework applying innovation science, generative AI, cognitive neuroscience, psychology, eco-responsibility's best practices and Harvard University Global System[™] tools

- Continuous Risk Management: The complete roadmap and practical templates
- Principled Negotiation: Framework and practical templates
- Harvard® Practical Time Management: The Complete Roadmap for what matters most and a life worth living
- Harvard[®] Planners: This patented and affordable innovation outperforms Day-Timers[®], The Economist[®] and Quo-Vadis, in space and timesaving (eharvard.org). Users can reschedule without rewriting details about tasks; and plan up to 10 events/hour without cluttering the next time line, in the pocket-sized version, and much more in larger Planners. Every buyer contributes to Harvard University's royalty which goes exclusively to fund student scholarships.
- Stakeholder-Dynamics' (10F driving forces) Template: Identifying, understanding and engaging stakeholders (incl. those invisible but ubiquitous) is a widespread challenge in innovation and complex-change management. Since perceptions are a reality in most people's minds, the first task is to capture the myriad of vested-interest perceptions, without omitting those blurred by the fogs of knowledge deficit, disinformation, and extreme surprise events (be they favorable or tragic). With clients' and peers' support, for over 15 years, I created and fine-tuned a novel method and template, to probe stakeholders' options with unprecedented clarity in strategic thinking, innovation and geopolitics.
- **Multipurpose Mechanisms to Fast-Track and Maximize Creativity and Inclusion in Innovation Teams:** On game-changing creativity, teamwork exemplarity and co-elevating leadership (mission-driven, principled, with resilience/grit, empathy), I am inspired by Jean Moulin whose selfless courage and foresight of peaceful transition from WWII and post-liberation reforms saved countless lives. We are also indebted to Arnold Barnett, K Frances Arnold, Satyendra Nath Bose, Gilles Brassard, Mark Carney, Emmanuelle Charpentier, Marie Curie, Charles Darwin, François Delattre, Olivier De Weck, Jennifer Doudna, Richard R. Ernst, Paul Farmer, Rosalind Franklin, Camillo Golgi, John Harbour, Linda Hill, Narry Kim, Anne Lacaton, Alva Myrdal, Louis Pasteur, Lester Pearson, Max Planck, S. Ramón y Cajal, A. Garcia Robles, Pardis Sabeti, John Sviokla, Terence Teo, Jean-Philippe Vassal, Alessandro Volta, Shinya Yamanaka, Rachid Yazami, Alan Turing and Tu Youyou.

We drew lessons from the *universally-beneficial inventions* of Joe Becker (Unicode), Louis Braille (Braille Code), Joseph Fourier, Benjamin Franklin and Dmitri Mendeleev, to incubate a practical framework, templates, algorithms and simple equations and to maximize effectiveness, inclusion and delivery speed in teams, including support staff.

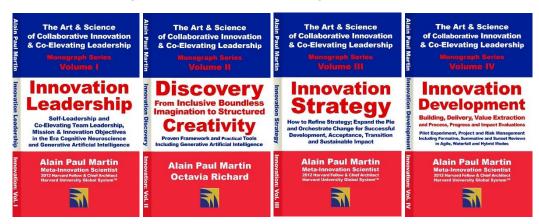
In addition to creativity-improvement instruments, our complexity-reduction tools enable team members to master the finest details in pilot-experiment and project planning (definition, estimating, scheduling, scarce-resource allocation, budgeting and earned value) and progress management. These mechanisms also fulfilled our goal to permit international teams to promptly share and probe plans and progress reports, across language boundaries.

In countless firms across the tech and non-tech spectra, hard-working front-line leaders and administrative assistants are among the high-potential professionals often left behind in both innovation-skills and management development. Users' experience with these instruments demonstrates that investing in this cohort is fair, equitable, inclusive and economically viable to address human-resource scarcity and enhance full-team participation, informed collaboration, performance and competitiveness (user-testimonies video: www.eharvard.org/EA).

5. Current and Upcoming Publications

My book: "<u>Harnessing the Power of Intelligence, Counterintelligence & Surprise Events</u>", was recommended by leading scholars, executives and the intelligence community (<u>www.eharvard.org/intelligence</u>).

The monograph series titled "The Art & Science of Sustainable Innovation and Co-Elevating Leadership" are planned for publication in 2024-25. In the meantime, part of the content is shared with the participants in our webinars titled: "Principled Collaborative Innovation & Co-Elevating Leadership Skills" featuring ideation, structured creativity (incl. generative AI), discovery, prototyping, strategy, negotiation, development and team leadership for scientists, engineers, policy makers and team leaders, both in English and French (www.eharvard.org).



6. Education, Professional Development and Continuous Learning

- Harvard Fellow, Advanced Leadership, 2011-2012; Harvard University ALI Coalition, 2017-Present Inter-faculty fellowship of six schools: Medicine, Public Health, Law, Business, Government and Education. Lectured on exemplary leadership. Led value-incubation research in innovation science. Led the Ivy-League Summit's Leadership Seminar focusing both on self-leadership and leading teams Cross-registrant: Evolution of Democracy in Europe (up to the E.U. era) by Prof. Peter A. Hall
- Concordia University, Montreal: B. Commerce in Quantitative Methods (Operations Research) •
- Advanced Technology, Lille (France). Internships at France's Peugeot (manufacturing), ARD (TV Network) in Berlin, University of Ottawa (Nuclear/Particle Physics' cyclotron team) and Carleton University (Engineering Faculty's research labs)
- Harvard Business School (HBS), Boston: OPM (27th Alumni Class), 1997-1999
 - HBS Club Leader (11 years, including 5 as President) and delegate to Leader Conferences Harvard Alumni Association and HBS Global Forums in Berlin, Cleveland, Shanghai, Washington and HBS Centennial (2005-2018)
 - I was privileged to work, since 1999, with Profs. Bruce Scott and John Sviokla. Prof. Scott joined my firm's Advisory Board until his death in 2020. I will never forget his generosity and the tribute he paid to me in the foreword of "Capitalism: Its Origins and Evolution as a System of Governance".
- Harvard Business School: Cross-registrant, MBA 2nd-Year Elective Courses, Leadership (2012) - Power & Influence: Prof. Julie Battilana
 - Acting in Time against Disasters: Strategy and Leadership: Prof. Herman A. (Dutch) Leonard
- Harvard Business School: Strategy: Building and Sustaining Competitive Advantage, Prof. Michael Porter
- Harvard Law School, Cambridge: Negotiation and Mediation for Lawyers
 - Teaching Negotiation in the Organization, Prof. Roger Fisher and MIT Prof. Lawrence Susskind
 - Negotiation for Senior Executives, Harvard-MIT-Tufts Inter-Faculty led by Prof. Roger Fisher
 - Advanced Negotiation for Sr. Executives: Dealing with Difficult People and Difficult Situations, Bill Ury
 - Negotiation for Lawyers, Emeritus Prof. Roger Fisher
 - Advanced Negotiation for Lawyers, Prof. Bruce Patton
 - Mediation (Harvard Law School) and Strategic Negotiation (Harvard-ALI) with Prof. Robert Mnookin
- Massachusetts Institute of Technology (MIT), Cambridge
 - System Project Management, MIT Eng. Systems, Prof. Olivier de Weck (2012 Auditor, Case Presenter)
 - Managing Complex Product Development Projects, MIT Sloan School of Management
 - Change Management (5 workshops), MIT Sloan School, Profs. Richard Beckhard, John S. Carroll, and Ed Schein
 - Government Programs' Evaluation, MIT Sloan School, Profs. Arnold Barnett, Martin Rein and Mark Thompson
- Gestalt Institute of Cleveland: Gestalt Psychology's Theory, Methods, Organization and Systems - Group Development, Intimate Systems, Change Theory: R. Beckhard, John Carter, C. Lukensmeyer, Herb Shepard - American Psychological Association: Cognitive-Behavior Modification/Therapy: B.F. Skinner, Don Meinchenbaum
- Advanced Risk Assessment, Simulation and Real Options, Palisade, Ithaca, NY
 - Real Options Valuation (ROV) in Business-Strategy by Dr. Michael Rees (Oxford, Wilmott Award)
 - Risk and Decision Assessment using @Risk and the Decision Tools Suite, Dr. Michael Rees

2020-Present: Continuous-Learning Events

- 2021 Three-Day Deep Dive into Technological Innovation: Digital Platforms, AI and Quantum Technologies Led by Dean Mike Smith, Harvard's Faculty of Arts and Sciences, with Profs. Bharat Anand, Finale Doshi-Velez, Matthew Finney, Elena Glassman, Evelyn Hu, Christine Keung, Gary King, Xiao-Li Meng, Vijay Janapa Reddi, Latanya Sweeney, Emilio Vavarella, Jim Waldo and Jonathan Zittrain
- 2021 Tackling Health, Housing & Homelessness: Harvard ALI, Howard Koh, Harold Cox, Jennifer Molinsky, Jim O'Connell
- 2020 Harvard Business School: Building Resilient Organizations in Turbulent Times and Crisis Management Stéphane Bancel: Pivoting Research & Operations at Moderna • Macroeconomic Policy, Financial Markets; Pathways for Driving Deep Change; Leadership Toolkit's Resilience; Recognizing & Managing Novel Risks in Supply Chains
- 2020-2021 University of Miami's Business School Regular participant in the Knight Venture Leaders Lectures, featuring influential forces in business, technology, arts and life and environmental sciences, from Nobel Prize winners and CEOs to trailblazers and cultural icons
- 2012-Present Harvard ALI Final Seminars & Think Tanks: Health, Environment, Education, Science & Technology 2020-Present: Manifold, Harvard Business School, Mines Paris Tech, Harvard Public Health and MIT:

Transformative artificial intelligence (Generative AI) in biopharma, finance, energy, climate change and education

Memberships: Société de mathématique de France, AAAS, Harvard (ALI) Advanced-Leadership Coalition. Past: Harvard Faculty Club, Canadian Operation Research Society (CORS), Assoc. of Computing Machinery, AEA (eval.org)

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