CURRICULUM VITAE

Louis Joseph Quagliata

Residences: United States: 409 Beacon Street, Boston, Massachusetts, 02115
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Born, July 14, 1937, Rome, Italy
Dual citizenship: U.S, Italy-EU

Education
Baccalaureate, Liceo Classico Torquato Tasso, Rome, Italy, 1955
Dott. Ing. University of Rome, Electrical Engineering (1961, 1968)
Master of Science, Massachusetts Institute of Technology (Aeronautics and Aeronautics),1965 .
Master of Arts, Harvard University, Physics 1968
"ABD" (PhD General exam), MIT, 1969
Languages:
Native: English, Italian; *Conversational*: German, French; *Reading*: Latin, Greek

EDUCATIONAL INSTITUTION BUILDING

2009-present: COLUMBIA UNIVERSITY. Advisor to VP for Global Center Development
Development and experimentation of educational paradigms for the Higher Education of the future, in collaboration with European institutions. Associated raising of funds.

2001-2008: COLLEGIO DI MILANO (CDM). Founding Trustee and Director/Dean
The vision was to create a live-in *College* to replicate the felicitous pairing of College and University education, which characterizes élite US institutions, for the benefit of the "most talented and motivated" undergraduates of the seven universities in Milano (~10-15 % of total enrollment). This requires focusing on how to offer *elite-like* care inside an *egalitarian, public* university system, which dispenses specialized degrees – mostly "en masse". Around this vision, a remarkable consortium of public and private Sponsors ([1]) was mobilized, which endowed the Collegio with ~8M$ and a very attractive small campus. The seven universities are independent and in different locations, with practically no live-in or college-like facilities. The solution was to introduce a new "player" into the mix: a separate live-in college center, *common to all universities* and drawing a vibrant community of its best students, to balance - "point/counterpoint" - the disciplinary curricula offered at each respective university. In the evening, students are fully in "general education mode" at the CdM - the college-like hub of their intellectual life; during the day, the students move out to their respective universities and are in "specialization mode".
A central concept being to "empower" the public system and collaborate with it, not to demonize it as inadequate. The "cultural program" developed at the Collegio gave rise to an array of original educational formats, including pioneering introduction of a direct educational role by industrial and financial enterprises.
The point-counterpoint pairing of an openly elitist, liberal arts life, with a curriculum of specialization at a large public university, albeit demanding, provided the extra dimension to launch students into *a transformational path of personal and intellectual growth*. The pairing, in fact, defines a *new kind of educational format*, a "track of excellence" offering for top students operating in *any* egalitarian context. All Milan University Presidents sit on the Collegio's Board, sanctifying the novel *consortium* of private and public. Last but not least, the unusual *elite/egalitarian pairing*, an apparent oxymoron, provides a choice of excellence to the best talents *in Italy* as a real alternative to their current diaspora to foreign universities.

Founded and led the initiative for six years from initial conception to full implementation: fundraising , attracting the US/Italian core team, designing its novel educational architecture, maintaining relationships with the different institutional constituencies and defining the singular education program at the core of the operation.

[1] *The seven Milan universities and* **22** *leading institutions (Aspen Institute, City of Milano, Pirelli, Edison, Mediaset, Astrazeneca, Unicredit, Falck, Banca Popolare di Milano, Corriere della Sera Foundation, Lumbardy Region, Assolombarda, ATM, family foundations, etc)*

MANAGEMENT CONSULTING

1994 – 2000: BOOZ ALLEN & HAMILTON (BAH). Vice-President; Partner-in-charge of the Italian office.
Booz Allen & Hamilton is a leading (2nd in the world) Management Consulting Firm which had negligible market position in Italy in the nineties, compared to its traditional competitors - McKinsey, Boston Consulting, and Bain. LQ Joined BAH as a US Partner assigned to lead its Italian Office and establish a strong and profitable franchise in the Italian management consulting market.

During LQ's tenure, the Italian office of BAH grew from one partner and a small market position to seven partners and 65 consultants, revenues of approximately 30M$, significant profit, offices in Milan and Rome. Engaged most major consulting segments (Energy, Telecom, Aerospace, Media, Automotive, Shipbuilding, Insurance, Consumer, Office Equipment, etc) and established top-level relationships with Italian (and selected European) industrial and financial establishments.

EXECUTIVE MANAGEMENT

1991 – 1993: ILVA-FINSIDER. General Manager for Technology and International Ventures.
One of four general managers for what was then a major state holding company and the fifth-largest steel producer in the world (revenues US$10 billion, 110,000 workers).

Activities: (1) Chairman of all the Group's international organizations (2) negotiatiation of major international acquisitions and joint ventures (e.g., acquisition of controlling interest in Pittsburg-based US Steel Corp; merger with Avesta of Sweden, a manufacturer of stainless-steel), (3) packaging and commercialization of ILVA's vast steelmaking know-how as CEO of ILVATECH.

2001 - 2003: TAU S.p.A. FINANCIAL HOLDING COMPANY OF THE YOMO GROUP – CEO.
The Yomo Group is a leading Italian producer of milk related staples - yogurth, cheeses, etc. - with about 450M€ (~600M$) in aggregate sales. The Yomo brand of yogurth is well known in Italy, commanding more than 50% of the domestic market in past years. Yomo Group has a sound industrial base, but was at the time financially troubled. Joined this privately held family company as CEO at a time of financial stress following the death of the founding owner.

In charge of developing the industrial restructuring plan, engaging new executive management in the underlying operating companies, assembling a team of prime industrial consultants to support implementation of the plan, formulating the legal strategies vis-a-vis the Banks holding the major debt. The company was successfully sold to a prime international food organization.

HI-TECH ENTREPENEURSHIP

1978–1991: INTERNATIONAL TECHNOLOGY PARTNERS (ITP) GROUP. Founder, Partner *and* ***CEO.***
The holding company and "incubator" for *ten* US and European *high tech startups* operating in the field of Industrial Automation. Transferring technology developed at MIT (see later in this document) - and in Europe at Fiat and Olivetti - ITP created and developed a series of hi-tech start-ups to bring innovation to traditional industries, who also provided the venture funding. The distinguishing feature and enabler was the application to such industries of ITP's core know-how - developed in the aerospace environment - in the areas of *System Integration, Computer Aided Manufacturing (CIM), Computer Aided Design (CAD), Operations Research, Enterprise software, Strategic Management Consulting* and technology transfer. The ITP Group of companies grew in time to an aggregate dimension of 700 professionals with revenues of over $100 million. In Italy, ITP was the first to introduce the US "Silicone Valley" model of venture capital funding of hi-tech innovation.

Was key entrepreneur in the formation of the group of underlying companies. Directed development and practical application of computer-supported innovations in the design-manufacturing cycle of multiple traditional industries (automotive, food, steel, aerospace, office equipment,...). Raised investment capital for hi-tech joint ventures from major automation users and suppliers - FIAT; Allen Bradley (Rockwell); IBM; Olivetti;

Finmeccanica; Coopers & Lybrand; Pirelli - as well as directly from Venture Capital firms. Was strategic advisor and participant in the penetration strategies of these players into the business of industrial automation.

APPLIED RESEARCH AND DEVELOPMENT - *industry*

1970-1978: MIT INSTRUMENTATION LABORATORY. Group Leader, INDUSTRIAL AUTOMATION DIVISION.

The MIT Instrumentation Laboratory (I-Lab, now Draper) was - and still is - the major research and development center in the US for the *Inertial Navigation and Guidance Systems* technology employed in aerospace and military applications (signature programs: APOLLO-NASA; POLARIS-NAVY; MX-AIR FORCE…). In the early seventies, MIT (and the I-Lab specifically) initiated a major drive to diversify and redirect their core technologies from aerospace and military projects alone to applications in *the civilian arena*.
MIT's first important initiative in technological diversification was to target computer-automation for the *auto industry*. The I-Lab's Industrial Automation Division was the centerpiece of these efforts. A *seminal collaborative program* with FIAT of Italy was established ("FIAT/MIT Joint Researches") which was active for eight years and brought ~25M$ in aggregate sponsorship to MIT. *The visionary goal of the program*, sponsored by both FIAT President Giovanni Agnelli and MIT President Jerry Wiesner, *was to leverage aerospace-derived system and computer technology to rethink and renew FIAT's entire cycle of industrial activities*: from the design of automotive products, through planning and layout of massive manufacturing plants to the culmination in actual fabrication on the shop floor. All phases were targeted within the program. During the eight year period, a remarkable array of hi-tech based innovations in automotive design and production was introduced and deployed *in the field* at FIAT, opening the path for the renewal of the automotive industrial cycle through the injection of information and control. Significant organizational changes and direct economic benefits derived from this landmark effort (pioneering utilization at Fiat of *logistics* as a major lever of industrial efficiency; design of the overall management and control system for Fiat's Spare Parts Division; first introduction of computers on the shop floor at the Mirafiori works for diagnostics, monitoring and management of production; advanced micro-processor controls of high production machinery; flexible manufacturing; etc)

From the base of know-how created with the FIAT Program, the Division seeded developments in other manufacturing processes and engaged other enterprises**:** Ford, General Motors, Allen-Bradley, Kellogg, Olivetti, the US Army Tank Command, Cincinnati Milacron, several Detroit-based suppliers of automotive manufacturing equipment, Eriksson, Texas instruments, Pirelli. The MIT Instrumentation Laboratory grew into a major Center in the formation of core know-how for the emerging field of computer-controlled "Factories of the Future".

Founded the Industrial Automation Division at the MIT I-Lab. Acquired the landmark FIAT program for MIT (~25 M$) and was in charge of it throughout its eight-year life. Expanded the Division's activities to other industrial partners, being responsible for initial contacts, conception and definition of program-scope, supervision of operational implementation. Secured the major funding for the Division (about 35M$ in the aggregate), becoming a leading practitioner of technology transfer from the research environment to industrial and business applications. The core know-how to start the ITP Group was developed in the course of this project.

APPLIED RESEARCH AND DEVELOPMENT - *aerospace*

1964-1969: MIT INSTRUMENTATION LABORATORY (*today* ***THE DRAPER LABORATORY). Systems engineer.***
The gyroscope-based technology of *Inertial Navigation and Guidance Systems* originally emerged in Germany during WW2 (*Werner von Braun*), and was pioneered and developed in the US at MIT under the leadership of the Instrumentation Lab's founder, Charles Stark Draper. Innumerable programs coupling refined mechanical technology with electronic and systems know-how were sponsored at the I-Lab by the US Navy, US Air Force and NASA.

Was system engineer on the following programs:

- *NASA - APOLLO PROGRAM*
- *AIR FORCE - SABRE PROGRAM (the Guidance System for Missile-MX)*

MEMBERSHIPS AND CULTURAL SUPPORT ACTIVITIES

1993 - 2008: ASPEN INSTITUTE ITALIA. Member
Aspen Italia is the Italian branch of the international *Aspen Institute*, the second most active after the US branch. An exclusive Club where the "top 200" key executives and decision makers of the country meet - out of the public eye - to debate the major policy issues related to country evolution and growth.

The "Collegio di Milano" initiative, for example, was the practical outgrowth of a specific symposium at Aspen Italia, dedicated to examining the shortcomings of elite education in Italy.

2008 - present: "ETRURIA MATER" FOUNDATION. Founding Partner & Board member.
An ambitious planned archeological site to *excavate the ancient Etruscan Capital of Tarquinia*, presently covered by 120/150 acres of virgin farmland. The plan calls for associating hands-on excavating activities with a major international teaching center. The project has reached the level of seed funding and initial visibility.

Definition and presentation of alternative strategies for the practical implementation of the concept. Raising of seed funds.

1997 - 2002: RENOVATION OF MICHELANGELO'S SANTA MARIA DEGLI ANGELI, ROME. Project Sponsor.
Installation of a contemporary art stained-glass cupola over Michelangelo's famous Basilica. Inaugurated in February 2002. The artist is Narcissus Quagliata, internationally-renowned stained-glass artist and the writer's brother.

Managed the fund-raising effort. The project required aligning public arts commission (Belle Arti), Vatican sponsors, private donors, and the arts community.

SELECTED SPEAKING ENGAGEMENTS

- ***Assolombarda, Milan Symposium on the Globalization of Education:*** "A Critical Survey of Élite Education in the Leading Countries of the World", 2009

- ***Siemens European Industry Symposium***: Keynote speech: "Startup Company Entrepreneurship and its relation to the R&D of major Industrial Corporations", 2006

- ***Coopers & Lybrand World Convention***, Rome, Italy: Keynote speech: "The Value-added Chain from Strategic Consulting to practical system implementation", 2001