

**Barry H. Soloway** is a senior executive with cross-functional accomplishments in leadership of high tech operations including engineering, manufacturing, quality and marketing. He brings extensive expertise and mature judgment based on a Product Realization Process that bridges the gaps that often exists between a proof-of-concept, a commercially viable product, and satisfied customers. Core competence is instilling the Discipline of Execution: blending strategy with pragmatics, energizing people and achieving agreed to results.

**1999-present MANAGEMENT PRAGMATICS LLC, Tucson, AZ**

**President & Founder**

Practice focused on Interim Executive engagements and Mentor with young companies.

**AIRGIA, Tucson, AZ**

**CEO & Co-Founder**

Micro wind turbine startup. Changing the terms of engagement in wind energy generation with patents-pending design, mobile manufacturing and micro-business focused approach to 1.5 billion people who have no access to basic electricity.

**Verdant Earth, Tucson, AZ**

**Mentor**

Containerized hydroponic growth system startup. Mentor on the design of LED-based lighting systems that are tailored to the growth stage, enabling 3-4 growth cycles per year.

**Produce Software, Nogales, AZ**

**Mentor**

Enterprise software company targeting growers and distributors. Mentor advising options to more effectively position the company relative to competitors and to help secure funding.

**All Optronics, Tucson, AZ**

**Mentor**

Low cost solar panel startup. Mentor in the design and low cost manufacture of a medium concentration solar panel. Co-inventor on one patent pending. Assisting in negotiations to set up licensing opportunities in Mexico.

**Lilliputian Systems, Wilmington, MA**

**Executive Consultant**

Miniature fuel cell startup. Due diligence assessments providing options for maturing the underlying technology, improving performance and cost effectiveness of product design and transitioning to commercialization. Project management and recruiting support to senior staff.

**Continuum Photonics, Billerica, MA**

**Interim Vice President Engineering**

Optical switch startup based on MEMS/piezoelectric steering of collimated beams. Company was experiencing difficulty in developing and launching its first product. Reporting to the CEO, systematically identified and mitigated technology and manufacturing roadblocks, negotiated with vendors, and drove the fast-track product redesign (11 months) of a family of optical switches for test & measurement, telecom and fiber distribution markets. Company achieved success event through merger with Polatis, a UK competitor.

**Glimmerglass Networks, Hayward, CA**

**Interim Chief Operating Officer**

MEMS-based, all-optical network switch startup. Reporting to the Board with full P&L responsibility. Successfully led the development and market positioning of an industry-leading, all-optical switch fabric, grew the staff from 10 to 58 people, accomplished rapid, focused growth and on-time deliverables, hired its first CEO, and positioned the company for successful Series B financing. Current market leader with over 150 installations.

**Novalux, Inc., Sunnyvale, CA**

**Interim Senior VP Product Realization**

Vertical cavity, semiconductor laser diode startup. Company was not able to launch its first product. Reporting to the CEO with responsibility for Product Development and Marketing. Questioned and reset market expectations, refocused development activities, cleared technology hurdles, and negotiated strategic partnerships; resulting in the successful launch of a miniature blue laser for medical diagnostics and subsequent RGB laser engines for HDTV. Company was acquired by Arasor.

**Sourcemine Inc., Woodland Hills, CA****Interim Chief Operating Officer**

Internet startup. Retargeted the company from a B2B exchange to a collaboration workspace that managed advertising campaigns for the media industry. Grew the organization from 10 to 35 people, define market requirements, developed the technology/product roadmap, led website development, and positioned its successful industry launch with TrueNorth, a premier US advertising agency.

**General Business Consulting**

Performance Technology Federal Systems (digital archiving), Prism Venture Partners (due diligence), Flywheel Ventures (due diligence), Polatis (optical switches), ErgoTouch (ergonomic computer peripherals), Extreme Photonics (flat panel display), Cambira (packet prioritization networking equipment), and Business Plan development for numerous local businesses.

**2006-2008 TOMAR ELECTRONICS, INC., Gilbert, AZ****VP Product Realization**

Manufacturer of high quality, high performance emergency vehicle lighting and traffic preemption systems for first responders. Responsibility for Design Engineering, Manufacturing Engineering, and Quality. Deployed new methods and tools that resulted in new products and manufacturing systems to support a 25% compound annual growth rate. Instituted integrated engineering/manufacturing approaches that simplified designs and minimized labor content. Initiated numerous cost reduction and warranty mitigation projects. Managed vendor and quality functions, including ISO9000 readiness. Launched four class-leading product lines, including the "Scorpion" Light Bar. Led the development of patents-pending emergency lighting system for the Carbon Motors purpose-built police cruiser.

**1998-1999 TIMEPLEX, INC., Woodcliff Lake, NJ****Senior VP Operations & Development**

Turnaround with sales of \$175 million, manufacturing voice and data switches and access products, and providing Network Operations Centers for ILEC's, CLEC's and private enterprises.

- Responsibility for Engineering, Manufacturing, Marketing, Customer Service and Quality.
- Reestablished internal and customer credibility through an aggressive Product Line Enhancement Plan designed and implemented by a worldwide tiger team.
- Refocused Quality and Customer Service to provide quick response to customer and vendor issues.
- Led the acquisition and subsequent integration of the staff and product lines of Simulation Labs.
- Achieved success event in 18 months, per the Board's requirement.

**1996-1998 VIDEOLAN TECHNOLOGIES, INC., Louisville, KY****VP Marketing & Development**

Post-IPO company commencing manufacture of a desktop video conferencing system.

- Defined the Video PBX market opportunity, cost reduced the hardware, enhanced embedded control software, and simplified the graphical user interface in response to customer input.
- Established pilot manufacturing, document control and vendor audits.
- Conducted successful field trials for remote medicine and distance learning applications.

**1994-1996 CHARLES INDUSTRIES, LTD., Rolling Meadows, IL****Vice President Engineering**

Growing \$150 million privately held telecommunications manufacturer (Wescom trade name) requiring transition from mature products to advanced local loop technologies.

- Responsibilities included product development for XDSL pair gain systems, access multiplexers, channel banks and transmission products.
- Instituted a Gate Review process that involved all functional areas of the company and focused, prioritized and drove a wide range of new product developments, feature enhancements and cost reduction programs.
- Revenue grew 2x during this period, primarily due to introduction of industry-leading XDSL products. Cost reduction projects yielded over \$12 million annually to the bottom line.
- Technical oversight for seven manufacturing plants in the Midwest, including electronics equipment and PC boards, electro-mechanical systems, injection molding and metal fabrication.
- Negotiated acquisition of product lines from Lucent and Alcatel.
- Championed ISO-9000 registration efforts and personally created the Engineering Development Process.

**1991-1993**      **VERILINK CORPORATION, San Jose, CA**      **Vice President Engineering**

Struggling \$30 million privately held telecommunications manufacturer of access multiplexers and CSU/DSU's for central office and customer premise applications.

- Responsibilities included Engineering, Manufacturing Product Support, Customer Service Call Center, Technical Support, Design of User Manuals, and ISO-9000 registration.
- Launched the flagship Access System 2000 multiplexer and GUI-based Element Manager, with Frame Relay, SMDS and mini-DACS functionality.
- Returned company to profitability with one-third of sales comprising products introduced in the prior two years. Company subsequently concluded an IPO.

**1985-1991**      **GROVE HILL ASSOCIATES, INC., Woodbridge, CT**      **President & Founder**

Technology management consultancy with clients in medical device, telecommunications, and consumer/industrial industries. Focused on evaluation and improvement of technology development, manufacturability, and commercial viability. Highlights of consulting engagements:

- **Pfizer Hospital Products:** R&D program evaluation across North America divisions (over a three-year period) for current products and new developments in laser surgery, biodegradable stents, implantable drug delivery pumps, and autologous blood transfusion components.
- **Welsh Allyn:** Resolved manufacturing startup issues with its first microprocessor-controlled otoscope and fiber-optic endoscope.
- **Senmed Medical Ventures:** Due diligence for potential investments in automated Pap smear evaluation (Cytyc) and ultrasonic surgical scalpel that provided simultaneous cut and cautery.
- **United Technologies:** R&D and Marketing Plan for commercial applications based on composite materials using carbon and optical fibers
- **Bell Northern Research:** Reviewed effectiveness of R&D programs with focus on linkage with the needs of operating divisions in the US and Canada
- **SmartCard International:** Established pilot manufacturing for one of the first smart credit cards containing microprocessor, display, and keypad.

**1966 - 1985**      **Extensive technical, project and administrative management experience.**

**ITT ADVANCED TECHNOLOGY CENTER, Shelton, CT**      **Division General Manager**

Started up two of the five Divisions: Systems Research Division and LSI Systems Support Center. Developed and transferred leading edge telecommunications and computing technologies to ITT companies worldwide, achieving a 70% productization success rate in a multi-national environment. Provided integrated circuit design and consulting services for twenty divisions in North America.

**FAIRCHILD SEMICONDUCTORS, Mountain View, CA**      **Product Line Manager**

Led the design, fabrication and qualification of the first silicon-gate CMOS digital logic product line (34000 series).

**BOWMAR INSTRUMENTS, Chandler, AZ**      **Operations Manager**

Established product development and manufacturing operations (maquilladora in Nogales, Sonora, Mexico) for one of the first digital watches.

**BELL LABORATORIES, Allentown, PA**      **Group Supervisor**

Led the development and transfer-to-manufacturing of many of the first integrated circuits and associated wafer fabrication and thin film hybrid circuit processes used in telecommunications systems.

## EDUCATION

**New York University MSEE-1966**      **Fairleigh Dickinson University BSEE-1964**