

Michael A M Davies

Chairman and Senior Partner, Endeavour.Partners

Senior Lecturer, Massachusetts Institute of Technology

Guest Lecturer, London Business School

Co-founder and CEO, WKD.SMRT, Inc.

Co-founder and former Chairman, Silverthread Inc.

Expertise

Michael Davies' specialist expertise and relevant experience cover the technical, business, strategic, economic, and broad policy issues involved in deep high tech and throughout the high-tech sector—in particular mobile devices and services—and wireless (cellular and satellite) and broadband networks, consumer electronics, the Internet of Things (IoT), electronic components, and semiconductors.

- the architecture and economics of communication services networks and computing services, in particular broadband cellular, fiber infrastructure, packet networks, cloud services, computing services, 'edge computing' services, satellite networks, video codecs, robotics, payment systems, IoT, and smart home technologies
- the architecture and economics of state-of-the art electro-mechanical devices, systems, and components that combine hardware and software, in particular mobile devices and systems, consumer electronics, personal computing and cloud computing, hardware manufacturing, semiconductors, and the related supply chains
- creative business models, co-opetition, and building business ecosystems, including open innovation, open source, shared infrastructure, and other ground-breaking approaches
- the economics of systems, platforms, architecture, modularity, and bottlenecks, in particular as this relates to complex products and services that combine software, computing, and communications
- consumer behavior and segmentation and the adoption and diffusion for high-tech that are novel products
- strategy and management for R&D, product creation, and technological innovation; knowledge-intensive technical teams, such as R&D staff; effective work practices; and the economics of innovation and intellectual property (trade secrets, patents, and licensing strategies)
- harnessing digital technologies knowledge and the challenges associated with innovation and how to address them

Michael has several areas of specialist expertise relevant to these challenges:

- consumers' purchase preferences and buying behaviors as well as projects adoption and diffusion of new technologies;
- anticipates the future by developing insight into the co-evolution of technological innovation and technology architecture, the potential demand opportunity, and platforms and business ecosystems;
- develops creative and robust business strategies by identifying opportunities and options for initiatives, investments, and novel business models that create and capture value; and
- provides effective leadership through decision-making under uncertainty, agile methods, and building resilience

Experience

Michael has worked for more than forty years in high tech telecommunications and mobile devices.

His experience spans the design, development, and deployment of mechanical, electrical, electronic, and high-tech products; manufacturing; software coding; video; supply chain management; research and development; technology; product creation; and business strategy.

Endeavour.Partners provides services to:

- delivers expert witness testimony on matters related to public policy, intellectual property, and commercial relationships within the mobile, wireless, and digital sectors
- provides consulting services on business strategy to companies throughout the mobile and wireless industry, including cellular infrastructure providers, mobile device manufacturers, and mobile network operators; companies involved in the broadband, fiber and satellite sectors
- provides consulting services on business strategy to industrial companies that are being impacted by digital and other deep technology

As a Senior Lecturer at MIT, Michael:

- created and taught courses in fundamental and advanced topics in technology strategy, systems engineering, leadership of high-tech businesses, and integrated design and product development process in both the School of Engineering (in Aero/Astro) and in the Sloan School of Management
- teaches creative innovation, value creation, emerging technologies, product management, product marketing, basic finance and business models, pricing and marketing, competitive analysis, market opportunity identification, funding entrepreneurship, data-driven decision-making, and decision-making under uncertainty
- created and leads, with colleague Blade Kotelly, Breakthrough Innovation: Creating Value in Times of Uncertainty

As a Guest Lecturer at the London Business School, Michael:

- created and for more than a decade has taught the New Technology Ventures program, which enables emerging entrepreneurs to evaluate novel ideas and inventions and turn them into new technology ventures
- created and serves as course Academic Director for the path-breaking course on The Business of Artificial Intelligence (AI), including the forthcoming course on generative AI

As the Founder and Chief Executive Officer of WKD.SMRT, Michael:

- leads a company that is accelerating innovation in healthcare by provide superior real-life data for clinical trials, through a turnkey solution that combines state-of-the-art technologies in sensing, machine learning, and computer processing

As the Founder of Silverthread Inc, Michael:

- founded a company that helps clients diagnose and improve the economics of maintaining, evolving, and developing very large-scale software systems

Education

London Business School

1989–1991

Master of Business Administration (With Distinction)

- Specialized in Business Strategy, Technology Management, and Decision Sciences
- Participated in the PhD Program on Systems Dynamics

University of Durham, UK

1982–1984

Master of Engineering

- Microelectronics
- Cybernetics and Robotics
- Management Science

St Catharine’s College, University of Cambridge

1979–1982

Bachelor of Arts (1982) and Master of Arts (1987)

- Electrical Sciences Tripos (Computer Science, Mathematics, Engineering, and Physics)
- Engineering Part I and Part II

Harvard Business School

Post-graduate study in Innovation & Organizations

SDA Bocconi School of Management

Admitted to pursue Doctor of Business Administration

Expert Reports and Testimony ExperienceUnited States of America et al v AT&T Inc et al.

- Department of Justice anti-trust investigation, Civil Action No. 11-01560 (ESH)
- Industry Expert: Antitrust
- Expert Report (2011)

Apple Inc v Samsung Electronics America Inc, Samsung Telecommunications America LLC, and Samsung Electronics Co Ltd

- International Trade Commission Investigation No. 337-TA-796
- Industry Expert: Public Interest
- Expert Declaration (2013)

Ericsson Inc and Telefonaktiebolaget LM Ericsson v Samsung Electronics America Inc, Samsung Telecommunications America LLC, and Samsung Electronics Co Ltd

- International Trade Commission Investigation No. 337-TA-862
- Industry Expert: Public Interest
- Expert Report, Rebuttal Expert Report, Deposition Testimony, Hearing Testimony (2013)

Samsung Electronics Co Ltd and Samsung Telecommunications America LLC v Ericsson Inc and Telefonaktiebolaget LM Ericsson

- International Trade Commission Investigation No. 337-TA-866
- Industry Expert: Public Interest
- Expert Report, Rebuttal Expert Report, Deposition Testimony, Hearing Testimony (2013)

InterDigital Communications Inc, InterDigital Technology Corporation IPR Licensing Inc, and InterDigital Holdings v Samsung Electronics America Inc and Samsung Telecom America LLC

- International Trade Commission Investigation No. 337-TA-868
- Industry Expert: Public Interest
- Expert Report, Rebuttal Expert Report, Deposition Testimony, Hearing Testimony (2013)

Sasken Communication Technologies Limited v Spreadtrum Communications Inc and Spreadtrum Communications USA

- American Arbitration Association, International Centre for Dispute Resolution No. 50-117-T-0092-12
- Technical Expert and Industry Expert: Arbitration
- Expert Report, Deposition Testimony, Hearing Testimony (2013)

On Track Innovations LTD v T-Mobile USA Inc

- United States District Court, Southern District of New York No. 12-cv.02224-AJN-JCF
- Technical Expert
- Expert Report, Deposition Testimony (2013-2014)

Hand Held Products Inc v Amazon.com Inc et al.

- United States District Court, District of Delaware No. 1:12-CV-00768-RGA-MPT
- Technical Expert
- Expert Report, Code Analysis (2014)

Enterprise Systems Technologies SARL v Samsung Electronics America Inc, Samsung Electronics Co Ltd, and Samsung Telecommunications America LLC

- International Trade Commission Investigation No. 337-TA-925
- Industry Expert: Public Interest
- Expert Report, Deposition Testimony (2015)

NVIDIA Corporation v Samsung Electronics America Inc, Samsung Electronics Co Ltd, and Samsung Telecommunications America LLC

- International Trade Commission Investigation No. 337-TA-932
- Industry Expert: Public Interest
- Expert Report, Deposition Testimony, Hearing Testimony (2015)

Nokia Corporation v Samsung Electronics Co Ltd

- Arbitration, International Chamber of Commerce No. 19602/AGF/RD (c.19638/AGF)
- Industry Expert and Technology Expert: intellectual property, patent royalties
- Expert Report, Deposition Testimony, Hearing Testimony (2015)

Ericsson Inc and Telefonaktiebolaget LM Ericsson v Apple Inc

- International Trade Commission Investigation No. 337-TA-952
- Industry Expert: Public Interest
- Expert Report, Deposition Testimony, Hearing Testimony (2015)

Core Wireless Licensing SARL v LG Electronics Inc and LG Electronics Mobilecomm USA Inc

- United States District Court, Eastern District of Texas No. 2-14-cv-00911-JRG-RSP
- Technical Expert
- Expert Declaration, Expert Report, Deposition Testimony (2015)

St. Lawrence Communications v ZTE Corporation

- United States District Court, Eastern District of Texas No. 2:15-cv-394-JRG and 2:15-cv-00351-JRG
- Technical Expert
- Preliminary work performed; case settled (2016)

ParkerVision Inc v Apple Inc, Samsung Electronics Co Ltd, Samsung Electronics Inc, LG Electronics Inc, LG Electronics Mobilecomm USA Inc, and Qualcomm Inc

- International Trade Commission Investigation No. 337-TA-982
- Industry Expert: Public Interest

- Expert Report, Deposition Testimony (2016)

T-Mobile USA Inc v Huawei Device USA Inc and Huawei Technologies Co Ltd

- United States District Court, Western District of Washington No. 14-cv-01351-RAJ
- Industry Expert: Trade Secrets
- Expert Report, Deposition Testimony (2016), Declarations, Trial Testimony (2017)

Immersion Corporation v Apple Inc and AT&T Mobility LLC

- International Trade Commission Investigation No. 337-TA-1004/990
- Industry Expert: Public Interest
- Expert Report (2016), Deposition Testimony, Hearing Testimony (2017)

Netlist Inc v SK hynix America Inc, SK hynix Inc, SK hynix memory solutions Inc

- International Trade Commission Investigation No. 337-TA-1023
- Industry Expert: Public Interest
- Expert Report, Deposition Testimony, Hearing Testimony (2017)

Andrea Electronics Corporation v Samsung Electronics America Inc and Samsung Electronics Co Ltd

- International Trade Commission Investigation No. 337-TA-1026
- Industry Expert: Public Interest
- Expert Report, Deposition Testimony (2017)

Motorola Solutions Inc v Hytera America Inc and Hytera Communications America (West) Inc

- International Trade Commission Investigation No. 337-TA-1053
- Technical Expert
- Inter Partes Review, Expert Report, Rebuttal Report, Deposition Testimony (2017)

WiLAN v LG Electronics Inc

- United States District Court, Southern District of California No. 3:17-cv-00358-BEN-BGS
- Technical Expert
- Preliminary work performed; case settled (2017)

Huawei Technologies Co Ltd et al. v Samsung Electronics Co Ltd et al.

- United States District Court, Northern District of California No. 16-cv-02787-WHO
- Technical Expert: Standards Essential Patents
- Expert Report (2018)

Seven Networks Inc v Google LLC

- United States District Court, Eastern District of Texas No. 2:17-CV-00442-JRG
- Technical Expert
- Expert Report (2018)

BiTMICRO LLC v Samsung Electronics America Inc, Samsung Electronics Co Ltd, SK Hynix America Inc, and SK Hynix Inc

- International Trade Commission Investigation No. 337-TA-1097
- Industry Expert: Public Interest
- Expert Report, Deposition Testimony (2018)

United States of America et al. in the matter of T-Mobile USA Inc and Sprint Corporation

- United States District Court, District of Columbia No. 1:19-cv-02232-TJK
- Technical Expert and Industry Expert: industry background, anti-trust, economics
- Expert Report, Model (2018)

EVS Codec Technologies and St Lawrence Communications v Sony Mobile Communications Inc

- United States District Court, Southern District of New York No. 1:18-cv-09518-JSR
- Technical Expert and Industry Expert: intellectual property, patent royalties
- Expert Declarations, Expert Report (2019)

Peloton Interactive Inc v Flywheel Sports Inc

- United States District Court, Eastern District of Texas 2:2018-cv-00390-RWS-RSP and 2:19-cv-00317-JRG-RSP
- Industry Expert: Trade Secrets, Intellectual Property, Inter Partes Review, Indicia of Non-obviousness
- Expert Reports (2020)

Neodron Limited v Samsung Electronics Co Ltd, Amazon.com Inc, Motorola Mobility LLC, Microsoft Corp, and Apple Inc

- International Trade Commission Investigation No. 337-TA-1162 and No. 337-TA-1193
- Industry Expert: Public Interest
- Expert Report (2020)

Helios Towers plc v Orange SA

- Arbitration, International Chamber of Commerce No. 25115/dda
- Technical Industry Expert: Arbitration
- Expert Report (2020)

United States of America v Huawei Technologies Co Ltd

- Western District of Washington Docket No. CR19-010-RSM
- Eastern District of New York Docket No. 18-CR-457 (AMD)
- Industry Expert: Theft of trade secrets, and conspiracy to steal trade secrets, violating the Racketeer Influenced and Corrupt Organizations (RICO) Act
- Advisory capacity (2020)

RED v CloudMinds Inc

- JAMS Arbitration No. 1220062943
- Technical Expert and Industry Expert: Arbitration
- Expert Report, Deposition Testimony, Hearing Testimony (2020)

Nokia Corporation v Lenovo Group Limited

- International Trade Commission Investigation No. 337-TA-1208
- Industry Expert: Public Interest, Domestic Industry, Bonding
- Expert Report, Deposition Testimony (2020)

Evolved Wireless LLC v Samsung Electronics Co Ltd and others

- International Trade Commission Investigation No. 337-TA-1253
- Industry Expert: Public Interest
- Expert Report, Deposition Testimony (2021)

Competition Bureau of Canada in the matter of Rogers Communication and Shaw Communication

- Assessment of the proposed acquisition by Rogers Communication of Shaw Communication
- Industry Expert: Public Interest
- Expert Report for §104 Injunction
- Expert Report for §92 Hearing
- Testimony at Competition Tribunal
- Affidavit for Stay and Injunction for Appeals Court Canada (2021)

Sonrai Memory Limited v Intel Corp (on behalf of Dell Technologies Inc, Lenovo Group Limited, and LG Electronics Inc), Samsung Electronics Co Ltd, and Samsung Electronics America

- International Trade Commission Investigation No. 337-TA-1280
- Industry Expert: Public Interest
- Expert Report, Rebuttal Expert Report, Deposition Testimony (2021)

Ericsson Inc v Apple Inc

- International Trade Commission Investigation No. 337-TA-1299
- Industry Expert: Public Interest
- Expert Report, Rebuttal Expert Report, Deposition Testimony, Hearing Testimony (2022)

Ericsson Inc v Apple Inc

- International Trade Commission Investigation No. 337-TA-1300
- Industry Expert: Public Interest
- Expert Report, Rebuttal Expert Report, Deposition Testimony, Hearing Testimony (2022)

Ericsson Inc v Apple Inc

- International Trade Commission Investigation No. 337-TA-1301
- Industry Expert: Public Interest
- Expert Report, Rebuttal Expert Report, Deposition Testimony, Hearing Testimony (2022)

AliveCor Inc v Apple Inc

- International Trade Commission Investigation No. 337-TA-1266
- Industry Expert: Public Interest
- Declaration on Public Interest (2022)

Arigna Technology Limited v Apple Inc

- International Trade Commission Investigation No. 337-TA-1308
- Industry Expert: Public Interest
- Expert Report, Rebuttal Report, Deposition Testimony (2022), Hearing Testimony (2023)

United States of America v Google LLC

- United States District Court, District of Columbia No. 1:20-cv-03010-APM
- Technical Expert and Industry Expert: industry background, anti-trust
- Expert Report, Reply Report, Deposition Testimony (2020)

Department of Justice, Anti-Trust Division, Media, Entertainment and Communications Section

- Anti-trust investigation in the communications services sector
- Industry Expert and Technical Expert: Anti-trust
- Advisory capacity (2022)

Daedalus Prime LLC v Samsung Electronics Co Ltd, Samsung Telecommunications America LLC, and Qualcomm Incorporated

- International Trade Commission Investigation No. 337-TA-1335
- Industry Expert: Public Interest
- Expert Report (2022)

Daedalus Prime LLC v Samsung Electronics Co Ltd, Samsung Electronics America Inc, Taiwan Semiconductor Manufacturing Company Limited, and TSMC North America

- International Trade Commission Investigation No. 337-TA-1336
- Industry Expert: Public Interest
- Expert Report. (2022)

Masimo Corporation v Apple Inc

- International Trade Commission Investigation No. 337-TA-1276
- Industry Expert: Public Interest

- Declaration on Public Interest (2023)

PayRange Inc v KioSoft Technologies LLC

- United States District Court, Southern District of Florida No. 1:20-CV-24342-RNS
- Technical Expert and Industry Expert: intellectual property, damages estimation
- Expert Report, Rebuttal Report, Deposition (2023)

Interdigital Inc v Samsung Electronics Co Ltd

- Arbitration, International Chamber of Commerce No. 27699/PDP
- Industry Expert: Arbitration
- Expert Report (2023), Rebuttal Report (2024)

ASUS Inc v Samsung Electronics Co Ltd

- Technical legal case No. 2:23-CV-00409-JRG-RSP
- Technical Expert
- Inter Partes Review

Telefonaktiebolaget LM Ericsson v Lenovo (United States)

- International Trade Commission Investigation No. 337-TA-1387
- Industry Expert: Public Interest
- Expert Report, Rebuttal Report, Deposition Testimony, Hearing Testimony (2024)

Skyworks Solutions and related companies v Kangxi Communications Technologies, Grand Chip Labs, D-Link and Rujie Networks

- International Trade Commission Investigation No. 337-TA-1413
- Industry Expert: Public Interest, Exclusion Orders
- Expert Report, Supplemental Report, Deposition Testimony, Hearing Testimony

Justin Wetherill, David Reiff, and Edward Trujillo v Asurion

- American Arbitration Association Case No. 02-23-0001-1129
- Expert Report, Rebuttal Report, Hearing Testimony

WideOpenWest v Baker Botts

- American Arbitration Association Case No. 01-24-002-3517
- Expert Report

Samsung v Ouraring, Inc.

- Inter Partes Review at the Patent Trial and Appeal Board
- Declarations

Professional Experience**Endeavour.Partners***Founder and Chairman**2003–Present*

Endeavour.Partners is a boutique consulting firm that empowers business leaders to create a future that is more prosperous and more humane, equitable, sustainable, and resilient by harnessing digital technologies—and other deep technologies—to create new value and accelerate growth both in leading technology and for other global leaders worldwide in many diverse sectors to harness digital and deep technology.

Endeavour.Partners leverages its deep and broad expertise in technology to help achieve positive outcomes for people and the planet in vital and critical areas, such as anti-trust and the public interest, which encompasses, for example, public health and welfare, competitive conditions, and outcomes for consumers.

Michael and his team have experience working throughout the digital ecosystem: across mobile, cellular, satellite, Internet, and digital convergence and commerce. This includes extensive work in communications, in particular mobile devices (feature phones, smartphones, tablets, cameras, connected homes, smart homes), services (video/PnP, data, messaging, mobile payment, codecs, Bluetooth), components (processor, memory, sensors), cellular and satellite networks (network infrastructure and equipment), broadband and Internet, computing (from semiconductors through personal computing to software services), consumer electronics, content (video, audio, gaming), commerce, and convergence of these domains.

The firm specializes in technological innovation, the adoption and diffusion of new products, and the emergence and evolution of business ecosystems from a systems point of view. This expertise encompasses the key digital technologies redefining business, the economy, and society: smartphones, cloud services, the Internet of things (IoT), Artificial Intelligence (AI), and robotics.

The firm is headquartered in Cambridge, MA, with a presence in Seattle, WA, and in London, United Kingdom.

Clients

Endeavour.Partners clients include:

- most of the leading mobile device and connected consumer electronics vendors, including HTC, Samsung, Apple, Nokia, LG, Sony Ericsson, and Motorola
- leading network operators and service providers, such as Verizon Wireless, AT&T, Sprint, T-Mobile, Deutsche Telekom, Vodafone, BT, Optus, and Virgin Mobile
- network infrastructure owners and providers, such as Crown Castle, Samsung, and Lucent
- other firms throughout the high-technology supply chain, including semiconductor companies such as Intel, SK Hynix, Qualcomm, and Analog Devices
- leading global businesses in diverse sectors harnessing digital and other deep technologies, including Thomson Reuters, Swiss Re, Husqvarna, Arla, TetraPak, TechnipFMC, and A.C. Milan
- innovative new technology ventures, such as PowerByProxi, Soul Machines, and zero360
- leading public sector organizations, including public broadcaster WGBH and the American Archive of Public Broadcasting (AAPB)

Scope of Work

Michael's work through Endeavour.Partners exemplifies his wide-ranging expertise in business strategy, technology strategy, technology innovation, product creation, supply chain, and public policy issues. He has provided industry expertise in patent and antitrust litigations on behalf of:

- U.S. Department of Justice—anti-trust case over the proposed AT&T and T-Mobile merger (2011)
- Commercial Arbitration participants—industry and technical expert providing multi-billion-dollar patent arbitrations concerning both Standard Essential Patents (SEPs) and non-SEPs on mobile connectivity and mobile services
- ITC complainants and respondents—industry expert opining on the public interest for litigation focused on wireless infrastructure and networks, mobile devices, wearables, smart home devices, semiconductors, software applications, and digital ecosystems
- United States District Court plaintiffs and defendants—technical expert opining on the (in)validity and (non)infringement related to several technologies involved in mobile devices and wireless networks, including the capture and decoding of real-time video signals, communication on smartphones, and audio codecs

Endeavour.Partners has also worked in strategy projects on behalf of:

- wireless carriers—video/PnP, 4G and LTE technologies, Bluetooth and data/messaging, particularly around innovative business models
- one of the world's largest and most successful network operators and service providers—video and media platform strategy
- a major wireless carrier—strategies in NFC technology and mobile payments, including a deep technical analysis of competing solutions, as well as assessment on the surrounding business ecosystem, viable business models, and drivers of consumer adoption patterns
- R&D department (~20,000 people) of one of the world's largest software development organizations—renewal of product creation
- world's number one mobile device vendor—"R&D University" for top management team (in collaboration with the world's top academics)
- world's number one consumer electronics business—the future of the consumer electronics, connected home devices, computing business ecosystem, and communications business ecosystem
- a multi-billion-dollar diversified global technology business—renewal of their technology management, from semiconductors through software platforms to devices and complete solutions
- top-tier service providers and network operators, such as BT and Deutsche Telekom—corporate and business strategy for communications services, software businesses, innovative start-ups, and infrastructure vendors
- world's number one device vendor—platform strategy for its flagship product line
- innovation leader in mobile devices—a family of modular products
- world's number one global provider of subsea robotics—new networking approaches for robust, high-bandwidth, multi-model subsea communications systems

Endeavour.Partners has also provided broad industry expertise in regard to:

- business strategies on Internet and mobile advertising, including market sizing, opportunity assessment, and business model deployment for various service providers

- business strategies on machine learning as a service, disease management, green hydrogen, carbon nanotubes, and sensors
- comprehensive projection of the medium- and long-term demand for all digital services and devices, and the related attributes driving consumer choice and preference, including projected market share for major players under a variety of alternative scenarios and the implications thereof
- analysis of the full spectrum of the communications sector, from underlying physical infrastructure, through cellular networks, fiber networks, and satellite networks
- standards for smart home products and connectivity

WKD.SMRT, Inc.

Co-founder and Chief Executive Officer

2019–present

WKD.SMRT delivers superior real-life data for clinical trials in the home. Its solution makes clinical trials faster, easier, lower cost, and lower risk by combining state-of-the-art sensing, machine learning, and computing technologies to deliver data that is more precise, more complete, more objective, and more real-life.

It is partnering with the world’s leading pharma company focused on neurodegenerative diseases, the world’s number one academic neurology department, and the world’s leading research group focused on the medical aspects of activities of daily living and quality of life.

Silverthread, Inc.

Co-founder, former Chairman

2013-present

Silverthread’s services and tools help clients diagnose and improve the design architecture of large software systems to improve predictability of project schedules, reduce unnecessary overhead costs, and prevent compounding complexity. The company’s clients include large corporations and government entities that own and manage large, complex software systems.

Zero-360

Co-Founder and founding Chairman

2012–2015

Strategic thought leader for this next-generation wearable device and solutions company focused on unique interactions and bio-sensing capabilities. Its particular focus is on how to support behavioral change. Zero-360’s cloud platform provided an open and scalable solution that integrated with third-party wellness programs in capturing valuable health and wearable data.

EquuSys

Co-Founder and Chief Technology Officer

2004-present

EquuSys is an animal instrumental business that provides real-time, real-world data to enhance the evaluation, diagnosis, rehabilitation, training, and conditioning of elite horses. The company commercialized Michael’s patented inventions, including the development of a hardware electronics sensor product and the accompanying software. This included developing novel wireless protocols for high-speed asymmetric data transmission in shared spectrum.

Mercator Partners*Founder and Chairman Emeritus*

1998–2009

This technology strategy consulting firm designed, directed, and delivered training programs in strategy and technology. Its alumni now fill top strategy roles within a number of industry-leading firms, including Google, HTC, Nielsen, Yahoo!, Sony Ericsson, HTC, and Vodafone. Client work focused on building creative new business models and developing effective business strategies on behalf of:

- leading US mobile company—business ecosystems, business strategies, and anticipating likely customers behavior
- major global JV with European and Japanese parents—emerging applications and potential business models
- most successful MVNO in the world—data services, market entry, and partnership development
- several high-tech R&D-intensive businesses across consumer electronics, telecommunications, automotive, and aerospace—how to commercialize highly innovative technologies
- for the number one US communications infrastructure company—customer needs and company strategy for 3G mobile
- leading Japanese consumer electronics and industrial conglomerate—evolution of consumer electronics; monetizing its semiconductor intellectual property; consumer segmentation; creative business models; and product portfolios, pipeline, and positioning
- variety of media companies—business models and content plays in the Internet and mobile service space
- leading European mobile operator—values- and lifestage-based consumer segmentations to increase customer loyalty and reduce costs
- several broadband and IP players—business models and market entry strategies
- several top-tier private equity players, such as The Carlyle Group, Providence Equity, Kohlberg Kravis Roberts, Blackstone, and Berkshire Partners—due diligence and strategic counsel on technology and telecom investments
- UK 3G auctions—assembled a consortium bid (SpectrumCo), and raising >\$4 billion for an innovative business model, with players such as Virgin, Sonera, Nextel, and Tesco, including strategies for sharing spectrum amongst multiple competing uses

GeoPartners Research*Principal*

1996–1998

GeoPartners Research provided technology evaluation and strategy focused on broadband, IP, and next generation wireless technologies on behalf of and in regard to:

- AT&T—overall corporate strategy, including IP, VoIP, local entry, wireless and broadband, including network infrastructure and equipment (including NAT and DNS for VoIP)
- Qualcomm—new technologies, business ventures, and organizational design, including work on Qualcomm’s first smartphone and on the design parameters for spectrum sharing on its next generation of data-oriented technologies such as EV-DO and EV-DV
- Ember Networks—the IEEE 802.15.4 and the standardization of the Zigbee protocols, and comparative evaluation of these protocols versus other wireless mesh protocols, with a particular focus on frequency hopping to mitigate interference in unlicensed spectrums

- HP, Northern Telecom (subsequently Nortel Networks), and Intel—business models and building business ecosystems

AT&T (formerly BellSouth International)

Chief of Strategy, One NZ (formerly BellSouth NZ)

1992–1996

Corporate and business strategy, government relations and industry relations, and R&D, including:

- Chairman of the 3rd Generation Interest Group of the GSM MoU (the largest organization of mobile network operators in the world)—assessed the alternative protocols available for 3G, with particular focus on the use of frequency hopping and other techniques to mitigate interference, the requirements to support global roaming, and to qualify state-of-the-art mobile devices for advanced services
- Chairman of the New Zealand Personal Communications Services working group—assessed the coexistence of various wireless protocols, with a particular focus on their frequency hopping strategies, including, for example, the interaction between DECT and the Japanese Personal Handyphone System (PHS)
- one of the leaders of a global task force evaluating the technologies and business models for satellite networks, including major new networks such as Iridium, Globalstar, and Teledesic
- pioneered the first PDA with digital cellular connectivity (Apple Newton, Nokia Data Card and Nokia 2110) and collaborated with Nokia on the development and testing of the very first modern smartphone, the Nokia Communicator
- built the business from pre-launch through to profitability, which has now become the clear market leader and Vodafone’s most successful business worldwide
- designed and drove a path-breaking multi-million-dollar global academic research program on the economics of communications, networks, and technologies in deregulated markets. Fellow participants included Jean-Jacques Laffont, Jean Tirole, Paul David, David Teece, David Gabel, and Glenn Woroch.

Boston Consulting Group

Manager

1991–1993

Michael focused on technology and telecoms businesses, including Philips Electronics, Telecom NZ, Telstra, and in particular BellSouth International. Responsible for training programs in advanced analytical techniques for strategy development.

Braxton Associates

Manager

1987–1991

Michael worked on a wide range of strategy projects, focusing on electronics and defense businesses in particular, such as companies involved in command and control systems, aircraft, tanks, submarines, and satellite networks. Also worked on corporate strategy, product development, manufacturing and operational transformation, and market entry. Played a leading role in development and training, focusing in particular on approaches to organizational transformation.

Mars Electronics*Project Manager, Program Manager*

1984–1987

Michael worked as roboticist; cyberneticist; and designer, developer, and program manager for large-scale real-time systems for manufacturing and logistics. Involved in the development of overall business strategy.

Cookson Group*Robotics Engineer, Project Manager*

1982–1984

Michael worked as a robotics engineer and automation manager overseeing and supporting many existing robotic handling and other automation systems. Designed, developed, and deployed additional state-of-the-art robotic and automation systems for manufacturing processes and material handling.

Academic Experience**Massachusetts Institute of Technology***Senior Lecturer—Integrated Design and Management*

Michael was invited to create and teach, as part of Integrated Design Lab I and Integrated Design Lab II (EM.441 and EM.442), courses that present fundamentals of and advanced topics in integrated design and product development process.

Michael developed and taught fundamental concepts, including innovation, emerging technologies, product management, product marketing, basic finance and business models, and pricing and marketing. Developed and taught advanced topics, including competitive analysis and market opportunity identification, funding entrepreneurship, business plan and pitch, and data-driven decision-making.

Senior Lecturer—Engineering Systems Division (now Institute for Data, Systems, and Society)

Michael was responsible for creating, managing, and teaching two capstone leadership courses, the Systems Leadership & Management Lab (SL&M Lab) and Praxis (ESD.39 and ESD.S51).

SL&M Lab is a semester-long course in which System, Design, and Management (SDM) Fellows work at least one full day per week (~fifteen person-days) on average with the top management of a high-tech business on a relevant real-world systems and management challenge. The host companies set the focus; therefore, project teams work on problems of true concern to the host companies.

The course also focuses on challenges such as team roles, logical thinking and writing, and the use of graphical communication. Assignments can range from high-level systems thinking issues to building a prototype. SDM students take this experience with them as they work with their host companies or continue in their career progression and development.

The SL&M Praxis course is about praxis: practice—application or use of knowledge or skills—as distinguished from theory. The course gives SDM Fellows insights into the realities of decision-making and managerial behavior in large, complex, high-tech, and systems businesses. It provides students with systematic approaches to apply their systems, architecture, technology, and strategy learnings to real-world leadership and management challenges. This course runs during the summer session as a complement to and preparation for the SL&M Lab course.

Senior Lecturer—Bernard M. Gordon-MIT Engineering Leadership Program, School of Engineering

The Bernard M. Gordon-MIT Engineering Leadership Program (<http://web.mit.edu/gordonelp/>) fosters new approaches that prepare the nation's young engineering leaders for productive and effective careers in engineering companies, and continues MIT's rich, innovative tradition of engineering leadership.

Michael taught the capstone undergraduate leadership course, Engineering Leadership (ESD.045).

The Engineering Leadership course exposes students to the models and methods of engineering leadership within the contexts of conceiving, designing, implementing, and operating products, processes, and systems. In particular, taught the Engineering Systems elements of the course, homed within AeroAstro.

Michael taught the Technology & Strategy course (15.905/15.965).

The Technology & Strategy course provides a strategic framework for managing high-tech businesses. It emphasizes the development and application of ways of thinking or mental models that bring clarity to the complex co-evolution of technological innovation, the demand opportunity, business ecosystems, decision-making, and execution within the business.

These tools help managers anticipate and decide how to respond to the behavior of competitors, complementors, and customers; and decide which technologies to invest in, opportunities to target, or partnerships to pursue.

Principal Investigator—Engineering Systems Division (now Institute for Data, Systems, and Society)

Involved in the research on the improvement of software project outcomes by attacking complexity and technical debt as part of a National Science Foundation (NSF) I-Corps program.

Researcher and Thesis Advisor

Supervises thesis work on related areas, including recent prize-winning work on the future of the smart grid, and theses on a broad range of issues.

Conducts research on how psychology shapes consumers' buying behavior and how product features and specifications influence consumers' choices among products and their liking for products. This culminated in a keynote presentation at MIT in Europe, held in Vienna, Austria and a keynote presentation at MIT in South America, held in Chile in 2023

London Business School

The Business of Artificial Intelligence

Course director for the highly rated flagship online program in how to create business value from Artificial Intelligence.

New Technologies Ventures Program

Manage and teach this unique program that brings MBAs and business students from London Business School together with post-doctoral researchers from University College London.

The goal of this course is to enable would-be entrepreneurs to evaluate novel ideas and inventions and turn them into new technology ventures. Participants, who are business professionals, scientists, engineers, and would-be entrepreneurs, explore how entrepreneurs and investors identify and analyze the feasibility of innovative technical ideas, turn them into products and services, and take these products and services to market, as both start-ups and established businesses. A key element of the program is projecting demand for innovative products and new product features

Professional Affiliations

Recognized as a World Class New Zealander (March 2007)

Member, Board of Advisors, Department of Systems Engineering at the United States Military Academy at West Point

Appointed to U.S. Beachhead Board of New Zealand Trade & Enterprise (NZTE) (July 2006)

Member, Board of Directors, Massachusetts Technology Leadership Council (MassTLC)

Co-Chairman, Mobile Cluster, Massachusetts Technology Leadership Council (MassTLC)

Member, Executive Committee, Boston Area Chapter of the Communications Society of the Institute of Electrical and Electronic Engineers (IEEE)

Member, Association for Computing Machinery (ACM)

Member, Academy of Management

Member, Strategic Management Society

Member, Institute for Operations Research and the Management Sciences (INFORMS)

Member, Product Development Management Association (PDMA)

Freeman of the Worshipful Company of Ironmongers