



Personal data

Name: Dr. Michael Anthony NAYLOR

Qualifications: B.A.(1st class Hons, Cambridge 1975) & M.A. in Natural Sciences, Ph.D. Structural geology (Cambridge 1979), F.G.S. (1979), M.I.o.D. (2014)

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Personal interests: Flying (holder of a Commercial Pilot Licence and Instructor and Instrument ratings); DIY; Foreign travel.

Employment history

An independent consultant for the past 7 years, and Senior Adviser for energy (oil & gas) to the Boston Consulting Group. Prior to this, 31 years' employment with Shell International, as a research scientist, geoscientist in oil & gas exploration; latterly in senior management / leadership roles.

Personal portrait

Mike has strong achievement drive and personal commitment to the business or organization in which he works. He is a creative and innovative strategic thinker, who applies well-developed analytical and problem-solving skills to deliver superior business results and challenge existing thinking in a constructive manner. He is a pragmatic and passionate leader with a genuine interest in coaching and developing people, and a good communicator who networks effectively across organisational boundaries and cultures. See also <http://mikenaylorsolutions.com/>

Relevant recent experience & career achievements

- **Management consultancy & executive education:** advice to investment banks, oil & gas companies and private clients. Specialist expertise in upstream oil & gas, with in-depth experience in geological sciences, exploration strategy, portfolio valuation and risk assessment.
- **Leadership:** managed and led teams and departments ranging from 3 – 60 in size. Was the discipline leader to a cadre of 1000 explorationists in Shell worldwide. Member of the 12-person team of Vice presidents leading global exploration in Shell, a \$3 bln p.a. business and recognized as the most effective and successful amongst its industry peers.
- **Technical & operations:** deep and broad expertise in the geosciences. Expert in exploration opportunity evaluation, technical de-risking of prospects, portfolio analysis and managing the interface between exploration, well engineering and field development. Knowledge of the major oil and gas basins of the world, of different operating regimes and contractual structures, ranging from Alaska, Gulf of Mexico and Brazil, through to the Middle East, former Soviet Union, Far East and Australia.
- **Safety:** following an unsatisfactory audit, became accountable for safety performance in exploration new ventures. By personal advocacy and leadership of a small team, delivered a greatly improved safety record, with pragmatic and effective HSE systems, tools, staff training and engagement.
- **R&D:** experience in the 3 key roles in R&D: scientific researcher, research manager, and 'customer' for R&D solutions. After re-defining Shell's exploration R&D strategy, led the re-structuring of the R&D organization, its interface with 'the business' and approaches to deployment and commercialization.
- **Strategy:** accomplished at formulating competitive strategies in oil & gas, R&D and technology deployment, translating them into actionable tactics and results. Defined exploration & corporate strategies for Shell's global exploration programme and for consultancy clients.
- **Accountability & decision-making:** accountable for bottom-line results: in a range of successful exploration ventures with budgets ranging from \$10's million to \$100's million. Made, or contributed to, complex business decisions / investments, taking into account strategic, technical, commercial, organisational and political considerations.
- **Corporate governance:** served as non-executive director on the Boards of the South Rub al Khali Company (oversight of gas exploration studies and drilling in Saudi Arabia) and SEAPOS B.V. (exploration deep-water drilling and facilities management).
- **Professional education, behavioural / motivational coaching:** experienced in organisational re-design, change management, leadership education and talent development.
- **Commercial skills:** has personally negotiated drilling compensation claims, educational contracts and oil & gas contracts, with values of \$5 million to \$100+ million.
- **Speaker and writer:** creative in presenting difficult or controversial material simply, with maximum impact and engagement. Regular panel speaker at oil and gas industry conferences.

Summary of positions held

2010 onwards: Director, MN Solutions (Cambridge) Limited

- *Management consultancy in strategy development, portfolio analysis and development, organizational change and project management processes. Has particular expertise in relation to high-risk, capital-intensive, high-tech businesses. Specializes in oil & gas exploration and science-based major project investments.*
- *Senior advisor (energy) to the Boston Consulting Group and independent advisor to oil companies on corporate strategy, exploration strategy, organization, capability development, technology deployment & business processes. Client base exceeds 15 independents, majors and NOC's - in USA, Europe, Russia, Middle East, Latin America & Far East.*
- *Provides a unique and highly acclaimed training course on best practice in exploration management to exploration leaders from a diverse client base.*
- *Acts as expert advisor to investment banks, hedge funds and private equity firms.*

2003 – 2009: VP Technical, Global Exploration, Shell Exploration & Production

Accountable for:

- *technical / non-technical risk assessment, assurance and advice to Executive VP Global Exploration on major projects and investment opportunities across the world, annual business plans and regional portfolios*
- *management of a team of regional technical experts who provide expert assistance in projects and local assurance of project quality.*
- *strategic direction of in-house R&D programmes (geology, geophysics and well engineering); technology deployment and commercialization; funding and delivery of a portfolio of IT/IM projects to support the business*
- *discipline leadership in exploration: definition of competence frameworks, and development programmes for exploration technical staff and leaders, and provide staff with individual career development advice.*
- *development of exploration processes / standards and delivery of an annual functional improvement plan*
- *HSSE standards and performance management in exploration new ventures;*

Dimensions: *direct budget of \$53 million p.a. with a primary influence over R&D and software development budgets of \$150+ million. Managed 9 direct reports and provided 'functional' oversight to 7 regional consultants. A member of Shell's global exploration leadership team, reporting to the EVP Global Exploration, impacting a \$3-4 bln+ global exploration budget, making discoveries of >1 bln barrels of oil annually. During this period, and based on external benchmarking, Shell's global exploration performance was recognized as best practice and industry leader.*

2001 – 2003: VP Kazakhstan, Shell EP Middle East Directorate

Governance of the politically and technically complex North Caspian (Kashagan / Kalamkas) joint venture (16% Shell interest, \$277mln p.a. budget at that time). Identification and delivery of 100% Shell commercial acquisitions for \$200 mln, covering an oil-field and pipeline interests. Negotiated access to high-quality exploration acreage (two significant discoveries subsequently made). Oversight of exploration in 8 Middle East / FSU countries (budget \$119 mln p.a.).

1998 – 2001: Exploration Planning Manager, Petroleum Development Oman (PDO)

With 5 immediate subordinates, was responsible for portfolio management and strategy formulation, with oversight of \$135 mln annual program. This role was combined with Corporate Discipline Head for exploration geology ("Chief Geologist") providing technical guidance and standards in an exploration directorate of 200 staff and oversight of the near-field exploration programme (below).

2000 – 2001: Near-field Exploration Manager, PDO

Executed by 9 staff, budget \$32 mln p.a. Coordinated physical and financial resources, directed and QC'd exploration evaluations, and supervised operational activities (well drilling and seismic acquisition/processing). Delivered oil reserve volumes above target and immediate oil production of 18,000 barrels per day.

1997 – 1998: Member of organisational re-design team, PDO

Member of a 4-man change-management team which re-structured PDO's functional organization into an asset-based structure. (PDO: 4500 staff and an annual budget of \$1.3 billion, operating across Oman).

1995 – 1997: Manager of geological services, PDO

Department of 65 staff, 3 direct subordinates, budget \$14 mln p.a. Provided short-term geoscience services (stratigraphy, structural geology and geochemistry), IT systems and longer-term technology studies and investments to a customer base of 115 geoscientists in PDO's exploration directorate.

1991 – 1995: Manager of structural geology research, Shell Research

Managed a programme of fundamental scientific research, applied R&D / technical consultancy to Shell globally, and technology transfer though delivered training programmes and software delivery. Made the case to increase staff and funding by 50% to 16 staff, annual budget approx \$3 mln, ROI greater than 15:1..

1986 – 1991: Senior exploration geoscientist, Gulf of Suez & NW Desert, Shell Egypt

Responsible for exploration in Shell's Gulf of Suez and Western Desert concessions, leading to discovery of the Gemsa oil-field and the Obaiyed gas field in desert and sensitive offshore environments.

1983 – 1986: Exploration geoscientist & seismic interpreter, PDO

Conducted evaluation studies based on limited prior data, resulting in novel play concepts which justified the drilling of 7 exploration wells in a hitherto-unexplored part of South Oman.

1979 – 1983: Research structural geologist, Shell Research

Executed a research programme directly impacting basin analysis and the evaluation of drillable prospects. The work encompassed mathematical and physical modeling, rock mechanics, analogue studies and technical consultancy.