

BY CO-
AUTHOR OF
PATTERNS OF
EXCELLENCE

Operational Excellence (OPEX) and Sustainable Performance Improvement In The Power Industry

25 to 27 APRIL 2017, SINGAPORE

Dr. David Challis has had **200 Power Industry consulting assignments** with major organisations including:

- **Canadian Generation Authority** – strategic business development advisor in relation to power generation
- investments and major projects implementation
- **Spectra Energy Canada** : Development of strategic contractor management frameworks to maximise ROI
- and manage risk
- **SERF** :Development of Power Utility and Energy sector Asset Management Roundtable
- **The Electrical Operating Authority Of Australia** – development of Safety Management Schemes
- **Solaris Power** – development of Asset Management Plan for 200MW expansion facility
- **Texas Energy** : Realignment of Asset Management Plans (RCM, TQM, RBI) to meet global business demands
- **Petronas (Malaysia)** – Design Reviews/eHAZOP studies for 400MW Gas Turbine Generating Plant
- **Gasco Abu Dhabi** : Development of Electrical Engineering Masterplan and Asset Management Plans

Measuring and
controlling outcomes
OPEX Terminology and
definitions

QA and Assurance
management
Gain insight into relevant
ISO standards (9000,
14000, 18000, 31000,
50001, 55000 the OPEX
model, document status,
strengths and limitations.

OPEX Vision, Policy,
Strategies and KPI's
Building an OPEX Process

Expert Course Faculty Leader



Dr. David Challis

OPERATIONAL EXCELLENCE(OPEX) AND SUSTAINABLE PERFORMANCE IMPROVEMENT IN THE POWER INDUSTRY 25TH TO 27TH APRIL, SINGAPORE

About This Training Course

The need for organizations to streamline processes and assure process compliance has been consistently recognized as a critical step in change management for the last 20 years. The term Operational Excellence exemplifies this concept: it describes looking at business as the sum of its parts, in its entirety, as opposed to its individual elements. It takes constant effort to build a sustainable culture, and it takes every level and every person in the organization to make it happen.

This course will equip you with the concepts, models, tools and knowledge to achieve OPEX within your team, department, function, organisation or business

Learning Outcomes

- Understand operational excellence and how it differs from business excellence
- To ensure all operational improvement activities are linked to the achievement of your organisation's strategic objectives
- Capture the 'Voice of the Customer' to ensure any potential operational changes are aligned to customer requirements
- Apply the simple, robust, structured and proven approach of DMAIC (Define, Measure, Analyse, Improve & Control) to operational improvement
- Move from a 'Functional' to a 'Value Stream' view of the organisation where stakeholders work together collectively to remove waste from the 'Value Stream'
- Carry out effective performance measurement and data analysis
- Prioritise opportunities for operational improvement
- Develop 'Permanent Corrective Actions' for operational failures
- Select and use the appropriate lean, six sigma and change management tools to reduce variation, defects, cycle times, lead times, waste and costs within your operations,
- Assess operational excellence
- Develop an operational excellence action plan to close performance gaps
- Understand the role of the leader in organisations who demonstrate operational excellence and most importantly
- Develop an organisational culture and set of employee beliefs that supporting the pursuit of operational excellence

Who Should Attend

- SVPs/VPs/Directors and Managers of Generation, Transmission and Distribution,
- Value Stream Managers,
- Business Process Improvement Personnel,
- Product Development Personnel,
- Asset Improvement Managers and Engineers,
- Reliability Engineers,
- Operations & Maintenance Managers and Engineers,
- Equipment Reliability,
- Plant Managers,
- Project Managers.

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3 Day Course Outline

Day 1

OPEX Terminology and definitions. Useful codes & standards.

- Understand the terminology that is used in OPEX in general.
- List some of the standards in use and their specific relevance (general awareness).
- Being introduced to the OPEX meta model and our road map,

Business context (2). How OPEX can help. What's in it for me? The Power Industry OPEX imperative

- Understand what the benefits and potential are to your business.
- And what are the risks of not managing OPEX well

Evolution of OPEX How did it the process evolve, what where stages of evolution tools. The Power Industry - what we have learned about OPEX

- Understand the evolution of OPEX and what drove the change.
- What OPEX does/doesn't do...benefits /limitations.
- Give an awareness of what a mature OPEX process would look like and how to assess the potential gaps in your system.

QA and Assurance management

Gain insight into relevant ISO standards (9000, 14000, 18000, 31000, 50001, 55000 etc - the OPEX model, document status, strengths and limitations. Plus discussion

- Understand the need of a credible assurances system to anchor you program and ensure continuous improvement.
- Understand the need for Auditing and continuous improvement

OPEX Vision, Policy, Strategies and KPI's

Typical Power Company OPEX visions

- Understand the importance of policy and Vision, the 4 components of an OPEX holistic strategy & the power of KPI to impact behaviour & culture.

Equipment Maintainability (Building maintainability at project and acquisition

- Understanding of the Project development process and the imperative to build in Asset resilience & maintainability. Gain some insight into the tools and techniques used in the Asset Development Process and how they can have a positive impact on the Assets resilience and maintainability.

Day 2

Process Reliability (operations Impact on OPEX)

- Gain insight into the important part Plant Operation has on the management of the Assets.

Equipment Reliability (On-going Integrity Reliability management)

- Understand that 4 functional pillars, including integration and interdependencies.

Human Reliability (examining the impact of people on OPEX)

- Gain further insight into the world of Human Reliability (behaviours, attitudes and beliefs).
- Gain some tools to help manage Human Reliability .
- Understand that successful implementation of complex OPEX projects is more than a roll out of processes, systems, procedures and tools.
- Understand the 10 insights that differentiate successful, from unsuccessful, OPEX investments – creating and sustaining 'the right behaviours and beliefs

Measuring and controlling outcomes

- Understand the mechanisms used to manage and control an OPEX program.
- Discuss the information that is in front of people and how it shapes their world and therefore their behaviour

Analysing and Improving performance.

- Understand the analysis and improvement cycle and a typical operational model .
- Discuss barriers to analysis and improvement & how to overcome them

OPEX Implementation and Change Management - Part 1

- Understand the OPEX initiatives need to be managed as a project.
- Appreciate what constitutes a transitional management or Change Management Plan and when it is required.
- Understand the OPEX implementation insights that differentiate success from failure.

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OPEX Implementation and Change Management - Part 2

- OPEX Change Management Case Study

Best Practices and Key elements of Success

- Understand some of the characteristics of a Best Practice OPEX process. Reflect on Key Learning's From 100 Man years Experience With OPEX Systems...avoid the fatal flaws. Endeavour to learn from, other peoples failures and develop a learning organisation

DAY 3

Building an OPEX Process (Part 1)

Introduction to the premise

- To consolidate and reinforce all the previous learning in a practical exercise that when complete will give each participant an understanding of how the processes fits together the various dependencies, and hopefully deliver a blue print to initiate the process back on each individual participants site.

Building an OPEX Process (Part 2)

Process Mapping

- Understand how the process flows and is interconnected , the dependencies and where the various gaps may be .

Building an OPEX Process (Part 3)

Step analysis brain storm each step in the process

- Brain Storm each step in the process , identify the barriers, behaviours and opportunities for each stage of the process flow. What might hinder implementation or need to be addressed (mitigate if possible)

Building an OPEX Process (Part 4)

Categorise and Priorities

Strategy development

- The identified Barriers and behaviours (on yellow post it notes) should now be divided up into the four elements or categories of the OPEX Meta Model (Human, Equipment Maintainability, Equipment reliability & Process Reliability) and put in order of priority for each sector (what to we need to address first).

Building an OPEX Process (Part 5)

Develop your own individual Action Plan

- Reflection, each syndicate take the learning and work on their own detailed action plan that mitigates the identified concerns, and leverages opportunities. Develop strategies in each of the 4 key areas to address the barriers, behaviours and opportunities previously identified actions to deliver the strategies.

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YOUR FACULTY EXPERT



Dr. David Challis has worked as a strategic energy and engineering specialist in major organisations for in excess of 35 years. He holds Bachelors and Masters Degrees in Power Electrical Engineering (UNSW) and a PhD in Management (University of Melbourne - 1996). David co-authored an international text (“Patterns of Excellence”) with Professor Danny Samson of Melbourne University that describes managerial excellence (MANEX) and operational excellence (OPEX) in leading international organisations (refer www.pearson.ch/Business/FTPprenticeHall/EAN/9780273638766/Patterns-of-Excellence for further information).

David was employed by Shell Australia for 15 years in a broad range of international roles that included Strategic Change Manager, Business Development Manager and Engineering Manager before working with the Australian Energy Sector Regulator in co-developing major reforms for the power generation, distribution and transmission industries. He has subsequently completed over 200 Power Industry consulting assignments with major organisations including:

- Canadian Generation Authority – strategic business development advisor in relation to power generation investments and major projects implementation
- Spectra Energy Canada : Development of strategic contractor management frameworks to maximise ROI and manage risk
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- Gasco Abu Dhabi : Development of Electrical Engineering Masterplan and Asset Management Plans

David has completed assignments for the energy sector at all points along the value chain. Assignments include independent review of major projects and development proposals, establishment of strategic contractor management frameworks and acting as an independent agent for owners, operators, regulators and governments to assist them in business development, service provider management and all aspects of operational excellence (OPEX).

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	PER PARTICIPANT	2 PARTICIPANTS OR MORE	IN-HOUSE TRAINING
3 Day Programme	SGD 3,700 Per Participant	SGD 3, 400 Per Participant	Guaranteed Minimum 40% Off Normal Price
	* SGD 3, 959 Per Participant (GST Inclusive)	*SGD 3,638 Per Participant (GST Inclusive)	

*GST FOR SINGAPORE REGISTERED COMPANIES

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Name Job title

Tel Department Email

Name Job title

Tel Department Email

Name Job title

Tel Department Email

Name Job title

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Name Job title

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Postcode..... Country.....

Tel Fax.....

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