



Workshop on “Technology Foresight”

by

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Date: 11 June 2013

Time: 9.00 a.m. – 4.00 p.m.

Venue: Block H, Faculty of Business and Finance
Universiti Tunku Abdul Rahman

CPD points: 7 points

COURSE SYNOPSIS

The One-day workshop is divided into 2 sessions; the morning session on “**Technology Forecasting and Technology Foresight**” will examine

- What is the difference between technology forecasting and foresight?
- How is the national technology policy defined, by whom, and how to allocate the budget?
- Consensus on general politics is through democracy vote. So, how to obtain consensus on technology policy for national, industry and enterprise?

The morning session will also introduce “**Scenario Analysis Methodologies**”.

Scenario Analysis Methodologies:

“OPEC is the Organization of the Petroleum Exporting Countries. Its mission is to secure a return to oil investors and an economic supply of oil to consumers. In the 1970s, OPEC acquired a say in pricing and raised oil prices steeply because of an embargo of Arab oil in 1973. The 1973 oil embargo happened in October following the United States' and Western Europe's support of Israel against Arab nations in the Yom Kippur War of 1973. Also, King Feisal of Saudi Arabia imposed an oil embargo against the West.

In doing so, the oil pricing for the United States went from 3 dollars to 12 dollars a barrel, spurring gas rationing. U.S. stations put a limit on the amount of gas that could be dispensed, closed on Sundays, and limited the days it could be purchased based on license plates. Prices continued to rise after the Embargo ended. The Oil Embargo of 1973 had a lasting effect on the United States. U.S. citizens began purchasing smaller cars that were more fuel efficient. The embargo also forced America to re-evaluate **the cost and source of energy, which previously received little consideration.**

One of the most lasting effects of the Oil Embargo of 1973 was **an economic recession throughout the world. Unemployment** flew to the highest percentage on record while **inflation** did the same. In Detroit, consumer interest in large gas guzzling vehicles fell and production dropped. Although the embargo only lasted one year, oil prices had quadrupled and a **new era of international relations** was opened. Arab nations discovered that **their oil could be used as both a political and economic weapon against other nations.**”

- Why was the world economy hurt so much in 1973?
- Can traditional forecasting methods be used to foresee the oil crisis? Why?
- Scenario Analysis Forecasting Methodology is used heavily after 1973. Why?

The afternoon workshop session will involve a guided group discussion on “**Scenario Analysis Forecasting Methodology for the electric vehicle industry development roadmap**”

Overview: The Electric Vehicle (“EV”) will be a revolutionary industry change for the transportation in the next 20/30 years. Due to the mature ICT product and technology, the EV is a product of adding four wheels to a motherboard. Using scenario analysis forecasting methodology, we can foresee the possibilities of the future electric vehicle industry development roadmap.

- Why the EV became a hot topic worldwide?
- What are the advantages and disadvantages of EVs replacing Autos today?
- Will the government push EV development in the future?
- Can you imagine the EV development in the future?
- What are the opportunities/threats on EV development for companies marketing on AM (after market)?

WHO SHOULD ATTEND?

Academic researchers, business strategists and analysts, and postgraduate students.

COURSE TRAINER



Dr Benjamin J.C. Yuan is a Professor of Institute of Management of Technology in National Chiao Tung University, Hsinchu, Taiwan. He serves as Honorary Chairman of Asian Association of Business Incubation (AABI), Councillor of Chinese Society for Management Of Technology, Honorary President of Chinese Business Incubation Association (CBIA), Councillor of Research and Development Manager Association, Director of Certification Committee and Councillor of Asia Pacific Industrial Analysis Association, Councillor of Chinese Association of Valuation, Councillor of Entrepreneur Innovation & Collaboration Association, and Councillor of The Society of Systematic innovation. He is also the editor for 10 International and Chinese journals in Management of Technology, Innovation & R/D Management,

including Asia Pacific Journal of Innovation and Entrepreneurship; International Journal of Entrepreneurship and Innovation Management (UK); International Journal of Technology Management (UK, SSCI), as well as International Journal of Foresight and Innovation Policy (UK), among many others. He is a visiting scholar at British Royal Society, United Kingdom, and

Massachusetts Institute of Technology (MIT), USA. He obtained his doctorate from the State University of New York at Buffalo and his research specialization includes innovation and R&D management, Technology forecasting and assessment, Technology Foresight and Policy, Core Technology and Competitive Strategy, Business Plan and New Venture, Industrial Economy and Technology Development. His recent work has been published in Social Behaviour and Personality, Chinese Management Studies, International Journal of foresight and Innovation Policy, Foresight, Energy Policy, International Journal of Technology Management, Technological Forecasting and Social Change, Journal of Engineering and Technology Management, among many others. He has also undertaken consultancies and research project grant with a total amount of more than NT 140 millions.

Workshop Schedule	
09.00 – 09.30 a.m.	Registration
09.30 – 10.30 a.m.	Session 1: Technology Forecasting and Technology Foresight
10.30 – 10.45 a.m.	Tea /coffee (Light refreshment will be served)
10.45 – 12.30 p.m.	<ul style="list-style-type: none"> • Case study: Scenario Analysis Methodologies
12.30 – 01.30 p.m.	Lunch break
01.30 – 02.45 p.m.	Session 2: Scenario Analysis Forecasting Methodology is used for the electric vehicle industry development roadmap
02.45 – 03.00 p.m.	Tea /coffee (Light refreshment will be served)
03.00 – 04.00 p.m.	<ul style="list-style-type: none"> • Case study • Wrap up, Q&A • Closing Presentation

The workshop is free of charge, but pre-registration is required as seating is limited. For RSVP, kindly email to: Dr Eng Yoke Kee, Email: engyk@utar.edu.my

JOINTLY ORGANIZED BY:

Centre for Economic studies (CES), UTAR
 Institute of Management and Leadership, UTAR