

# **Innovation & Entrepreneurship: Generating and protecting business ideas to planning and launching the actual business**

**(Synchronous e-learning)**

## **Introduction**

The globalization brings opportunities however; it also brings pressures for domestic firms as it increases competition. To remain and improve their competitive position, firms must innovate and manage the technology, as these are the key drivers of competitive advantage in today's knowledge-based economy. Therefore, the aim of this course is to provide a broad understanding of the dynamics of technological development and practice for starting, developing and growing new technological business through innovation.

## **Course objectives**

This Course intends to provide participants with concepts of creativity, innovation, entrepreneurship, technology management and the necessary skills to inspire innovation and harness the power of technology within the organization or individual businesses to innovate, grow and succeed in today's fast changing digital economy. They participants will also learn to become leaders who can manage and innovate in dynamic business environments.

## **Course outline**

### **Session 1: Introduction to Technology and Entrepreneurship**

Technology management, drivers of innovation and creativity, Technopreneurship and some success stories (Google, Microsoft, YouTube, Facebook, Amazon, Ali baba etc.), economic impact of entrepreneurial firms, Risk and Returns.

### **Session 2: Venture Creation, Business Models and Business Plan**

Feasibility analysis, innovative business models, developing an impressive business plan, the elevator speech, business plan red flags, changing economic, social and political trends, how to create business ideas, business plan components, financial analysis and projections, presenting the business plan and acquiring the funding.

### **Session 3: Types of Ventures, Marketing and Intellectual property**

Choosing the form of ownership (single, partnership, and corporation), legal form of the firm, family owned businesses, franchising and its boom. Elements of marketing plan, market segment, positioning, market research and the sales force. Patents, copyrights and other IP (intellectual property) Franchising A case study. E-commerce, Globalization (Web's global reach) and new models for digital economy (virtual organizations, e-value chain, value web).

#### **Session 4: Technology S curves and Disruptive Technology**

How to identify winning technology, four stages of S curve, radical innovation, disruptive innovation, sustaining innovation.

#### **Session 5: Imitation and Blue Ocean strategy**

Imitation and counterfeiting, four stages of industry life cycle, first move advantages, imitation strategies. Blue and Red oceans strategies, value proposition, Cirque du Soleil: Case Study

#### **Session 6: Group Presentation**

#### **Teaching Methodology**

“Live” online class, with well-known business case studies, videos, interactive short quizzes.

#### **Duration**

2.5 hours x 6 sessions

#### **Instructor**



#### **Dr Siyal**

Dr Siyal holds MSc and PhD degrees in Computer Engineering from University of Manchester, UK and an MBA (specializing in IT) degree from European Management School, Surrey University, England.

Dr Siyal has been working in Universities in Europe and Asia and has been involved in teaching, research and supervising/advising students in multi-disciplinary areas such as in Cyber Security, IT management, E-commerce, AI and Big Data, Blockchain, Microprocessors, Computer vision and medical image processing at the school of EEE, NTU, Singapore.

Dr Siyal has published over 200-refereed journal and conference papers and has authored 8 books. At NTU, he has won numerous teaching awards including “Best Dressed Teacher”, “Teaching Excellence Award” and “Nanyang Teaching Excellence Award”. He was Singapore’s National Day Award recipients in 2018.