COURSE

DATA ANALYTICS

Case study
3M

Enquire

In the cocoa industry, the entire eco-system involves farmers, traders, bankers, manufacturers, logistics providers and retailers, and more. Each party in the eco-system collect data which contains valuable insights into the business challenges and opportunities.

Data analytics has been used increasingly in different business context and applications. Data analytics techniques and methods involve extensive use of data, statistical and quantitative analysis, explanatory and predictive models, and fact-based management to provide valuable insights, in order to drive decisions and actions

This 2-day course by SMU Academy is designed to achieve the following learning outcomes:

- Understand what data analytics is and learn the different levels of data analytics.
- Establish the linkage between data analytics and decision making, focusing on asking the right questions.
- Explore the different business applications of data analytics to widen the learners' perspective.
- Participate in the data analytics thinking exercise to apply the CRISP-DM process to think through questions and data.
- Understand the DELTA Framework which the management can use to assess the elements that can put analytics to work and be successful in gaining value from analytics.
- Discuss 3M's journey into data analytics case to highlight the success factors and potential pitfalls.
- Gain insights into your organization's self-assessment of own analytics readiness, future plan, and the actions to be taken, based on DELTA framework.
- Develop technical know-how in using Excel as a powerful tool to perform data analysis and charting, predictions, and demand forecasting, to answer important business questions.
- Apply the Excel skills acquired to build data visualizations for descriptive analytics for a hands-on exercise
- Understand what Artificial Intelligence is and its applications.

WHO SHOULD ATTEND?

Cocoa Association of Asia

- **Target Audience:**
  - Mostly mid-level professionals, and some new to the industry, senior management professionals in related role

- **Pre-requisites:**
  - Participants must be comfortable with mathematics and use of software tools (commercially available software tools will be used)

- **Duration:** 2 days

- **Delivery Date:** 7 & 8 December 2022
- **Delivery mode:** In-person, Classroom
- Fees: $550 (CAA Members), $750 (Non-CAA Members)

YOUR TRAINER

SMU Singapore Management University | SMU Academy

Dr. Michelle Cheong
Professor of Information Systems
Associate Dean, SIS Post-Graduate Professional Education
Director, Doctor of Engineering
Singapore Management University

Prior to joining SMU, Dr. Michelle Cheong had 8 years of industry experience leading teams to develop complex IT systems which were implemented enterprise-wide covering business functions from sales to engineering, inventory management, planning, production, and distribution.
She joined SMU in 2005 where she teaches the Business Modeling with Spreadsheets course at the undergraduate and master levels. She is the co-author of a book on the same topic. Michelle was instrumental in designing and launching the Master of IT in Business (Analytics) programme in January 2011, which is the first Analytics master's programme in Asia. The programme remains the leading one of its kind today. She also designed and teaches the Operations Analytics course in the MITB (Analytics) programme, and several executive courses in Data Analytics for other programmes including Master of Science in Communication Management, IE-SMU MBA, and Master of Science in Innovation.

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PROPOSED COURSE CURRICULUM

	Day 1	Day 2
09:00	• Introduction into Data Analytics • Different levels of data analytics (Descriptive, Diagnostic, Predictive, Prescriptive) Activity #1 – different levels of data analytics	Performing Data Analysis using Excel • Basic Statistical Information • Data Filtering • Linear Regression and Multiple Linear Regression for quick predictions
10:00	AM Coffee Break	
10:30	• Scenario thinking of why data driven analysis and prediction can lead to better business outcomes, focusing on asking the right questions • Business applications of data analytics in several organizations Activity #2 – key takeaways word cloud	Performing Data Analysis using Excel • Graphs and Chart • Pivot Table and Pivot Chart • Demand forecasting
12:30	Lunch	
13:30	• CRISP-DM Process • Data Analytics Thinking Exercise Activity #3 asking the right questions and what data will be needed • DELTA Framework - putting analytics to work	More Data Visualization using Excel Hands-on Exercise: Understanding Container Throughput using World Development Indicators
15:00	PM Coffee Break	
15:30	• Case Study – 3M's Journey into Data Analytics Activity #4 3M's best practices and potential pitfalls • Your organization's Analytics Readiness and Future Plan (Survey will be conducted before the training) Activity #5 key takeaways word cloud	• The future with Artificial Intelligence • Reflections, Questions and Answers

* HANDS-ON SESSIONS WILL USE PUBLICLY AVAILABLE GENERAL DATA SETS WHICH ARE APPLICABLE TO MOST PARTICIPANTS, IN ORDER TO SUIT PARTICIPANTS WITH VARIED BACKGROUNDS AND ROLES.