Course Proposition and Executive Summary

This course caters to executives who are new to analytics and looking at learning the breadth of what analytics is all about and how it may be harnessed more effectively to make better decisions. Covering topics from basic statistics and simple yet highly useful data analysis methods to presenting data and information through the use of highly effective visualizers, to concepts of big data and data mining, this interactive and easy-to-understand 2-day course is specially designed for busy executives who wants to learn all you need to know in the space of data analytics within a short span of time. Participants will be exposed to the salient data analysis research tools and techniques where case studies will be highlighted to facilitate learning and understanding of concepts amongst participants.

Who is this course for?

This course is designed with beginners in mind and assumes no prior knowledge of statistics, quantitative analysis, data visualization, big data or data mining. Participants who have an interest in learning and picking up data analytical methods and concepts will find this course highly useful and applicable.

Course Objectives

After attending this course, participants will be able to:

1. Apply basic statistics and business research methods in their work.
2. Carry out basic research using business analytics methodologies, and be able to perform different types of quantitative data analysis taught during the course.
3. Make sense of statistical outputs and be able to apply it into their work effectively.

Course Content

Introduction to Basic Statistics

- Types of variables and classification
- Descriptive statistics
- Inferential statistics

Introduction to survey methods and sampling

- Biased and unbiased sampling approaches and their differences
- Sample sizes and basic concepts on determining optimal sizes
- Process of survey methodology: Framework and best practices

Introduction to Data Visualization and Reporting

- How to visualize and create charts that:
    - show differences
    - exhibit trends
    - exemplify statistical relationships

Introduction to basic quantitative data analysis

- Overview on quantitative and qualitative data analysis
- Univariate analyses and robust estimators
- Quantitative research techniques and tools

Introduction to Data Science Methods and Techniques

- Big Data Analytics and its applications
- Data Mining and its applications
- Data Analytics Frameworks and Methodologies
- Addressing business problems using data analytics:
    - Descriptive data analytics: What has happened
    - Predictive data analytics: What is going to happen
    - Prescriptive data analytics: What can we do about it

*The course will be conducted with computer-aided data analysis software and participants will get a chance to see how analytics are being applied in real-life scenario.

Pre-requisite

There is no course pre-requisite for this introductory analytics course for busy executives.

Mode of Assessment

Participants are required to sit for an open book quiz which exemplifies what was taught in this introductory course.

Price Schedule

SGD850/pax

Certificates/Awards

Certificate of Performance will be awarded if participant satisfies the course criteria.

Profile of Trainer

Mr. Ng Jinsheng joined IBM SPSS in 2008 as an Executive in Training and Consulting after his graduation from the National University of Singapore (NUS) with a Degree in Statistics and Applied Probability. During his stay in IBM SPSS, he has trained hundreds of participants from the public service and private sector in statistical and data mining concepts, tools and applications in solving business problems. He has also led consulting projects and worked with C-level executives in addressing pressing business issues during which he received numerous praises and testimonies. During his working with IBM SPSS, Mr. Ng Jinsheng also completed his Masters of Science in Knowledge Management [M.Sc(KM)] from the Nanyang Technological University (NTU) and graduated one of the top in his cohort with a Dean's List award in academic excellence. He later joined SAS Institute as an Education Specialist in the Training department, and thereafter as a Senior Associate in professional Consulting services.

An academic paper he has co-authored was nominated for the Best Paper Award in the 20th International Conference on Computers in Education (2012). He is currently a founding member of AnaVantage Management Consultancy LLP, and lectures and trains at Tertiary Institutions in Singapore in the area of business statistics, data mining and analytics, and develops analytics courses for undergraduate programmes in Singapore. Professionally recognized by the Project Management Institute (PMI) as a Certified Associate in Project Management (CAPM), he is also an IBM Business Analytics Certified Specialist in IBM SPSS Modeler (Professional) and IBM SPSS Statistics, as well as SAS Certified Predictive Modeler using SAS Enterprise Miner and SAS Certified Business Analyst using SAS 9: Regression and Modeling.

Professionally as a Trainer, Jinsheng possessed an Advanced Certificate in Training and Assessment (ACTA) conferred by the Workforce Development Agency of Singapore (WDA) and a proud recipient of the prestigious "Excellence in Teaching" Award (EIT) conferred by the Singapore Polytechnic (SP) during the Annual Excellence in Teaching and Training Convention 2015. He is also conferred the title of an *Associate Adult Educator* by the Institute of Adult Learning (IAL) in 2016, an Adult Educators' Professionalisation recognition which awards pedagogical and professional excellence.