

BUSINESS STATISTICS FOR MANAGERS

(using Microsoft® Excel)

INTRODUCTION

Business managers in the 21st century have access to large amounts of information. A major issue is how to use the available information to make better decisions. Sorting, organizing and analyzing data becomes mere activities unless one is able to gain insights into what the data is revealing and accurately make use of the information for further actions. This training program teaches the basic principles and concepts of the use of statistics for decision-making and demonstrates the power of proven techniques used by highly successful managers in many functional areas of business such as accounting, finance, management, operation, and marketing. Statistics business scenarios are used extensively throughout the course to provide an applied context for the concepts.

Unlike traditional Statistical courses that emphasize on meticulous calculations and deriving formula, **this training program smartly utilizes common computer spreadsheet techniques (e.g. MS Excel) to reduce those non-value added and boring tasks (such as tedious calculations, graphing and searching of statistical tables) into a few clicks of a button on the computer keyboard.**

Our emphasis, therefore, is to focus more on **value-added tasks** such as *analyzing data*, *interpreting results* and *insights of the workings of statistical methods in business*, *process controls* and *decision making methods*. Combining various teaching methods such as group discussions and case studies, this program also includes computer simulations with an emphasis on participation throughout. This training program is a must for modern managers who need to acquire statistical skills quickly and easily in order to make better decisions.

CONTENTS: (3 Days Program)

- Introduction
 - Why use MS Excel as a statistical tool?
 - Benefits of charting presentations.
 - MS Excel : Add-in, functions, charts.
- Presenting Data and Describing Information:
 - Collecting and organizing data
 - Accelerated method to construct graphs & charts
 - Accelerated method to construct problem solving tools.
 - Get new perspectives on data with pivot table.
 - Descriptive Statistics
- Drawing Conclusions from Populations, Based on Sample Information:
 - Basic Probability & Discrete Probability Distributions
 - Normal Distribution & Sampling Distribution
 - Confidence Interval Estimation
- Fundamentals of Hypothesis Testings:
 - One sample testing - - t-test, Z-test
 - Two-sample testing - - Z-test, F-test
- Analysis of Variance (ANOVA):
 - One-way ANOVA
 - Two-way ANOVA
- Statistical applications in quality improvements:
 - Law of Variation, Common and Special Causes
 - Basic principle of Statistical Process Control (SPC)
 - What is a control chart?
 - Process improvement and capability

- Simple Linear Regression Model and Correlation
 - Types of regression models
 - The Least-Squares method
 - Correlation coefficient
 - Example: Forecasting sales

- Exercises :
 - Business scenarios
 - Case studies
 - Decision-modeling
 - Individual & group exercises

Special note: In order to achieve the accelerated learning objectives of this course, it is necessary that participants know how to use basic computer spreadsheet program (such as Microsoft® Excel: using formula, edit graphs, printing, etc).

OBJECTIVES

At the end of the program, participants will be able to:

- Understand the overall concepts, principles and methods using Statistics for making business decisions.
- Utilize the computer to quickly calculate, present and describe information.
- Utilize the computer to quickly construct powerful tools for problem solving.
- Know how to draw conclusions about large populations based only on information obtained from samples.
- Acquire basic knowledge of process control and quality improvement techniques.
- Understand simple forecasting technique.

WHO SHOULD ATTEND:

- Managers, Engineers, Executives – all those who need to make business and operational decisions in their daily work.

ADMINISTRATIVE DETAILS

Duration : 3 days
 Time : 9.00am – 5.00pm
 Venue : In-house or external training program

Language Medium: English

TRAINER:

Nelson Kok is a graduate from the Universiti Sains Malaysia, and holds a Master in Business Administration and B.Sc (Hons) degree in Physics. He has more than 19 years of work experience, working with both multinational companies such as AT&T Consumer Products Pte Ltd, Corner Peripherals Sdn Bhd, Read-Rite (M) Sdn Bhd, and as well as local companies such as Globetronics Technology Berhad, Amquest Sdn Bhd and GGN Solutions Sdn Bhd. He is currently an entrepreneur running his own business and also an external consultant to various training providers.

He started his career as a Production Supervisor, Production Manager, HRD/Training Manager, TQM Manager and IT Manager. In the last 5 years, he held the position of General Manager in an Information and Communication Technology (ICT) company where he gained Internet Technology (IT) skills and

entrepreneurial experience. Throughout his career, he was a certified trainer for many management, quality and productivity programs such as *5S Good Housekeeping*, *SPC*, *QCC*, *Quality Improvements using 7QC Tools*, *7 Steps Problem Solving*, *QIT*, *TQM*, *MRPII*, *ERP*, *Team Building Program*, *Effective Meetings Workshop*, *Effective Supervisory Skills*, *Problem Solving & Decision Making*, *Effective Time Management*, *Motivation At Work*, *Frontline Leadership Program*, and *7 Habits of Highly Effective People*. He has also conducted many quality audits and was directly involved in company's ISO 9002 and Quality Management Excellence Award (QMEA) certifications. He is currently involved in research, development and marketing of Internet Control Solutions and software packages. Nelson's area of specialization is in helping organizations to achieve higher productivity using proven Management, Quality and IT tools and techniques.