

## **Data Analysis in the Workplace: Use of Data to Boost Productivity**

Are you interested in speeding up your work process?

Want to learn effective ways to automate some work process?

Worry about misleading analysis leading to wrong decision making?

### **Introduction**

Data analysis in the workplace is designed to allow executives to work effectively with the use of technology. A lot of decision making went wrong when misinterpreting of the data analysis. The right method to analyse data helps to reduce errors in decision making. This training program starts with understanding the nature of data, the application the use of data. Then, the participants would be exposed to common mistakes during data analysis. In addition, this training shares the fundamentals of Microsoft Excel for executives to perform some statistical data analysis. At the last stage, the candidate is exposed to the relationship of findings and decision-making process in their workplace.

### **Program Objectives**

This program aims to

- Enable participants to understand the nature of data.
- Apply the principle of data analysis.
- Reduce errors during data analysis.
- Choose the right decision based on data analysis.

### **Learning Outcomes**

After completing this program, participants should be able to:

- Understand and apply statistic analysis in their daily work
- Reduce errors during decision making.
- Achieve efficiency and effectiveness during decision making through statistic analysis

### **Who should attend?**

First-line management, middle management, senior management and anyone who is involved with data analysis and reporting

## Methodology

Case studies, forum discussion, role-play, presentations, gamification

## Program Outline

Time	Day One
9.00am – 10.30am	<b>Fundamental of Handling Data</b>  In this module, the participant would start to understand the function of data and how to convert data into information. The participant would learn the type of data and the basic method of how to deal with the data. The participants would learn how to manage data and how to handle missing data.
10.30am-11.00am	<b>Morning Break</b>
11.00am-1: 00pm	<b>Fundamental of Data Analysis</b>  After understanding the type of data, the participants would look into fundamental of the data analysis. The participants would look into the fundamental of the feel of data and the inferential data analysis. The concept such as normality, skewness is introduced in this module.
1.00pm-2.00pm	<b>Lunch</b>
2.00pm-3.30pm	<b>Validity and Reliability of Data Analysis</b>  In this module, the participants would learn the concept of validity and reliability and how to apply the reliability and validity into data analysis.
3.30pm-4.00pm	<b>Tea Break</b>
4.00pm-5.00pm	<b>Practical Sessions in Data Analysis</b>  In this module, the participants would learn and apply and have the hands-on practical session on how to clean the data, handling missing data and managing the validity and reliability of the data analysis. This module also looks into descriptive data analysis.
Time	Day Two
9.00am – 10.30am	<b>Visualising Data with Charts</b>  In this module, the participants would learn how to generate graphs, charts and various type of infographic to represent the data. By using graphs and pictorial method, the data analysis becomes more interesting, and it makes the data easier to be understood by other readers.

<b>10.30am-11.00am</b>	<b>Morning Break</b>
<b>11.00am-1.00pm</b>	<p><b>Inferential Data Analysis</b></p> <p>In this module, the participants would learn how to conduct simple data analysis such as comparing mean, comparing standard deviation and regression in data analysis. From the data analysis, the participants would know when to apply specific strategies.</p>
<b>1.00pm-2.00pm</b>	<b>Lunch</b>
<b>2.00pm-3.30pm</b>	<p><b>Fundamental of Qualitative Data Analysis</b></p> <p>With pure quantitative data analysis would not be complete without looking in-depth of the data. In this module, the participants would learn how to analyse qualitative data analysis to enrich the quality of data analysis.</p>
<b>3.30pm-4.00pm</b>	<b>Tea Break</b>
<b>4.00pm-5.00pm</b>	<p><b>Reporting in Data Analysis</b></p> <p>In this module, the candidate would learn how to produce a complete report for the decision making based on data analysis conducted. In addition, the participants would be exposed to the application of data analysis for boosting the performance of the organisation.</p>