

Quantitative Research Techniques and Statistics



In the complex and data-driven business environment, effective organizational decision making must be grounded in sound statistical analyses and research to succeed in a globally competitive world.

Business statistics involves the collection, summarization, analysis, and reporting of numerical findings relevant to a business decision or situation.

This module provides a complete picture of statistical concepts and their practical applications and will demonstrate how statistical methods are vital tools for learners planning to become business leaders.

Learning Outcomes

1. Explain key statistical concepts: the population, the sample, and statistical inference.
2. Define descriptive and inferential statistics.
3. Describe methods of collecting data.
4. Discuss sampling plans, sampling error, and non-sampling error.
5. Explain three rules that are used to calculate the probability of more complex events from the probability of simpler events.
6. Apply Bayes' Law to calculate conditional probability.
7. Discuss the concepts of hypothesis testing and the results of a test of hypothesis.
8. Describe how to make inferences about the population mean when the population standard deviation is unknown.
9. Discuss the factors that identify one-way analysis of variance.
10. Recognize the effect on the response variable of two or more factors.
11. Describe the process of selecting one alternative from a list of several possible decisions.

Recommended Learners

- Undergraduate Students
- Graduate Students
- Researchers and Analytics Specialists

Data Collection & Sampling

- Methods of Collecting Data
- Questionnaire Design
- Sampling & Sampling Plans
- Sampling Error and Non-sampling Error

What is Statistics?

An example of a learning event in our Leading Edge Learning modules. The types of instructional content within the modules include: readings, videos, transcripts, audios, interactive questions, offline application exercises, flash cards, narrated presentations, matching exercises, relevant articles, downloads, a final exam, and other activities designed to engage learners based on recognized science of learning educational concepts.

Applications and Best Practices

- ✓ Integrate in a research methodology and statistics course.
- ✓ Academic leveling for learners who may not have adequate preparation for advanced studies in statistics or analytics.
- ✓ Professional development for continuing education or refresher of skills for those who want to advance as business researchers and analytics specialists.

Pricing
Module is Approximately 3-5 Learner Hours

1-100 Learners per Year \$49 per Learner	101-500 Learners per Year \$44 per Learner	500+ Learners per Year \$39 per Learner
---	---	--