

Quantitative Research Methods & 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 in quantitative research techniques and statistics will provide a complete picture of statistical concepts and their practical applications, and will demonstrate how statistical methods are vital tools for modern business leaders.

Outcomes

1. Explain key statistical concepts: the population, the sample, and the 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. Describe how to assign probability to events.
6. Explain three rules that are used to calculate the probability of more complex events from the probability of simpler events.
7. Apply Bayes' Law to calculate conditional probability.
8. Recognize the significance of the sampling distribution.
9. Review the concepts of hypothesis testing.
10. Discuss the results of a test of hypothesis.
11. Describe how to make inferences about the population mean when the population standard deviation is unknown.
12. Explain how to draw inferences about a population variance.
13. Discuss the factors that identify one-way analysis of variance.
14. Recognize the effect on the response variable of two or more factors.
15. Describe the process of selecting one alternative from a list of several possible decisions.
16. Recognize the importance of acquiring, using, and evaluating additional information in decision analysis.

Recommended Learners

Higher Education

- Undergraduate Students
- Graduate Students

Business, Industry, Nonprofits, & Agencies

- Business Researchers
- Business Analytics Specialists

Data Collection & Sampling

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



▶
-1:44 1X

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

- | Higher Education | Business, Industry, Nonprofits, & Agencies |
|--|---|
| <ul style="list-style-type: none"> ✓ Include in a research methodology and statistics course. ✓ As part of an academic leveling program. | <ul style="list-style-type: none"> ✓ Instruction for 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
---	---	--