Influence of Data Analysis Tools in Teaching and Learning Economics

C. V. Suresh Babu

https://orcid.org/0000-0002-8474-2882
Hindustan Institute of Technology and Science, India

A. Auroshaa

https://orcid.org/0009-0001-7285-430X
Hindustan Institute of Technology and Science, India

EXECUTIVE SUMMARY

In this chapter, the authors outline a plan for implementing CBL in economics education and highlight some of the key tools and resources that can be used to enhance the learning experience. They provide access to data analysis tools for the students that can provide access to data analysis tools such as statistical software packages and online databases. This can enable them to analyze economic data more effectively and develop their data analysis skills. There is the platform to study all types of data analysis tools that may be useful to both educators and students for learning the economics. The chapter emphasizes the importance of conducting a needs assessment, developing digital resources, establishing the necessary technology infrastructure, providing faculty training, and implementing the CBL strategy across all economics courses. The chapter also highlights some of the tools and resources that can be used to support CBL in economics education, including Microsoft Excel, statistical software packages, geographic information systems, and business intelligence (BI) software.

INTRODUCTION

Data analysis tools have become increasingly important in teaching and learning economics in recent years. With the explosion of digital data and the proliferation of data science techniques, economists are now able to analyze and interpret complex economic phenomena with greater accuracy and depth than ever before (Suresh Babu, 2023). This has led to a growing demand for data analysis tools in economics education, as students seek to gain the skills and knowledge necessary to thrive in an increasingly data-driven world.

The use of data analysis tools in teaching and learning economics has several important benefits. First, it enables students to gain a deeper understanding of economic concepts and theories by providing them with concrete examples and real-world data to analyze. Second, it helps students develop important analytical skills, such as the ability to identify patterns, draw conclusions, and communicate findings effectively. Finally, it prepares students for a wide range of careers in economics and related fields, as data analysis skills are increasingly in demand in today's job market.

In this context, the influence of data analysis tools in teaching and learning economics cannot be overstated. From basic statistical analysis to complex econometric modeling, these tools provide students with the means to explore economic concepts and theories in greater depth, and to apply their knowledge in a real-world context. As such, they represent a powerful tool for shaping the future of economics education, and for preparing the next generation of economists to tackle the complex challenges of our time.

RELATED WORK

Define the Problem

The problem identified for the influence of data analysis tools in teaching and learning economics is the lack of practical application and hands-on experience for students. Traditional economics education often focuses on theoretical concepts and models but does not provide students with the skills and tools necessary to analyze and interpret real-world economic data. As a result, students may struggle to understand how economic concepts apply to real-world situations and may have difficulty finding employment in industries that require data analysis skills.

The lack of practical application in economics education can also lead to a lack of interest among students. Economics can be a complex and abstract subject, and

Related Content

Database Queries, Data Mining, and OLAP
Lutz Hamel (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 598-603).*
www.irma-international.org/chapter/database-queries-data-mining-olap/10882

Discovering an Effective Measure in Data Mining
Takao Ito (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 654-662).*
www.irma-international.org/chapter/discovering-effective-measure-data-mining/10890

Data Transformation for Normalization
Amitava Mitra (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 566-571).*
www.irma-international.org/chapter/data-transformation-normalization/10877

Multi-Instance Learning with MultiObjective Genetic Programming
Amelia Zafra (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 1372-1379).*
www.irma-international.org/chapter/multi-instance-learning-multiobjective-genetic/11000

Segmentation of Time Series Data
Parvathi Chundiand Daniel J. Rosenkrantz (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 1753-1758).*
www.irma-international.org/chapter/segmentation-time-series-data/11055