A Machine Learning, Artificial Intelligence Approach to Institutional Effectiveness in Higher Education

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About the Book

The Institutional Research profession is currently experimenting with many strategies to assess institutional effectiveness in a manner that reflects the letter and spirit of their unique mission, vision, and values. While a “best-practices” approach to the measurement and assessment of institutional functions is prevalent in the literature, a machine learning approach that synthesizes these parts into a coherent and synergistic approach has not emerged.

A Machine Learning, Artificial Intelligence Approach to Institutional Effectiveness in Higher Education presents a practical, effective, and systematic approach to the measurement, assessment, and sensemaking of institutional performance. Included are instruments and strategies to measure and assess the performance of Curriculum, Learning, Instruction, Support Services, and Program Feasibility as well as a meaningful Environmental Scanning method. The data collected in this system are organized into assessments of institutional effectiveness through the application of machine learning data processes that create an artificial intelligence model of actual institutional performance from the raw performance data. This artificial intelligence is visualized through five organizational sensemaking approaches to monitor, demonstrate, and improve institutional performance. Thus, this book provides a set of tools that can be adopted or adapted to the specific intentions of any institution, making it an invaluable resource for Higher Education administrators, leaders and practitioners.