About Civilytics

Civilytics Consulting is a data science consulting firm founded in 2016 by Dr. Jared E. Knowles. Civilytics has served clients at all levels of government in several policy areas including K-12 education, higher education, policing, and taxation. Dr. Knowles pioneered an award-winning machine learning algorithm for the state of Wisconsin that is used across the state to help struggling students get back on track. Since 2012, his work has been used around the country to improve the accuracy of predictive analytics systems in education. He has been published in several peer-reviewed journals, including the Journal of Educational Data Mining and Journal of Policy Analysis and Management. He has a Ph.D. in Political Science with expertise in the management and governance of publicly-run education agencies. He has advised government agencies in a variety of sectors on the development, business use, and policy implications of machine learning tools to augment human decision making.

Civilytics Consulting focuses on building the capacity of its public institution partners to sustain analytic products after the initial work. By using open source software and open data sources, providing all source code and extensive documentation, and excellent training of customers in the product, Civilytics ensures that its clients can maintain products developed long after the contract ends. This sustainable partnership model is unique, allowing agencies to build lasting organizational change. Civilytics approaches projects with a human centered design methodology that creates lasting partnerships with clients.

Projects

Recent Projects

- placing 2nd out of over 60 entries in a data science competition hosted on Kaggle for the Center for Policing Equity
- building an enrollment projection system for a state higher education system
- building an equity focused dashboard and reporting tool for student recruitment
- designing a curriculum for data analysts in education agencies
- developing an open platform for education analysts to reproduce results using synthetic data to protect confidential records and increase collaboration

Past Projects

- advised on the development of a statewide early warning system
- audited and reviewed predictive models
- built programmatic city accountability reports on police performance

Select Client List

The Strategic Data Project at the Center for Education Policy Research at Harvard University

The Tennessee Department of Education

The Pennsylvania State System of Higher Education

Mazin Education

The Lincoln Land Institute

Clarity Partners

The College and Career Readiness and Success Center by the American Institutes for Research

Dr. Jared E. Knowles

President, Civilytics Consulting