

CIVILYTICS CONSULTING

Corporate Capabilities

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SUMMARY

Civilytics Consulting, LLC, is an independent data science company that provides social science research and analysis, software solutions, and training in the higher education, K12 education, criminal justice, and public finance sectors. We work with researchers, journalists, grassroots organizations, and elected officials.

Civilytics focuses on open software and data solutions that empower government agencies, nonprofits, and others with clear, transparent, and impactful analytic solutions to meet their needs.

What sets Civilytics apart from the competition?

- Deep expertise working with practitioners
- World-class development capabilities in R
 - Excellent data communication skills
 - Adaptability to emerging challenges

DATA ANALYSIS AND SYSTEM DESIGN

Civilytics ensures clients can maintain products developed long after the contract ends by using open tools and data whenever possible, delivering all source code with quality documentation to the client, and training users on the product. This partnership model allows clients to build lasting organizational change through analytic tools like:

- Design and implementation of automated reporting pipelines for accountability reports, school performance reports, and more
- Enrollment forecasting systems with user-tunable model parameters and dashboard to monitor and evaluate predictions weekly
- System design integrating data analysis and modeling into strategic planning processes
- Machine-learning, deep learning, and predictive modeling

DATA DRIVEN COMMUNICATION AND STRATEGY

Civilytics is uniquely focused on making data analysis and evaluation results relevant, engaging, and actionable for all stakeholders. We find the right strategy for the audience based on our technical expertise and perspective-taking skills. Hallmarks of our approach include:

- A user-centered dashboard development process
- Strategic advising on goal setting, benchmarking, and measurable progress grounded in institutional data
- Proven practitioner-relevant data and research results communication strategies
- GIS data visualization and geospatial analysis for contextualizing data findings in time and space
- Disseminating work through social media channels, monthly newsletter, and popular blog presence

PUBLIC FINANCE TRAINING AND ANALYSIS

Civilytics conducts analyses of city, county, and state budgets; trains grassroots organizations and local elected officials to analyze and communicate about their local budget; and builds budget advocacy tools to make this work less time-consuming and comparable over time and across places. Our work includes:

- Training grassroots organizations to read and engage with their local budgets
- Analyzing budgets along with adjacent data like calls for service and daily population counts in prisons and jails
- Building interactive tools to compare one police department's size to other cities and to examine a city's spending on policing compared to other public services
- Developing visualizations using Census and open city data to understand inequalities in city services by neighborhood

SELECTED CLIENTS

PRIVATE SECTOR

- Harvard University (Center for Education Policy Research)
- Tableau Foundation
- American Institutes for Research

PUBLIC SECTOR

- Pennsylvania State System of Higher Education
- Boston Public Schools
- Gwinnet County Public Schools

R TRAINING AND ANALYSIS

Civilytics' lead trainer, Dr. Knowles, has trained hundreds of data analysts at LEAs, SEAs, CMOs, nonprofits, and higher education institutions to use R. Civilytics provides a full suite of training services including:

- Customized training based on the existing skills and expertise of agency programmers using a project-based approach that maximizes time spent learning project-relevant skills
- Curriculum design for data analyst training and continued professional development, including courses on predictive analytics, regression, data visualization, data cleaning, and data governance
- Development of an open platform for analysts to reproduce results using synthetic data to protect confidential records and increase collaboration
- In-person workshops, virtual training, and tutorials on HLM, dashboard development, and R automation

ANALYTIC CAPABILITIES

- World-class R development
- Interactive data visualizations and interactive modeling tools as well as data dashboard and data responsive report design
- Experimental and quasi-experimental evaluation design and analysis
- Statistical expertise in hierarchical linear models, latent variable analysis, and more

IT CAPABILITIES

- Secure data transfer and storage dropbox
- Cloud computing services delivered via AWS or Azure
- Secure private cloud services for sensitive data
- High-performance computing resources to complete projects faster

General Information

Legal Name: Civilytics Consulting LLC
Date Incorporated: August 23, 2016
DUNS Number: 07-937-4998
CAGE Code: 7QUE1
Registered and Insured LLC in the Commonwealth of Massachusetts.

Vendor Certifications and Registrations

Federal SAM Registration
Pennsylvania (Vendor ID: 1110875)
Boston (Vendor ID: 0000093562)

North American Industry Classification System (NAICS) Codes

541720 – Research and Development in the Social Sciences
541511 – Custom Computer Programming Services