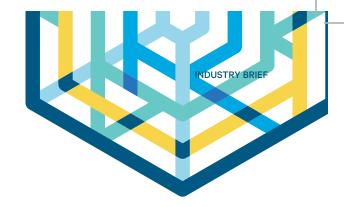# Data Drives the Constituent Experience

Data and analytics are a necessity for any government agency, non-profit organization, or institution looking to better connect with constituents. To do so, it's critical to utilize technology as a means to collect and analyze constituent data that cuts across every channel, capturing every interaction. Equally important is interpreting that data to connect citizens and communities as a whole to the government agencies serving their needs. Leveraging data is a difficult task, as current public sector technology landscapes are fragmented with a wide variety of applications that each have their data and analytic limitations.

Cloudera Enterprise, powered by Apache Hadoop, provides public sector policy makers with a secure platform to build and analyze a complete view of constituents and relevant data to inform every decision. Unlike other data analytics solutions, Cloudera's platform allows organizations like universities or government agencies to ingest structured and unstructured constituent data to support informed decision making, while keeping any volume of information securely online indefinitely.

By centralizing constituent data and analytics on a secure and scalable platform, public sector organizations can better understand the citizens and other constituents they serve by enriching traditional citizen profiles with unstructured behavioral information. These profiles allow leaders to optimize investments of tax dollars, create personalized experiences for citizens, and enhance public trust.

Improve Outcomes

Multi-channel citizen engagement is a trend that is expanding the reach and precision of government services. As constituents become more tech-savvy, there is an increase in their expectation for government organizations to interact in ways that mimic commercial businesses. Engaging the public is a difficult and expensive task that requires a complete understanding of your citizen base, and how they expect to interact with your organization. The challenge to gaining this understanding is building a complete 360-degree profile of every constituent that spans across a number of diverse data sources—from social media interactions to the last government web page they visited. Without the ability to understand your constituent's journey to this degree, it is difficult to provide the most targeted services or learn what offerings would be the most helpful to them. This becomes particularly relevant for citizens who partake of services such as medicaid, welfare, SNAP benefits, and the like, but it is also important for those who seek education opportunities and require assistance with passport, visa, or immigration services.

Cloudera provides public sector organizations with a secure, centralized repository of datasets to build and analyze a complete constituent 360 profile that cuts across every channel. By creating a centralized profile, organizations can analyze interactions that span structured and unstructured data with leading business intelligence (BI) tools or simple search. Analyzing these richer omni-channel profiles enables the team to optimize each engagement. Benefits include investing in the right dialog with individual citizens, providing the right service at the right time, and lowering the total cost of engagement and support.

Create Personalized Experiences

Storing, analyzing, and serving data out of Cloudera Enterprise, powered by Apache Hadoop, provides public sector organizations with a centralized platform to build personalized constituent experiences. Cloudera Enterprise includes data processing, analytics, and serving frameworks needed to build content or service recommendations. This can be particularly useful for citizens engaging in multiple programs because it allows government agencies to have a complete view of their needs and therefore suggest complementary programs or support vehicles that might be needed. This approach builds citizen trust and provides them with peace of mind knowing that their needs are being met in a comprehensive fashion. Similarly, this process can be used to benefit colleges and universities who seek to target, admit, and oversee the education of students as they move throughout the lifecycle of the institution, which will ultimately result in their employment and subsequent support for the institution. Instead of having data scattered across the organization, public sector leaders can bring constituent data together to create a richer 360 profile that allows for new micro-segmentation and recommendation models that take into account their specific characteristics. Micro-segmenting not only requires a richer constituent 360 profile, but also multiple analytic capabilities that range from simple search to leading SQL on Hadoop processing speeds for BI integration to advanced analytics. All of these analytics can be run out of Cloudera Enterprise with no need to purchase or move data to additional systems. Once constituents have been micro-segmented, and the services required have been determined, organizations can then serve the recommendations directly out of Cloudera Enterprise, or existing applications.

Build Public Trust

Active citizen engagement through outreach such as electronic petitions is the vital link between transparency and accountability, and it presents government agencies with a wealth of information that can be used to build public trust. This can help determine the best course of action around policies and procedures, as well as how to allocate limited tax revenue to benefit the greatest number of constituents. Furthermore, opening additional channels of communication, and seeking to understand and act on the data they provide, can help transform public sector organizations and enhance support from the citizen base.

Building a 360 profile of every constituent interaction, and ingesting more complementary data in near real-time, allows organizations to better understand what leads to engagement and also shows governments what services their constituents need and value. For example, agencies can solicit input from citizens through multiple channels that can be translated into actionable information about what services are desired by the community, resulting in constituent involvement for initiatives like participatory budgeting and policy-making as well as enhanced services around education, healthcare, and unemployment. This is particularly valued in traditionally underserved communities or segments of the population such as the elderly, low income neighborhoods, or those with large immigrant populations where the need for

government services—and insight into how those services are succeeding—is critical. With Cloudera Enterprise, organizations can analyze and monitor the complete constituent journey from a single platform. Analyzing this information results in a more engaged citizen base who will provide valuable feedback on their preference for tax dollar and resource allocation.

Summary

Across the public sector, leaders for many organizations seek to identify the unique needs of constituents and determine how to best deliver them cost effectively. This is a very difficult task, as gaining that insight requires the understanding of citizen data inside and out. While analytics teams are a great start, it's important that data and analytics embed themselves within every organizational decision. With more and more digital interactions being captured by a variety of applications, it is critical to make sure that government organizations have the ability to take advantage of this information. From building and analyzing a complete constituent 360 profile that optimizes services investments to creating a personalized experience to building citizen trust by exceeding customers expectations, Cloudera has your data and analytics needs covered.

About Cloudera

Cloudera delivers the modern data management and analytics platform built on Apache Hadoop and the latest open source technologies. Cloudera helps information-driven agencies make the most of their data, their infrastructure, and their most valuable resource — their people. Cloudera was the first and still is the leading provider and supporter of Hadoop for the public sector and offers software for mission critical data challenges including: capture, store, process and analyze vast amounts of data efficiently and securely; empowering them to use advanced analytics to drive business decisions quickly, flexibly and at lower cost than has been possible before. To ensure our customers are successful, we offer comprehensive support, training and professional services.