Produce Actionable Analytics More Quickly

Trimming the Time to Translate Raw Data



The Challenge



Soon after the passage of national health care reform, California became the first state to enact legislation to establish a qualified health benefit exchange. Known

as Covered California, the agency has helped more than 2.9 million people purchase affordable, quality health care coverage since 2014.

CALIFORNIA In conducting business, Covered California collects huge volumes of data from its vendors, partners, and other state departments on varying frequencies. These datasets are manually processed, cleansed and then queried by different teams internally.

Initially, the TrinityTG team helped the agency design and build a robust Business Intelligence (BI) environment that could securely support a variety of data analytic needs including importing, storing, accessing, combining and exporting datasets obtained from various external data sources.

BY THE NUMBERS

- 1.4 million currently enrolled statewide
- 423,000 signed up during latest enrollment period
- 11 different plans available
- Ages of Insured:
 - <18 4.4%</p>
 - **19-29** 20.0%
 - **30-44** 25.2%
 - **45-64** 50.3%
 - >65 0.1%

Source: Covered California

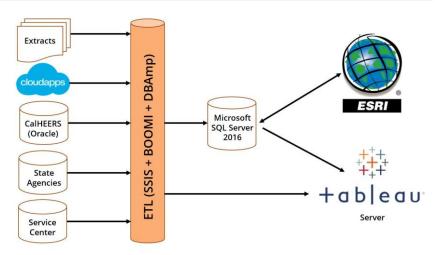
But as the agency grew, so did the amount of data it collected resulting in a system becoming data rich, but information poor. The agency needed modern BI tools that allowed for information rich environments where analysis is proactive and the needs of stakeholders and constituents could be anticipated.

Covered California's long-term goal was to build an agile self-servicing BI platform with enterprise capabilities to reduce the amount of time it takes to go from raw data to actionable analytics. More specifically, the agency needed a firm that could enhance its existing data warehouse, as well as employ visual analytics, dashboards, and geo spatial capabilities.

Further, the firm would need to gather requirements for advanced analytics uses cases from different program areas, automate data transfer processes, design security roles and scale the existing environment for wider deployment to about 400 users across Covered California's locations in Sacramento, Rancho Cordova and Fresno.

The TrinityTG Solution

TrinityTG built a SQL server-based geodatabase for the required spatial entities. Maps and web services were created using ArcGIS server technology, and a handy Geo-enabled web application was constructing using the advanced analytical functionalities such as network analyst and geo-statistical analyst in the ArcGIS portal. Users are able to access these functionalities from



a web browser. The solution will also automate the importing and exporting of datasets and reports in the target SQL server environment and support a robust data warehouse solution in the future.

Technology Attributes:

MS SQL Server 2012/2014/2016, MS SQL Server Reporting Services 2016, Integration Services, DTS, T-SQL, VB, MS Excel, DB2, Access and Excel, Tableau, Salesforce, DB Amp, SQL Server Analysis Services 2016, Team Foundation Server, Dell Boomi, C#, ASP .NET, MVC Framework

GIS Technology:

ArcGIS Desktop 10.5, ArcGIS Pro, ArcGIS Server 10.5, Java script API 3.17 & 4, HTML5, GeoDatabase

Key Client Benefits



INFRASTRUCTURE IMPLEMENTED: Supports the anticipated data volumes and reporting needs



DEVELOPED PROCESSES: For GIS data update, GIS layers, maps, web services and web application



DATA MODELS: Developed relational and multidimensional models adaptable for future needs



TRANSFERRED KNOWLEDGE: Agency staff can be self-sufficient with domain expertise to grow the solution



SECURITY: Ensuring data is maintained following the policies around PII and HIPAA



DIVERSE DATA: Extraction, transformation, and loading of diverse sources to populate the database

PROVIDED ANALYSIS: For the design, and implementation and support of the SQL Server

Trinity Technology Group

Trinity Technology Group in Sacramento has been building IT solutions and solving real business challenges for two decades. Our team of talented professionals – from business and quality assurance analysts to seasoned developers and project managers – work hand-in-hand with you to create plans for each critical process, and then deliver solutions to meet the specific needs of your organization.