

Protecting Consumers' Health and Safety Through Analytics

Developing interactive visual dashboards and analytics using modern technologies.

Health Analytics

Developing Visual and Interactive Reporting Solutions

FDA Mission

Enforce the Federal Food, Drug, and Cosmetic (FD&C) Act and other laws designed to protect consumers from unsafe food, drugs, cosmetics, electronic radiation emitting products, and medical devices.

Website: www.fda.gov

What We Did

- ▶ *Data Analytics*
- ▶ *Software evaluation & development*
- ▶ *IT modernization & consolidation*
- ▶ *Operations and maintenance*

Background

The volume of domestic-produced and imported products under regulation is tremendous and grows rapidly each year. The Food and Drug Administration (FDA) does not have the resources to closely monitor every product. Therefore, the FDA relies on an efficient set of policies, procedures and supporting IT systems to effectively prioritize its efforts.

Challenge

The FDA performs many functions to safeguard the products under regulation. FDA personnel expend significant effort to evaluate and approve products, conduct facility inspections, collect and analyze product samples, and enforce compliance actions when a violation occurs. Restrictive budgets require the FDA to carefully plan activities for the fiscal year but to also respond rapidly when conditions change and unexpected incidents occur.

The FDA relied on traditional data collection and reporting tools to analyze the large volumes of data necessary to make informed decisions. Personnel would generate large static reports and then manually analyze the data.

Relying on human interpretation of reams of data was not only slow, but meant that insights, trends, and anomalies could easily go undetected. The FDA needed a more visual and interactive reporting and analytic solution that would help personnel to rapidly make wise decisions to best prioritize its inspection, laboratory analysis, compliance, and other activities.

Salient CRGT has successfully delivered over 450 data analytics projects across more than 30 federal agencies and Fortune 1000 companies.

Our Health Analytics

► Health Analytics Framework

Through over **450 data analytics implementations**, Salient CRGT's framework has been proven and refined over time.

► Health Analytics Companion

There are over **500 artifacts** in Salient CRGT's library of guidelines, templates, and best practices. Additionally, Salient CRGT houses more than **350 data analytics experts** and more than **100 health domain subject matter experts**.

► Health Analytics Accelerators

Through agile-focused iterations, Salient CRGT's accelerators allow customers to envision what is possible with modern analytics techniques and to quickly begin to reap the benefits of that data. Customized for your specific organization's challenges, these accelerators leverage modern technologies and help agencies overcome the limitations of legacy data environments.

"We have a deep understanding of the technology challenges our customers face. Salient CRGT is strategically positioned to help the FDA connect with its public user audience via modern data visualizations."

*-Tom Ferrando,
Salient CRGT President and CEO*

Solution

Salient CRGT integrated commercial-off-the-shelf (COTS) dashboard and analytics capabilities into the FDA's data center and Cloud operating environments. Our implementation team took full advantage of FDA's existing IT investments to rapidly deliver several targeted interactive dashboard solutions.

Salient CRGT delivered a workforce planning dashboard for the FDA Division of Planning and Evaluation Management (DPEM). This dashboard enables DPEM and District Directors to visualize the annual workforce plan and to monitor the work accomplished against the plan throughout the year. Users can examine the progress of foreign and domestic inspections, sample collections, and field examinations. By visualizing progress throughout the fiscal year, the FDA can adjust its resource allocations to meet unexpected needs, and identify potential bottlenecks.

The FDA requested a dashboard to track the performance of FDA's laboratory network. The FDA maintains geographically dispersed laboratories that analyze product samples from the local district. Salient CRGT developed a dashboard that allows laboratory managers to monitor pending, in-progress and completed analyses, and to visualize trends of lab performance. This capability allows the FDA to review each lab's performance and to adjust staffing levels based on the dynamic workload.

Salient CRGT additionally supported delivery of a dashboard that allows personnel to view the capacity of neighboring laboratories. In the event an outbreak requires a surge of sample analysis or a lab unexpectedly closes due to catastrophic conditions, the FDA can quickly divert samples to an available lab.



Impact

FDA personnel are quickly discovering the advantages of using interactive visual dashboards and analytics over traditional reporting tools. Modern dashboards are easy to use and allow rapid interrogation of information. Users are discovering insights that would have gone unnoticed.

As users experience the power that these capabilities provide, the FDA will quickly adopt a self-service model to dashboards and analytics. Users want to develop their own visualizations and perform what-if analyses. Salient CRGT is enabling this transformation by supporting and training users. This support includes developing standards guides that teach users the most impactful ways to visualize different types of data, and how to present interactive dashboards that are fully accessible to persons with visual and physical impairments.