

# Storytelling through Data Visualization



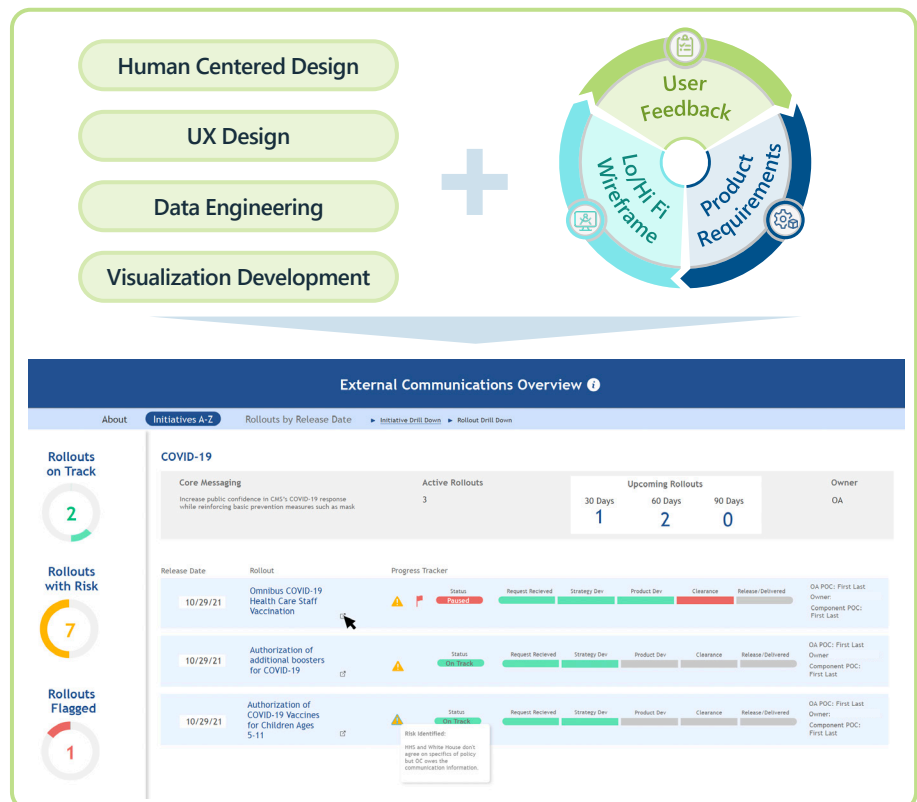
The greatest works of literature use intentional mixtures of detail and emotion wrapped in story to captivate and guide their audience. Information delivery is no different. Noblis utilizes Human Centered Design (HCD) alongside User Experience (UX) teams to understand our Centers for Medicare and Medicaid Services (CMS) client's needs and iteratively develops tailored data visualizations and dashboards. Our data engineers and data scientists are experienced in collecting, cataloging, and munging disparate structured and unstructured data artifacts to operationalize them within cloud environments.

## Challenge

CMS has continuously stressed the need to increase information accessibility for Leadership using enterprise-wide data gathering and reporting of strategic initiatives, key business programs, IT continuity, systems information, human capital, and more...

## Approach

Noblis' Data Storytelling experts have developed and successfully deployed a human centered approach to rapidly collect and operationalize information for production visualizations used across CMS. Using HCD, UX, Data Engineering, and Visualization Development tightly coupled with agile operations, our solution is easily scaled and seamlessly embraces user and product owner feedback within each phase of the process. The solution has proven successful in shorter pilot projects and multi-year development, operations, and maintenance contracts.



# Technical Capabilities

Noblis uses the following capabilities:

**Visualization and Dashboarding:** Streamlit, Plotly, PowerBI, Tableau, QuickSight, FOSS Webapps, and more..

**Environments:** AWS, Dynamics365, Tableau Server, Jupyter, Python, and more...

## Results

### OPERATIONALIZING TIME TO HIRE INSIGHTS WITH AI

Noblis is providing HCD, Machine learning, Cloud architecture, and data engineering expertise to the Office of Human Capital (OHC) and the Office of Information Technology (OIT) on an AI Launchpad Pilot to operationalize data for better understand of time to hire.

### CURATING ENTERPRISE DATA DURING THE PANDEMIC

Through the EW and the award winning COVID-19 dashboards, Noblis developed visuals for agency executives to view both the current and past status insight related to agency communications, financials, beneficiaries, providers, etc., which all influence the decision making at CMS.

### SIMPLIFYING DATA ENCRYPTION EVALUATION

Noblis utilized our subject matter expertise alongside our data storytelling methods to partner with CMS for the development of an award-winning AI tool that evaluates the status of agency data encryption and prioritizes action.



## Awards and Recognition

2021 G2Xchange FedHealthIT Innovation Award for Noblis' work on CMS COVID-19 Dashboard

2021 G2Xchange FedHealthIT Innovation Award for Noblis' work on CMS Enterprise Data Encryption (CEDE)

Using HCD Research to Understand the Centers for Medicare and Medicaid Services (CMS) Needs: Noblis collaborated with business leaders and Information System Security Officers for nearly all CMS component areas to review the CEDE Tableau dashboard. Comments ranged from: "we've never actually seen our security information before or been able to interact with it to understand our security posture" to being "thrilled to have user-friendly visibility and understanding of system security."

Two-time Technology in Leadership Noblis Awardees

## NAICS Codes

541611	541990	541330	541711
541618	541690	541380	541712