Deloitte.

In association with **Dataiku**

US department of defense client boosts retention, optimizes personnel data **with solutions and staffing insights from Deloitte and Dataiku**

CHALLENGE

Unanticipated staff shortages jeopardize the critical mission of the US Department of Defense (DoD). In response, the DoD initiated efforts to improve personnel retention methods and strategic staffing forecasting by addressing challenges with existing workforce systems and data analysis.

These challenges included:

- Outdated and inefficient manual processes used to forecast and analyze staffing volume, behavior, and outcomes

- Legacy tools that couldn't discretely model future staffing impacts accurately

- Difficulty performing accurate "what-if" analyses to forecast personnel shortages and trends due to legacy systems' limitations

For a mission-critical organization, these shortcomings put essential services, protections, and duties in jeopardy due to the potential of unplanned staff shortages.

Without modern methods to support retention, promotion, and recruiting rates to meet staffing needs—especially in key gaps across the organization—the agency was overdue for significant digital transformation.

SOLUTION

Deloitte developed a new tool for modeling various parameters that forecast future workforce needs and trends . The solution capitalized on Deloitte's depth and breadth of experience in advanced data analytics implementations for government and public services clients. It also leveraged Deloitte's alliance relationship with Dataiku, a provider of a market-leading machine learning operations (MLOps) platform that automates data preparation and machine learning (ML) through the design, deployment, and management of AI applications for all users in a low- or no- code environment.

The DoD client solution, built on a Dataiku-hosted, user-friendly, and intuitive dashboard, provides an interactive display of data driven by R programming language. It is designed to facilitate easier, faster, and more accurate data analysis and simulation of workforce staffing changes .

The solution was also designed with "plug and play" capabilities that enable the client to simulate changes in its workforce by estimating how potential changes could impact staffing over the course of several years. Based on a combination of any changes made as a result of the simulations, predicted outcomes, and disaggregating workforce data down to specific organizational elements, the DoD client could more nimbly adjust retention, recruiting, and promotion rates to improve forecast accuracy and help leaders better pinpoint and address staffing needs in the most effective ways possible.

IMPACT

Deloitte's Dataiku-powered solution assisted the DoD organization to make data-driven decisions based on accurate, frequent data analysis of workforce needs and trends. The organization could adjust parameters within the tool to simulate different real-world scenarios affecting staffing numbers.

Looking forward, the team is also exploring ways of introducing additional Dataiku solutions to streamline usage through API integrations that could eliminate manual data ingestion and modeling capabilities that could further optimize workforce levels at the click of a button.

Learn more about how the Deloitte and Dataiku alliance can help your government agency or organization use data insights to drive productivity, efficiency, and operational success.

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