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CUSTOMER CASE STUDY

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Early adopters of generative AI like this government and health organization see immediate productivity benefits and inspiration for new ways of working across many job roles.

Uniformed Services University Plans for a Digital Medical Workforce with Generative AI

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Introduction

The Uniformed Services University's (USU's) essential mission is to train the U.S. military's medical personnel and prepare them professionally and technically for the future of digital medicine. Technologically, many complex systems must come together to produce, consume, and distribute various materials for the university. For example, administrators need to create new policies, professors need to update course syllabi, and students need to digest vast amounts of complex material to master medical expertise.

Sean Baker, USU's Chief Technology and Senior Information Security Officer, was eager to find solutions to address inefficient processes across the institution. He jumped at the opportunity to participate in Google's early adopter pilot program to test Gemini for Google Workspace (fka Duet AI), a generative AI (GenAI) collaborative assistant integrated across Google Workspace. For the first time, Baker saw the potential of a general deployment of AI that could be useful across the organization.

Historically, AI was deployed on specific tasks at USU, such as clinical decision support for individual diagnostics. However, deploying Google's GenAI technology ahead of general availability presented the university with a unique opportunity to have an early influence on an important new technology.

SOLUTION SNAPSHOT

ORGANIZATION:

Uniformed Services University, a health science university of the U.S. federal government

ORGANIZATIONAL CHALLENGES:

- Finding new ways to work more efficiently in a highly regulated, process-heavy organization
- Ensuring the next generation of military medical personnel are trained to work in a digital medical workforce

SOLUTION:

Enable more efficient ways of working across a broad set of use cases and roles using Gemini for Google Workspace

BENEFITS:

- 88% of pilot users report being decidedly more effective at what they do overall
- Faster task completion
- Improved productivity and time savings
- Increased focus on high-value, more meaningful work
- Improved job satisfaction

Baker envisioned a broad application of Gemini for Google Workspace across USU in many different use cases. Academic deans could save time writing policies on academic integrity, professors could spend less time rewriting syllabi, students could have personalized help, and more. And yet, given the strong security and privacy regulations associated with the military and healthcare, USU had to vet all prospective exposures before leaping in.

Implementation

As a current Google Workspace client, USU had already conducted rigorous security reviews of the Google platform. The Gemini for Google Workspace pilot was approved by the university after a cybersecurity assessment and legal review to ensure proper compliance and to address intellectual property concerns and data rights. The cybersecurity review was completed within one day and required a review of the vendor architecture because USU had already extensively scrutinized Google Workspace's architecture. The fact that so many features within the platform were already using AI capabilities and that this same architecture was used to facilitate GenAI made this the simplest aspect of participating. From there, it took about a week to establish the terms of engagement for users. Baker anticipates the data ownership and stewardship considerations that his team had to work through will be an even simpler period for production users.

In the process of considering USU's participation in the pilot project, USU leaders weighed the potential of deployment against the risks of not using the most current tools to support the institution. As Baker notes, "It's about teaching the next generation of medical providers to interact with generative AI. Ten years from now, the semantics are absolutely going to be different, but the capabilities, the platforms, and what the tools are capable of will be critical if we want to be delivering modern digital medicine to American service members and their families." Thus Gemini for Google Workspace was broadly offered to users from all departments, regions, and roles within the university so that Baker and his team could quickly understand which use cases would be most useful and where they might find the greatest savings in time, cost, and effort.

Challenges

At the project's outset, senior leadership had trepidations about how impactful Gemini for Google Workspace could be. Leadership questioned how effective GenAI would be in writing research proposals and drafting syllabi across the curriculum.

The main challenge was definitively measuring in detail all the benefits end users were able to achieve. To fully achieve the potential of GenAI, USU will require access to large, specialized language models with deep domain expertise. With a large percentage of the language in its documents referencing deep domain, academic, or medical terminology, the team looks forward to creating a model based on detailed diagnostic literature that could pass the U.S. Medical Licensure Exam.

Benefits

After the initial pilot, 88% of the 50 USU pilot users said they were decidedly more effective at what they do overall using Gemini. Half of the users also reported being more productive in multiple aspects of their domain-specific task areas. Baker notes, "USU is a heavily niche organization as the only medical university in both the U.S. government and Department of Defense, and so our specialized users within this context do not look like knowledge workers anywhere else. Given that the tools are designed for general purpose, we were quite impressed with half of the folks finding domain-specific gains in these early models."

One of the biggest benefits of the Gemini for Google Workspace deployment has been the acceleration of administrative tasks, especially the HR, academic, and proposal writing processes (e.g., the writing of first drafts for appointment letters, position descriptions, needs statements, value propositions, and the like). Users were also able to create meeting minutes and notes from the transcripts developed by Google Meet. Others were able to condense (or elaborate upon) existing prose to condense a course syllabus down to a description field that only accepts 50 words.

Trial participants were able to reduce their administrative burden. The most immediate impact came in the form of load reduction on support staff, who were able to self-streamline many of their more tedious tasks to make themselves (and those whom they support) more effective. For instructors, removing or speeding up monotonous administrative tasks meant having more time to mentor their students.

While still in the early stages of deployment, USU pilot participants saw clear benefits, including:

- Increased effectiveness in doing general and domain-specific work:
  - 88% of pilot users report being decidedly more effective at what they do overall
  - 50% reported that Gemini for Google Workspace made them more effective in domain-specific tasks
  - One day — amount of time needed to complete the cybersecurity review
- Speed to complete routine or redundant tasks, such as translating a Gen Ed syllabus into a shorter or longer expression of the same information
- Improved knowledge capture, such as enabling Gemini for Google Workspace to take notes during a meeting and generate personalized tasks
- Faster content organization, including the ability to catalog information for a course, including associated credit hours
- Better code quality and translation, such as enabling auto-translation of code (e.g., rewriting Python to R to validate data across different systems)

> We're trying to get people to have the appropriate skills and mindset to be part of a digital medical workforce. — Sean Baker, USU Chief Technology and Senior Information Security

The promise of expanding on these benefits by enabling Gemini for Google Workspace to access deep domain–specific knowledge and inline learning support is another benefit USU users look forward to in the future. The open-ended approach to adopting GenAI capabilities has rapidly surfaced both immediate and future use cases to benefit individuals at the university and strengthen the institution's future.

Methodology

The project and company information contained in this document about the deployment of Gemini for Google Workspace were obtained from multiple sources, including information supplied by Google and questions posed by IDC directly to USU employees.

About the Analyst

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Amy Loomis is research vice president for IDC's worldwide Future of Work market research service. In this role, Ms. Loomis covers the growing influence of technologies such as artificial intelligence, data analytics, robotics, augmented and virtual reality, and intelligent process automation in changing the nature of work. Her research looks at how these technologies influence workers' skills and behaviors, organizational culture, and worker experience and how the workspace itself is enabling the future enterprise.

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