

PFIZER INC.

EVOLVING THE PFIZER DPS INFORMATICS STRATEGY:
A CASE STUDY TO LEVERAGE PCMM AND SCIENTIFIC DATA CLOUD**Student team:**

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The Tauber project at Pfizer is a jointly sponsored initiative between the Drug Product Supply (DPS) and Technology & Innovation (T&I) groups. The intent is to deliver improvements in the informatics space by leveraging recent developments in both the manufacturing and technology fields. DPS has been developing a new manufacturing method with Portable, Continuous, Miniature, and Modular (PCMM), and T&I is in the process of implementing the Scientific Data Cloud (SDC) as a new data management system. These two technologies are well suited to each other, as PCMM is generating huge amounts of data that current systems are unable to handle. Utilizing these two technologies together is the best way to fully take advantage of both, helping to move Pfizer forward, shortening development timelines and getting medicines to those in need faster than ever before.

In order to give a clear and comprehensive view of how these technologies can best be used, the Tauber team first created an informatics strategy specific to DPS. Then, the current state was analyzed in terms of this informatics strategy and gaps were identified. For the purpose of this project, the area of visualization was selected and solutions were implemented to fill this gap. Specifically, visualizations were created for PCMM using SDC as a data source, with the goal of helping scientists focus more on the science and spend less time gathering and analyzing data. The Tauber team identified, mapped, and integrated critical data points and created visualization templates. In addition, the Tauber team also created visualizations using a similar method to create a real-time operations dashboard to provide information to managers to make faster and more effective decisions. Recommendations for expanding the visualizations and making improvements in other areas of the informatics strategy were also provided so Pfizer can continue to advance in informatics after the Tauber project.

Benefits from the PCMM visualizations include a reduction in time spent gathering information and creating visuals from weeks to minutes. In addition, the knowledge gained from PCMM visualizations will lead to increased process understanding, helping to limit development runs. Cutting one development run could save over \$800,000 in active pharmaceutical ingredient costs alone, and would free the equipment for other purposes, resulting in better equipment utilization. In the end, however, the real benefit is to the patients who will receive the treatment that Pfizer will be able to develop faster and more effectively.