



## Pratt & Whitney unlocks new capabilities and value by streamlining their infrastructure with an upgrade and consolidation from MCA v7 and SPM v9 to SPM v11 solution

Pratt & Whitney

When Pratt & Whitney absorbed the AeroPower auxiliary power units business, several software platforms and systems had to integrate and one had reached the end of its IT supportability—Pratt & Whitney needed to make a choice: converge disparate systems or risk losing essential services.

To continue to provide the right parts at the optimal time, as well as world-class service, Pratt & Whitney Materials Center of Excellence manager Robert Tomastik knew that modernizing the current technical infrastructure needed to happen – but at what cost of implementation and what ROI?

## Background

Founded in 1925 and headquartered in East Hartford, Connecticut, Pratt & Whitney is an American aerospace manufacturer with global service operations. It is an operating division of United Technologies Corporation. Pratt & Whitney's aircraft engines are widely used in both civil aviation and military aviation. Pratt & Whitney Commercial Engines MRO (Maintain, Repair, Overhaul) services include among them engine overhauls, part repair, and spare parts fulfillment. MRO locations are dispersed worldwide in 22 locations, including the United States, India, China, Australia, Germany, and Saudi Arabia.

## If It Ain't Broke

AeroPower's transition into Pratt & Whitney was an initial challenge, however the team created opportunity from the need to consolidate two very successful, but different, long-standing parts management solutions. This was done by demonstrating SPM v11 consolidation not only met, but exceeded prior functionality and quality of the separate MCA v7 and SPM v9 solutions, and do so at a lower internal cost.

Tomastik explains that both entities were using existing implementations that had already proven their value but still called for an upgrade.



**If we don't upgrade the commercial engines business, we will lose the benefits that we had achieved and the same for AeroPower. These tools are really considered essential."**

Indeed, both legacy systems had achieved superb results with their respective users. When Pratt & Whitney deployed MCA v7 in 2009 to forecast and optimize their parts and inventory systems, they saw a 10% improvement in fill rate and a 10% reduction in inventory. Moreover, MCA v7 served its purpose until 2016 – a remarkable longevity.



We see clients with a tangle of legacy software and deployments that can be a distraction from focus on digital transformation and they look to PTC and specifically PTC's Customer Success team to lead them through a path."

Sanjay Jagdale  
Vice President, SLM Segment, PTC

Updating or upgrading large systems can be challenging. There are time and cost considerations when it comes to implementation, and even a sentiment of "if it's not broken, don't fix it." In the case of AeroPower and Pratt & Whitney, the opportunity lay in PTC's ability to chart a course that maintained the functionality of legacy systems well-loved by their users while adding tremendous enhancements to service levels and fulfillment rates.

"We knew that Pratt & Whitney was in the perfect position to undertake this joint upgrade with their new AeroPower business unit. When business units are merging or milestones are approaching and upgrades are necessary, PTC's latest SPM functionalities and expert consultants in Customer Success are a natural fit for a forward-thinking entity like Pratt & Whitney that depends on sourcing and servicing mission-critical parts," adds PTC's Jagdale.

Despite the necessity of this system upgrade to SPM v11, gaining company-wide support took a two-part approach.

### Boldly Going

The first phase began with running both SPM v9 and MCA v7 in parallel and showing the eye-opening benefits of upgrading to the latest SPM v11. Pratt & Whitney partnered with PTC's Service Lifecycle Management and Customer Success groups to launch an assessment and proof of functionality in Phase 1, from April to May 2015. The configuration was to include MCA functionality, but to enhance when possible. The data interface had to include the same data elements as MCA, but mapped to new SPM tables.

In September 2015, the project entered Phase 2 of implementation, that lasted through February 2016.

Marrying two business units into one service umbrella naturally brought up concerns over the cost. "We needed to control implementation costs, and we did that by combining implementation into one upgrade, and having one team do both at the same time. We also controlled costs by leveraging as much of Pratt & Whitney's knowledge of the current tool set and getting our staff involved in the implementation instead of relying solely on PTC's consultants," says Tomastik.

PTC's Customer Success group provided additional support to scope and advise the project throughout. Tomastik adds,



**They were outstanding. They came in within schedule and within budget, and met 100% of the scope and even beyond the scope in terms of the new capabilities of SPM v11."**

"I'd say it was a complete success, they were so knowledgeable. This was the first upgrade from MCA to SPM, and having the right consultants on the job was key."

### Going Bold

By leveraging PTC's Customer Success team and newest SPM software, Pratt & Whitney took what could have been a challenging or costly time of transition and turned it into a runaway success. "The immediate benefit was more on the implementation cost side, having one team do both at the same time. Some of the general modeling techniques were applicable to both businesses, so we were able to use templates across multiple business operations. We were able to leverage that common modeling approach to be more cost-effective," Tomastik says.

Beyond cost, Pratt & Whitney was also able to deploy brand new abilities that were unavailable to them in previous SPM software iterations, and end-users were delighted. "AeroPower's older version of SPM didn't have some of the advanced optimization of the new version, so when the two products merged, it was a big eye opener for them, in terms of the multi-echelon optimization capability that SPM v11 has. That was a huge draw and selling point for the users on the AeroPower side. For the commercial engine side, the graphical user interface and additional forecasting configuration options were a big improvement over MCA," Tomastik adds. Ultimately, delivering a product where end-users can make use of the latest technology advancements and benefits from usage is key. "There was very little resistance when they saw that the new version brought more capability and more usability," says Tomastik.

"Now that benefits can be realized for both MCA and SPM legacy customers, PTC is able to enhance the client experience by offering more options on modeling demand statistics (scaled or de-trended standard deviation and forecast error,) better and configurable GUI, and more flexible optimization groups, among many," says Jagdale. PTC's solutions enable companies to optimize the entire service parts supply chain. By understanding service parts demand and improving stocking levels, clients can deliver significant value through increased parts availability and equipment uptime.

For Pratt & Whitney's critical equipment, consistent global part availability isn't an option, it's a business requirement, and the company has placed significant value on, and invested in SPM capabilities that will ensure that its operations continue to exceed their high standards." At Pratt & Whitney, our large commercial engines power more than 25 percent of the world's mainline passenger fleet. We succeed when our customers get the service they need when and where they need it," says Tomastik.



We made a large investment into the future of our customer service. Our customer base relies on uptime, and optimizing our services just makes sense – for our customers and for the long-term success of our business."

To learn more, please visit:

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J8524-Pratt & Whitney CS-EN-0217