



Accelerating time-to-completion in Aerospace

With over 13,500 airplanes tied up in backlog, Chris Brumitt, VP Aerospace & Defense, and Alfred Baumbusch, EVP Operations, at Maine Pointe, outline how cross-functional supply chain collaboration is the key to unlocking trillions of dollars of revenue tied up in production.

▶▶ The Question:

As the saying goes, “every rose has its thorn”. With the market so buoyant for new aircraft what, if any, “thorn” should executives be prepared to deal with?

“The challenge is that these record orders are putting exponential pressure on aircraft supply chains and operations.”

Chris Brumitt: With new aircraft orders and deliveries in 2017 hitting new records, the global backlog of airplanes is at an all-time high. Boeing, for instance, recently booked orders for 912 commercial airplanes. This pushed their backlog at the end of 2017 to a record high of 5,864. Meanwhile, Airbus secured 1,109 net orders from 44 customers in 2017. This resulted in an overall backlog of 7,265 aircraft valued at US\$1.059 trillion at list prices. In one sense this is great news for shareholders as new orders bode well for future revenue and send share prices upwards. The challenge is that these record orders are putting exponential pressure on aircraft supply chains and operations. That’s why manufacturers and suppliers must aggressively tackle the need to boost the production rate and accelerate time-to-completion. Addressing this “thorn” is key if they are to improve their book-to-bill ratio, which many analysts are concerned about.

▶▶ The Question:

How can executives deal with this “thorn” and accelerate time-to-completion to improve booked revenue?

“A more end-to-end collaborative and cross-functional approach is key to unlocking trillions of dollars of revenue tied up in production.”

Alfred Baumbusch: With each plane not delivered, significant revenue isn’t recognized, impacting EBITDA and growth. Demand is showing no signs of slowing, so manufactures and suppliers need to address the elevated execution risk over the coming 12 to 36 months. For example, supplier delivery delays and operational bottlenecks will directly impact on-time delivery to the customer.

The University of Tennessee’s Global Supply Chain Institute¹ (GSCI), recently conducted a study, sponsored by Maine Pointe, and published a white paper, [End-to-End Supply Chain Collaboration Best Practices](#). The research indicated that internal collaboration creates financial worth. It also points out that best-in-class companies are leveraging collaboration outside their organizations to create competitive advantages. In short, it outlines that the companies with the most robust supply chains are integrating them from end-to-end, both inside and outside their organization, to increase overall supply chain value.

1. Global Supply Chain Institute, University of Tennessee, End-to-End Supply Chain Collaboration Best Practices, 2017 <http://www.mainepointe.com/global-supply-chain-institute-end-to-end-supply-chain-collaboration-white-paper>



From a practical perspective, synchronization and optimization right across the buy-make-move-fulfill supply chain is needed. We call this Total Value Optimization™ (TVO). This more end-to-end collaborative and cross-functional approach is key to unlocking trillions of dollars of revenue tied up in production. Identifying bottlenecks and synergy opportunities is the starting point. After that, it's paramount to implement a collaborative optimization plan. This accelerates the ability to complete unfinished aircraft and balance out the existing production line. Specific areas of focus that drive success include Leader and Organization Improvement (LOI), implementing a robust Collaborative Management Operating System (CMOS), optimization of processes, materials supply chain improvements and ability to measure results to make proactive decisions.



The Question:

Do you have an example of where you have done this?

Our team: We headed up efforts for one major global manufacturer to complete and obtain customer acceptance and FAA Airworthiness Certification for over 100 aircraft. This resulted in the company achieving an additional \$1.4 trillion of revenue by accelerating-time-to completion for their aircraft.

“A direct result of these operational and supply chain implementation changes was accelerated time-to-revenue. This led to the company achieving a further \$1.4 trillion in billed revenue.”

The stock price of this major aircraft manufacturer was riding high. The company had promised the market that their new aircraft would be in service the following year. However, with many delays in certification and production, the stock price was under pressure and customers were becoming increasingly frustrated. As a result, the price dropped 28% per share. The new aircraft was stock piling at the end of the production line. Over 50 aircraft were waiting to be completed in the appropriate configuration prior to receiving its Airworthiness Certification. At the same time, the production line was continuing to increase its rate. A combined optimization plan was needed to accelerate the ability to complete unfinished aircraft and balance out the existing production line. The completion schedule was exceeded by multiple aircraft. The backlog of unfinished aircraft was minimized and ultimately eliminated. Confidence soared among employees, investors and customers alike as aircraft duration time reduced and on-time deliveries started to materialize. A direct result of these operational and supply chain implementation changes was accelerated time-to-revenue. This led to the company achieving a further \$1.4 trillion in billed revenue. Not surprisingly, the stock price boomed and is now tracking three times higher than before the engagement.

If you would like to discuss any of the points raised in this article email info@maineplane.com for a no-obligation and confidential discussion.

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About Maine Pointe

Maine Pointe, a member of the SGS Group, is a global supply chain and operations consulting firm trusted by many chief executives and private equity firms to drive compelling economic returns for their companies. We achieve this by delivering accelerated, sustainable improvements in EBITDA, cash and growth across their procurement, logistics, operations and data analytics. Our hands-on implementation experts work with executives and their teams to rapidly break through functional silos and transform the buy-make-move-fulfill digital supply chain to deliver the greatest value to customers and stakeholders at the lowest cost to business. We call this Total Value Optimization (TVO)™.

Maine Pointe's engagements are results-driven and deliver between 4:1-8:1 ROI. We are so confident in our work and our processes that we provide a unique 100% guarantee of engagement fees based on annualized savings. www.maineplane.com