

Cash is king—again

Supply chain management in Aerospace and Defense

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In the most recent quarterly earnings calls, the six largest aerospace and defense companies collectively mentioned the word “cash” 134 times, compared with just 75 in the same quarter three years ago. What’s behind the sector’s renewed focus on cash? Beyond a standing desire and obligation to return money to shareholders, companies across the sector are looking to free up cash for investments. In commercial aerospace, the long-term competitive outlook is forcing companies to manufacture new and improved products more frequently. In defense, the market is returning to growth after nearly a decade of declining defense budgets.

All of these cases demand greater investments in development, capital expenditures, and inorganic growth opportunities—and that requires cash. Many aerospace and defense (A&D) companies have the potential to unlock significant amounts of cash; the key will be knowing where to look and the measures to take to free it up.

Creating a cash culture

Making the shift to prioritize cash is not easy. Most companies have historically viewed profit as king and cash as “free.” Cash is often controlled by a fragmented group of midlevel managers, almost none of whom have the incentive to maximize cash. We have never seen cash metrics or incentives alone work to structurally increase cash flow in A&D companies. The quality and on-time delivery focus of executives and managers (especially on the front line) almost always trumps cash concerns. Only companies that make the culture change to see cash as a measure of world-class performance and run a tight ship make progress. Otherwise, cash efforts become “another corporate initiative” and are ignored.

These behaviors and mind-sets span functions. An oft-repeated sentiment from supply chain leaders: “I get fired if the product is delivered late, but no one gets fired for too much inventory.” Similarly, most sales leads would agree: “I get fired if I don’t hit my quarter sales numbers. If I don’t have products on hand, I can’t ship. If I can’t ship, I can’t book the revenue.” When executed properly, a successful cash transformation program will reduce inventory while maintaining or often even improving internal performance and customer service.

So how can companies address these misconceptions and create a “cash culture”? Aggressive targets, visible leadership commitment, and a focus on capability building are all critical elements of a comprehensive program. Changing behaviors and mind-sets typically starts with developing a compelling case for change. While the overall objectives are the same across the sector, there are critical nuances in commercial versus defense environments.

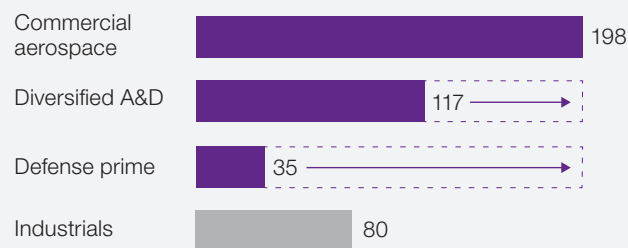
In commercial aerospace, the numbers tell a compelling story. Compared with industrial peers, commercial aerospace players tend to carry more than twice as much inventory. A&D players do face unique supply chain challenges, such as long lead times (many months or even years) and a relatively high percentage of sole source suppliers (reducing the amount of negotiating leverage for the primes). Despite these challenges we have consistently found opportunities to reduce inventory by 20 to 30 percent.

In defense, the unique nature of government contracting adds complexity to managing and tracking inventory. Due to progress payments, the “financial” inventory number on the books may be an order of magnitude less than what companies have “in the warehouse.” In this case, the financial versus physical distinction typically masks underlying inefficiencies in the supply chain. While the cash opportunity alone is often still compelling, the full value of physical inventory becomes even more critical when considering the opportunities associated with a streamlined supply chain. Building the capabilities to better manage inventory results in shorter lead times, more proactive risk management, and increased supply chain flexibility—all important factors in enabling profitable growth. Given inventory has typically been even less of a focus in defense, we find companies that choose to tackle it often achieve reductions of 50 percent or more (exhibit).

Exhibit Working capital metrics by industry segment

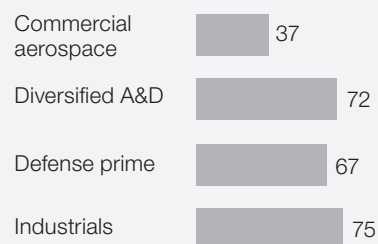
■ Priority improvement areas

Inventory days on hand



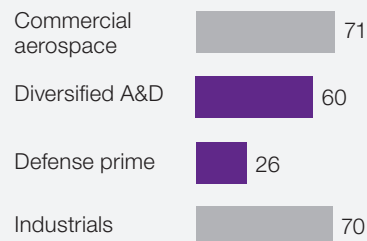
While government progress payments artificially bring net inventory down in defense, physical inventory is typically on par or exceeding commercial aerospace levels

Days sales outstanding



A&D companies have generally negotiated favorable sales terms, but opportunity exists to improve payables and align accounts receivable (A/R) and accounts payable (A/P)

Days payable outstanding



◦ Recognizing the opportunity

Where A&D companies have achieved inventory reductions of 20, 30, or even 50 percent, what were the indicators of significant opportunity? Recognizing that benchmarks are only ever directional at best, executives should look for a few common patterns in their organization.

- 1 **You don't have visibility into inventory turns by program.** What isn't tracked likely isn't managed, and this lack of visibility is often the first indicator of a significant cash improvement opportunity. Companies that have been focusing on other priorities, such as cost, are not set up to easily manage inventory across programs, sites, or business units. This scenario is particularly common in defense, where the difference between financial and physical inventory makes transparency even more challenging.
- 2 **Your lead time data are unreliable.** We've worked with multiple A&D companies where supplier lead times in practice rarely match those recorded in the procurement system. It can be especially challenging to maintain accurate data when lead times are long and volumes are low. However, without a clear picture of when parts will be delivered, buyers tend to simply add more (excessive) buffer inventory.
- 3 **"Safety stock" is considered a bad word.** Having the "right" inventory is critical to manage inevitable variability in the supply chain. When we conduct part-level statistical analysis, we typically find some parts should actually have more inventory (offset by reductions in other parts, for a net overall savings). Companies that don't proactively plan for variability can create a vicious cycle, where late parts drive a culture of more (indiscriminate) inventory.
- 4 **Work-in-process (WIP) inventory isn't clearly tracked on the factory floor.** While the full potential value for WIP inventory is tied to lean operations broadly, we often find sizeable near-term opportunities in optimizing WIP buffer targets. These tend to be set early in a program life cycle when manufacturing performance is still highly variable but aren't revisited over time to reflect production improvements.
- 5 **Your buyers routinely trade cash terms for price concessions.** Incentives and metrics drive behavior. We find that buyers are almost always measured on part price alone and can lack visibility into their company's carrying cost. As a result, contracts are often negotiated to allow for (or even encourage) early deliveries or offer generous cash terms.
- 6 **Your company has never made a concerted effort to align A/R and A/P terms.** Companies sometimes seek to gain an advantage by negotiating strong prepayment terms. However, we often find valuable opportunities when payment terms haven't historically been a focus and where suppliers have been aggressive in negotiating prepayments for themselves.

Tackling the challenge

Establishing the case for change—both quantitatively and qualitatively—is the first challenge. Successfully capturing the opportunity requires addressing several others, and that requires acknowledging and debunking common myths:

Myth

Reducing inventory will result in late parts and lost revenue.

Reality

In fact, companies with higher inventory turns consistently have better service levels because they are focused on having the “right” inventory. This common misconception is perhaps the single largest barrier to most cash programs, so it must be addressed up front to develop the case for change and further reinforced throughout the program. For this reason, we find successful programs typically start with a focused pilot to capture value and field-test a “playbook” that can be used as the program scales. This approach provides a tangible proof of concept to demonstrate the actions that can be taken to reduce inventory without negatively impacting service levels.

Myth

Cash is a finance issue.

Reality

Multiple functions must coordinate to manage cash. However, as previously discussed, accountability is fragmented and often absent. It is critical that any effort be led by not just finance but also supplier management and manufacturing to influence behavior on the front line.

Myth

It’s all about getting better data and tools.

Reality

We commonly hear lack of data and visibility cited as barriers to better supply chain management. This notion cannot become an excuse. We find that much of the opportunity can be captured through process changes. A successful program will push forward with data work-arounds to capture value quickly, while also investing in new digital and analytics tools to unlock the full, longer-term potential.

Myth

We just need to set targets, and managers will figure it out.

Reality

Simply proclaiming that cash is a priority is not sufficient. In fact, issuing targets without simultaneously investing in supply chain capabilities to appropriately set and manage inventory introduces real risk to service levels. Cutting inventory is easy; optimizing it in a way that also ensures on schedule parts requires considerable effort. Successful programs typically include a significant investment in capability building.

Given the scope of the challenges, it is critical to tackle the opportunity holistically—including developing the right “playbooks,” governance, and capabilities. This effort requires commitment and resources from across the organization but offers sizeable rewards for companies that get it right. ■

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