The rise of maintenance, repair, and overhaul services

Exploring a new imperative for the aerospace and defense industry

Maintenance, repair and overhaul (MRO) for the aerospace and defense (A&D) sector are related to aftermarket services in industrial manufacturing for commercial, regional, general aviation, and military aircraft. And while industry dynamics for MRO slightly differ from aftermarket services in manufacturing, the overall trends, challenges, and digital opportunities remain largely the same for companies in both sectors.

Now more than ever, A&D companies need to understand the business value and potential growth opportunities that MRO can provide. We conducted a series of global executive interviews with 35 North American and European leaders and subject-matter specialists, analyzed companies’ financials, and performed detailed case study research. Here we explore insights that A&D manufacturers can consider as they define and execute their own MRO strategy.

What’s driving investment in MRO services?

### A&D sector

**Short-term:** As new sales may slump due to the COVID-19–related economic downturn, the demand for MRO is likely to be driven by maintenance and service of existing aircraft fleet and defense equipment.

**Long-term:** The market for commercial and military aircraft is expected to remain robust over the next decade, leading to solid growth in MRO services.

**Seizing opportunities**
- A&D manufacturers are expanding their service offerings to capture demand.
- Some companies are targeting to increase their MRO revenues significantly, to about **3X over the next decade**.
- Pure-play MRO providers and original equipment manufacturers (OEMs) are collaborating and partnering with smaller, regional competitors to expand their services business.

### Commercial aerospace market

**MRO landscape drivers:**
- Changing aircraft fleet mix
- Pressure on airlines to reduce maintenance costs
- Emergence of new advanced technologies
- Growth of next-gen aerial vehicles

**Short-term:** With new aircraft orders likely to be deferred due to the impact of COVID-19, maintenance of the existing fleet will become far more important.

**Long-term:** Several airline customers are looking to invest in setting up captive or in-house MRO operations.

### Defense and military market

Military aircraft, especially multirole, are likely to drive demand for MRO services, with most activity expected to be seen in the engine maintenance segment.

**Short-term:** A COVID-19–related slowdown is likely to have a moderate impact on defense spending, since military projects are critical to national defense. Demand for upgrades and maintenance are expected to remain robust.

**Long-term:** As governments across the globe continue to strengthen their military positions, they are modernizing and maintaining their existing fleet of military aircraft, armored vehicles, and naval vessels.
A changing business model
As major OEMs are aggressively expanding into MRO, stakeholders across the ecosystem are reevaluating their business strategy and value proposition.

- MRO customers are moving to performance-based service offerings, with OEMs providing pay-per-use and subscription-based services.
- Manufacturers of complex components are offering long-term service contracts to customers to expand their presence in MRO.

What challenges could get in manufacturers’ way?

- **Talent shortages** due to an aging workforce.
- **Complex supply chains** continue to affect the cost and speed of maintenance.
- **Increased competition** from major A&D OEMs in the MRO space is intensifying competition for smaller players.
- **Global disruption** from COVID-19 and the resulting economic downturn is expected to soften market demand in the near term.

Accelerate a new wave of growth
MRO services are an increasingly valuable part of a manufacturing business. These services can offset the impact of crisis on the sale of A&D equipment and generate new growth opportunities.

Discover how Deloitte can help with your MRO strategy so you can gain a competitive edge and protect and grow your business. Explore our full article “Aftermarket services: Transforming manufacturing in the wake of COVID-19 pandemic” to learn more.

Let’s talk
Get in touch to discuss your MRO needs:

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How might digital technologies hold the key to MRO success?
Services powered by digital technologies could be a significant driver of revenues in the future—approximately 65 percent of industry executives expressed high confidence in their potential. And the proliferation of smart parts and products is opening opportunities for new digital service offerings.

- MRO providers could optimize their services using **advanced analytics and predictive applications** and create new service offerings by utilizing access to performance data.
- Using **digital platforms and data**, service providers could proactively monitor customers’ maintenance needs and advance customer engagement.
- **Virtual and augmented reality technologies** can help reduce the need for on-site technicians, further improving field service efficiency.

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