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FINDING THE NARROW TARGET OF SUCCESSFUL LARGE RJ OPERATIONS

Potential markets for 70- to 115-seat RJs | Technology to assist aircraft turnaround processes

CFM56-7B maintenance management & budgets | Appropriate parts & components for cabin maintenance

Configuring an M&E system for MRO providers | 737NG freighter conversion programmes

Digital MRO—EmpowerMX says resurgence will be digital

Digital MRO Evangelist Dinakara Nagalla says there will be no new normal, but a whole new horizon of elegantly networked MRO ecosystems.

Dinakara Nagalla, CEO of EmpowerMX, the Dallas, Texas-based MRO platform company, sat down to a Q&A, and some excerpts follow:

Let's start off with an introduction to EmpowerMX.

EmpowerMX's cloud-based, mobile-first software-as-a-service (SaaS) solutions are used by the world's leading airlines, MROs, and OEMs to more efficiently plan, execute, and optimize heavy maintenance, line maintenance, materials management, shops activities and component overhaul. Our software drives ROI and transformative efficiency gains by shortening maintenance turn-around times (TAT), increasing aircraft availability, and lowering cost per available seat mile (CASM) by improving workforce utilization, eliminating unproductive workflows, providing real-time visibility into task completion, and digitizing historically paper-based processes and documentation. Our team is composed of aviation industry veterans and A&Ps who have ran and managed the maintenance facilities and tech ops functions for major airlines and MROs, and spent decades implementing and developing mission-critical software on the floors of these organizations. As a result, we've been listening to mechanics, leads, supervisors, and base leadership since 1999, and ensuring that their needs and inputs drive the design and functionality of our products This on-the-ground experience gives us a unique, firsthand understanding of how MROs, OEMs, and airlines can best leverage cloud-based, mobile-first technology to more

efficiently and profitably plan, execute, optimize, and digitize their maintenance and overhaul functions.
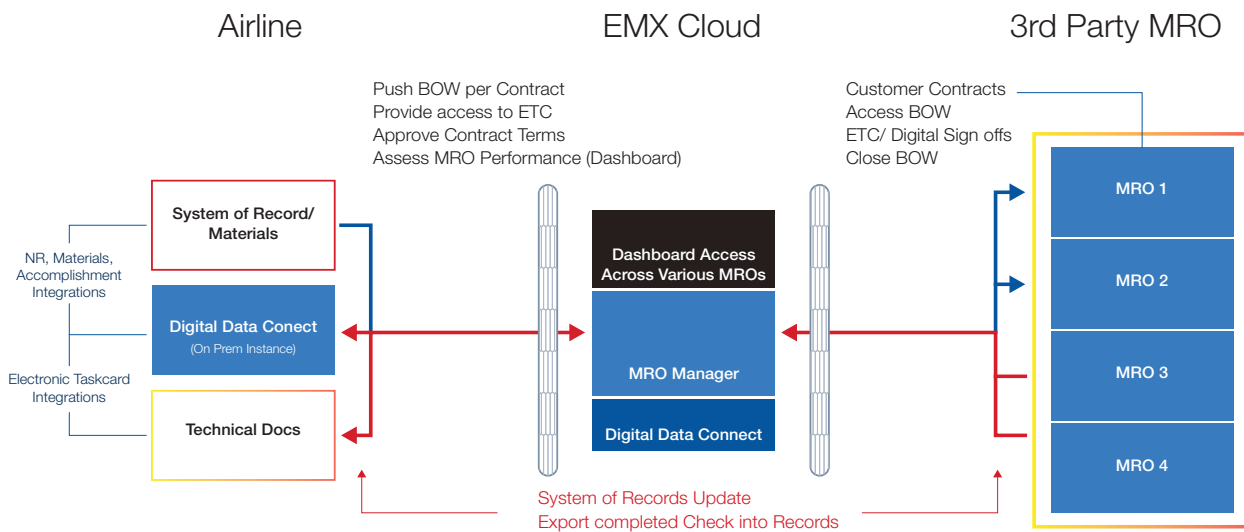
Why do you believe there is a paradigm shift in how the MRO industry is going to operate?

This was bound to happen—the pandemic was simply a catalyst and accelerated the need to change. While many B2B verticals and consumer-facing experiences have become completely digital and seamless, aviation MRO operations have remained mired in paperwork and inefficient processes—often leading to errors, long wait-times for physical documentation to move along, and complete lack of transparency and visibility around the status of aircraft. While digitization addresses many of these issues, adoption has been slow—however, the pandemic gave the MRO industry a push by forcing the use of mobile and digital tools to support touch-free operations and improve safety to keep shops open. As a result, many industry players are now experiencing the benefits of digitization, which should continue to drive the adoption of solutions such as EmpowerMX during the post-pandemic recovery cycle and beyond.

How does this paradigm shift begin? Does an MRO have to rip-and-replace everything they have?

No, in fact, it is the exact opposite. EmpowerMX is extremely modular, can be brought online in an incremental fashion, and is designed to minimize downtime and operational disruptions as we

EmpowerMX powered Cloud MRO Network

Airline   **EMX Cloud**   **3rd Party MRO**

Push BOW per Contract
Provide access to ETC
Approve Contract Terms
Assess MRO Performance (Dashboard)

Customer Contracts
Access BOW
ETC/ Digital Sign offs
Close BOW

System of Record/ Materials

NR, Materials, Accomplishment Integrations

Digital Data Conect (On Prem Instance)

Electronic Taskcard Integrations

Technical Docs

Dashboard Access Across Various MROs

MRO Manager

Digital Data Connect

MRO 1

MRO 2

MRO 3

MRO 4

System of Records Update
Export completed Check into Records

When Airlines and the MROs that Contract with Airlines are jointly on EmpowerMX platform

It provides full visibility   It avoids data re-input   It avoids billing conflicts resulting in immediate payments vs many months of delays

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begin with a 6-12 weeks implementation of just one line. We start with our flagship Production Control module that immediately brings diverse business operations into an integrated visible dashboard, then eventually layer on additional functionality as the implementation scales.

For example, one of the largest MRO bases in Central America, was over 100 days behind in scheduled turn-around times (TAT) and experiencing significant declines in customer satisfaction as they lacked visibility into their daily operations. In response, they chose to implement EmpowerMX on a single line, which dramatically improved KPIs.

Building upon that initial success, our platform now manages the facility's entire MRO operations across all their bays, all of which were implemented without requiring a facility shutdown.

How does this integration work?

The EmpowerMX platform is a seamless ecosystem that provides powerful, contextual integration across internal siloed ecosystems and external partners, suppliers, and vendors. One of the largest airlines in the world leverages the EmpowerMX Digital Data Connect module to connect all of its MRO operations with suppliers, manufacturers, and sourcing to bring real-time synchronization in parts, price, and provider selection. This has led to just-in-time inventory control, zero wait time, and greater efficiency across the operations—from shop to supplies to sourcing. Digital MRO is beyond daily operations—it impacts and coordinates partners, suppliers, and all stakeholders involved with getting an aircraft in and out of the shop.

There are larger platforms and extensive custom implementations already in place. How is EmpowerMX going to make a difference in this legacy?

Our growing roster of blue chip clients is evidence that our approach is resonating, and EmpowerMX is becoming the product-

of-choice for airline in-house MRO and third-party MROs. New customers that have committed to EmpowerMX since the onset of the pandemic include one of the world's largest third party MROs (which has chosen EmpowerMX to manage its entire MRO operations covering over 40 lines of maintenance), one of the most respected airlines in Central America, and a leading network of aircraft, line maintenance, and component services in the U.S. Today, the biggest challenge for MRO operators is manpower planning, especially in the post-pandemic return-to-work, and how to build efficiency in the entire aircraft-in to aircraft-out process. The skilled aircraft technician labor shortage is returning, customers don't have enough fleet capacity, and the entire industry is under pressure to shorten turn-around times for aircraft. EmpowerMX provides full visibility into the operations, avoids data re-entry, and avoids billing conflicts so that vendors are paid in weeks instead of months-long delays.

Where will this paradigm shift lead MRO operators to? More tools and more data silos?

No, in fact, all we ask is for tablets to be deployed—our tools are thin client and optimized for low-bandwidth experiences on the shop-floor. Our Digital Data Connect module can provide troves of data for analytics and insights, and eventually lead to automation—thus reducing labor, errors, and costs.

With another client, one of the largest MROs in the Middle East, algorithmic automation and predictive analytics has led to very efficient lines, real-time integration with suppliers, and seamless synchronization with third-party MROs. It has reduced their legacy silos significantly, and improved overall cost efficiency in less than 18 months.

It is not about will MROs embrace digital tools, but when will an MRO embrace digital platforms. EmpowerMX is a flexible, modular, and dynamic cloud-based mobile first platform, offering enterprise-grade security, and a scale-as-you-grow solution for MRO customers—regardless of size or complexity.