



CUSTOMER STORY

Leading Electric Aircraft Propulsion Developer, magniX, Selects Jama Connect® for Its Ease of Use and Quick Deployment

magniX chooses Jama Connect to help modernize their requirements management program and demonstrate compliance with standards.

- Headquartered in Everett, Washington
- Founded in 2009
- Expertise: Leading developer of propulsion systems for electric aircraft, including motors, inverters, and motor controllers
- Recent Awards for magniX:
 - 2020 Fast Company Most Innovative Company in Energy
 - Finalist 2020 GeekWire Innovation of the Year award
 - Frost and Sullivan Technology Innovation Leadership Award

Headquartered in Everett, Washington – located just outside of Seattle – magniX is the leading developer of propulsion systems for electric aircraft, including motors, inverters, and motor controllers.

MagniX is working to bring affordable, emission-free, and quieter flights to communities around the world.

MAGNIX CUSTOMER STORY OVERVIEW

OBJECTIVES

- Move away from Word/Excel to a modern RM solution that all team members could use
- Create a centralized requirements repository
- Demonstrate compliance with aviation standards

SELECTION PROCESS

- End-to-end traceability
- Powerful, easy-to-use platform
- Configuration control

THE OUTCOME AND THE FUTURE

- Increased visibility in development activities
- Improved efficiency in review cycles

OBJECTIVES

In addition to recently unveiling two “optimized-for-flight” electric propulsion units (EPUs), in May of 2020 magniX’s propulsion system powered the Harbour Air DH-2 Beaver to become the world’s first commercially focused electric aircraft to take flight followed by the Cessna 208B Grand Caravan, becoming the world’s biggest all electric commercially focused aircraft to take flight.

With big plans on the horizon, magniX set out to find a modern requirements management solution that could help them make their ideas a reality.

Initially the team was using Microsoft Excel and Word to manage their requirements, but they quickly realized it was only a temporary solution. The limitations and risks of using static requirements in this manual process were becoming apparent.

As they began their search for a requirements management solution, they knew the following things were most important:

- Moving to a modern, cloud-based RM tool
- Creating a centralized requirements repository
- Demonstrating compliance with aviation standards



SELECTION PROCESS

While the evaluation process was short and led to the selection of Jama Connect®, the magniX team seriously evaluated multiple systems.

Jama Connect stood out for the following reasons:

- Jama Connect was a more modern, easy-to-use solution with the powerful features they required
- Jama Connect allowed for the magniX team to easily customize the solution to meet their needs, without requiring complex custom scripts to be written
- The interface in Jama Connect was intuitive

“The ability to easily customize Jama Connect to fit our needs without custom scripts is a major advantage over other solutions,” said Carlos Souza, Head of Energy Storage Systems at magniX. “Jama Connect just allows us to achieve more with less work.”

Ultimately, the magniX team selected Jama Connect because the solution:

- Allows for end-to-end traceability that gives the magniX team the ability to control requirements from the product level down to implementation in one single database
- Is powerful, intuitive, and easy-to-use requiring very little training to see wide adoption and ROI
- Enables configuration control throughout all stages of development

“One of the main reasons we selected Jama Connect is the ability to provide configuration control for all the requirements and maintain them in one database. It allows everyone in the company to have visibility into the requirements and their status,” said Souza.

Jama Connect helps to form a digital thread through development, test, and risk activities — enabling the magniX team to have end-to-end compliance, risk mitigation, and overall process improvement. Moving from static requirements (in disparate teams, activities, and tools) to Living Requirements™ management was the key to them achieving real-time, cross-team collaboration and coordination. And, because of its easy, intuitive, modern user interface, broad adoption is made simple.

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Jama Connect is very intuitive and easy to get up and running. We received training, and the rest was very fluid and straight forward,” said Souza. “Teaching others how to use the tool internally is very easy.”

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THE OUTCOME AND THE FUTURE

Now, with users across multiple teams using Jama Connect – including systems, certification, process assurance, software and hardware development, and program management – they are realizing the full potential and value of the solution to optimize their end-to-end processes.

Increased Visibility into Development Activities

Not only is their process more efficient, it's also more transparent. The digital thread enabled by Jama Connect provides end-to-end and cross-team visibility and collaboration that allows any stakeholder to see where anything is at any moment during the development process. "Jama Connect allows us to have visibility at all stages of the requirements development, validation, and verification processes," said Souza. "Without it, there would be so much more confusion and wasted time."

Improved Efficiency in Review Cycles

Jama Connect's Review Center is now MagniX's single place for reviewers, approvers, and moderators to collect and manage all feedback and validation for a project's requirements. With structured reviews and collaboration – their teams can now elicit feedback, review product features with stakeholders and track critical decisions across teams and locations— in real time.

"The Review Center is very useful for us. It allows us to see exactly which requirements are under review and capture everyone's comments in a single place," said Souza.

"Our review process is now so much more fluid and easier because we don't have to have everyone in the same room to manage a review. Now, you open a review in Review Center, set a target date, and let everyone conduct their review on their own time. It's so much less disruptive than our old process."

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Carlos Souza
(Head of Energy Storage Systems at magniX)



ABOUT JAMA SOFTWARE

Jama Software® is focused on maximizing innovation success in multidisciplinary engineering organizations. Numerous firsts for humanity in fields such as fuel cells, electrification, space, software-defined vehicles, surgical robotics, and more all rely on Jama Connect® requirements management software to minimize the risk of defects, rework, cost overruns, and recalls. Using Jama Connect, engineering organizations can now intelligently manage the development process by leveraging Live Traceability™ across best-of-breed tools to measurably improve outcomes. Our rapidly growing customer base spans the automotive, medical device, life sciences, semiconductor, aerospace & defense, industrial manufacturing, consumer electronics, financial services, and insurance industries. To learn more, visit us at: jamasoftware.com.