



CUSTOMER STORY

Innovative Rocket and Spacecraft Manufacturer Relies on a Streamlined Design Process with Jama Connect® to Help Revolutionize Space Transportation

Jama Connect® helps an innovative aerospace company keep track of thousands of requirements by providing a platform for greater visibility and collaboration with its team and customers.

ABOUT

This innovative aerospace launch company designs, manufactures, and launches the world's most advanced rockets and spacecraft. In just ten years, the company has emerged as one of the fastest growing aerospace companies in the world working toward their vision to revolutionize space travel.

CUSTOMER STORY OVERVIEW

Launching spacecraft and satellites into orbit are highly complicated endeavors and like many large organizations, this rocket and spacecraft manufacturer was struggling to provide visibility, manage, changes to requirements, and meet aggressive schedules.

In 2010, this industry-leading space exploration technology company selected Jama Connect® to help its team develop new ways of working to simplify requirements management, improve visibility, and customer communication, and create an efficient, paperless product delivery process.

They saw significant improvements to its requirements management process with Jama Connect, including:

- Reducing meeting times, simplifying cumbersome specification docs, and improving overall communication to ensure all requirements were accounted for accurately
- Better traceability from requirements to derived requirements to verification events
- Improved customer relations with shared project visibility and enhanced communications

CHALLENGES

- Providing visibility and managing customer expectations
- Managing inevitable change to requirements and other important details
- Eliminating rework in order to meet aggressive schedules

EVALUATION

- Utilize Jama Connect's Review Center for open customer and internal communication
- Track requirements for faster change management
- Maintain common requirements in one place to prevent repeats

OUTCOMES

- Helped reduce meeting times, simplify cumbersome specification docs, and improve overall communication to ensure all requirements were accounted for accurately
- Provided a method for traceability from requirements to derived requirements to verification events
- Improved customer relations with shared project visibility and enhanced communications
- Accounted for contract milestones and ensured timely payments



This is Rocket Science

Launching spacecraft and satellites into space is a highly complicated endeavor. Like many other large organizations tackling complex projects, the company initially faced a few critical business challenges that Jama Connect® could help them address:



Providing visibility and managing customer expectations



Managing inevitable change to requirements and other important details



Eliminating rework in order to meet aggressive schedules

As a customer, NASA needed visibility into the company's progress to ensure key requirements were being met. Prior to using Jama Connect, the company did not have an easy way to share quick status reports on requirements verification. As a result, many hours were spent compiling status and change-control reports.

This process, although effective, took too much time. Hours were spent in meetings reviewing large cumbersome spreadsheets – going line by line to review thousands of details. The company had to implement complex macros to pull information from Microsoft Excel into Word documents to create specific reports. This was time-consuming for everyone involved. The company wanted to share real-time information with NASA for their review and approval, but they did not have an easy way to accomplish this level of collaboration prior to using Jama Connect.



On Small Step for the Company, One Giant Leap for Efficiency

The company implemented Jama Connect in 2010, wanting to develop new ways of working to simplify requirements management, improve visibility and customer communication, and create an efficient, paperless product delivery process. Jama Connect helped in three specific areas:



Open Customer communication



Improved Change Management



Automated Processes and Reduced Repetition

1. Open Customer Communication

In order to provide better visibility and manage customer expectations, The company implemented Jama Connect's Review Center, which offers a well-organized review and approval process to capture feedback, including voting for priority and electronic signatures for formal approval. With Review Center, the company can share and collaborate on requirements with their customers, as well as internally within their engineering teams. This helps to ensure requirements are captured accurately and executed according to expectation. In addition, mission managers can segment requirements so that engineers can easily find requirements applicable to them, minimizing search time while keeping engineers informed of the latest changes.

The most significant outcome of using Jama Connect is improved collaboration and streamlined communication with its customers.

2. Improved Change Management

They also use Jama Connect's Review Center for customers to review and approve "verification events" that are linked to requirements using traceability and coverage. These events demonstrate to the customer how the company will review and meet every requirement. By reviewing all verification events through Jama Connect's Review Center, the team can more quickly discuss, comment on, and change items until everyone is satisfied and all requirements are approved. By tracking requirements in Jama Connect, they have been able to automate the Interface Control Document (ICD) development process. This document contains all mission requirements and is used as a milestone deliverable to the customer. After approval of requirements and verification events through Review Center, mission managers can now easily output an ICD for delivery, which was previously only one through Word and Excel document exchanges. Using Jama Connect for ICD development, The company now can easily manage revision control, feedback and comments, and eliminate confusing track changes.

3. Automated Processes and Reduced Repetition

Using Jama Connect's reuse capabilities, the company creates common assets once and uses those to support parallel development efforts. This allows the company to maintain all the common requirements in one central place. These are managed by a core engineering team, ensuring that they are current and accurate. Engineers working on specific projects can access those requirements quickly and easily. Additionally, if any of the common requirements change, the engineers are notified and can determine the appropriate action. This enables them to spend their valuable time on the requirements unique to each project.



Improved Communication, Happy Customers

The most significant outcome of using Jama Connect has been improved collaboration and streamlined communication with its customers.

Customers have greater visibility with Jama Connect, which translates into increased customer satisfaction. Consequently, the teams can quickly turn around requirements for review and approval and increase efficiency on the engineering side. Both customers and the company's teams are happier because Jama Connect helps keep everyone in sync with the latest plans and status of projects.

Jama Connect has eliminated the endless meetings and cumbersome spreadsheets to track requirements and other important details of projects. This allows the company to focus on design and development. They are now able to pull requirements from Jama Connect to create status reports within an hour or two.





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, please visit us at jamasoftware.com.