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ATLAS RFID SOLUTIONS: Material Readiness Redefined



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Material Readiness Redefined

located just off Australia's central Queensland coast, Curtis Island is home to uninhabited beaches, secret fishing spots and mangroves. Not far from this unexplored wilderness lies a bustling hub of coal seam gas export facilities including natural gas liquefaction plants. It is here where Bechtel, a global engineering and construction company met with a unique supply chain challenge. Bechtel's three liquefied natural gas (LNG) project construction sites—owned by separate entities—were accessible only by water, and they had no room in the island to store materials for a long time. Given the challenges presented, Bechtel deployed innovative RFID technology to automate work processes typically performed manually to improve efficiencies. The company procured and deployed active RFID tags, tracking and tracing millions of material movements as the construction materials moved from the mainland port to Curtis Island, eliminating the need for manual recording in the project databases.

The brainpower behind this amazing feat was Jovix, a powerful application from Atlas RFID Solutions that tracked and delivered materials from multiple locations to Bechtel's LNG project construction sites. Given the capaciousness of the construction sites, Jovix,

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into the availability of material required to complete their work. Addressing this problem, Jovix enables material readiness by utilizing sensor technologies to collect data from disparate physical construction assets. The congregated data is then tied to specific work packages and the construction schedule to provide analysis for timely completion of construction schedule. At the core, the firm's material readiness application integrates design, fabrication, schedule, and on-site work package data to provide work package forecasting, predictive analytics and exception reports. These functionalities equip the users with future material readiness by comparing supply and demand data from work packages. With Jovix, users have accurate information in real time, which proactively resolves problems and saves time.

Jovix facilitates high level of visibility that is markedly advantageous to project managers, construction planners and supply chain managers. Prior to using Jovix, the manual process of collecting data, and updating legacy systems, with information about material location and status used to take 30 days for some of Atlas' clients; This is just for keying in material information into the systems from paper records. "The solution plants RFID tags on the materials and the transfer units providing access to real-time information about the materials' location, time of arrival, and more," says Chesser. Treading on the heels of Collect-Process-Analyze-Act schema, material readiness is the next breakthrough in project performance of capital projects, granting the ability to drive better decisions through unprecedented visibility into materials with respect to construction schedule.

Challenging the orthodoxies in the industry, Jovix keeps pace with the latest technologies in fabrication and modularization to provision material readiness information that drives necessary actions and accelerates availability of the right material at the right time and in the right condition. Jovix extends features such as personalized Materials Readiness dashboard for owners, contractors and fabricators, which utilize automation to highlight issues on an exception basis in easy-to-consume format that facilitates investigation.

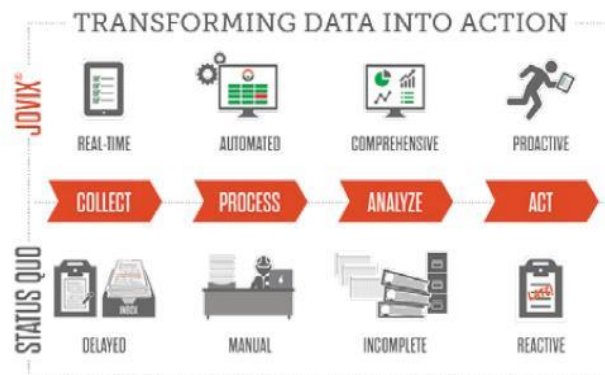
In a nutshell, right from the process of fabrication and receiving to planning and installation, Jovix assists the users to control every aspect of material lifecycle by quickly turning vast amounts of data into actionable information, and providing access to this information to mobile users in the field as well as corporate and project executives in the office.

Testimony to Efficiency

Amid the numerous accolades and accomplishments in Atlas' journey, one that stands out is their engagement with Bantrel, an engineering, procurement and construction firm. Bantrel knew that future material availability is a critical input into the construction sequence planning process and a lack of visibility into existing or future inventory can cause construction delays and negatively impact the construction schedule. With Jovix, Bantrel integrated multiple data systems to provide one source

of information regarding the status of materials, visibility into the location and status of critical construction materials. By implementing Jovix, the project greatly reduced unnecessary man-hours and labor costs, and avoided other potential costs that directly impact the project budget. The implementation of field mobility and auto-ID on this project resulted in staggering savings of \$10,642,500 in time spent for searching material, \$942,808 in receivables process, and \$190,300 in having integrated data systems. Altogether, the client saved \$11 Million in 24 months using RFID-enabled material control solution.

With success stories like this, there is a clear rationale as to why owner/operators, EPC Firms, contractors, fabricators and suppliers from more than 200 sites across the globe count on Jovix to potentially reduce direct and indirect labor and curb material spending. "We have deployments in 23 countries around the globe, compliant to diverse needs of the industry," says Pamela Fetterolf, SVP, Corporate Services & General Counsel, Atlas RFID Solutions.



At the Vanguard of Innovation

In the vicinity of progress as well as challenges, Atlas RFID continues to focus on its primary aim: equipping construction companies with true material readiness and providing owners with better oversight capabilities. The company is at the vanguard of innovation, commencing pilot projects to develop applications for monitoring materials and equipment onsite through drones. Besides, the team at Atlas RFID Solutions is really gung-ho to script more success stories by working towards incorporating machine learning and new sensor technologies such as Bluetooth Low Energy in a bid to improve data gathering, followed by implementing predictive analytics to drive better decisions on the jobsite. Amidst these advancements, the company's close partnership with Oracle to develop a connector that ties the existing material and schedule data to a construction work plan is en route to yield impressive results.

With developments like this, Atlas's vested interest in material readiness is already creating waves in the industry, and sure enough, they are constantly raising the bar for industry peers. **CR**