

CASE STUDY

How Jujotech and BlueJeans Empower Connected Workforces with Industrial Remote Assistance Software

Jujotech's industrial remote assistance software can be a lifesaver for businesses with workers in remote locations, such as those in the energy sector. When a team of field workers on an oil rig in Brazil installed a choke manifold incorrectly, the operator faced the potential of losing approximately \$10,000 a day while waiting to fix the problem. Flying the closest available expert from his base in Panama to Brazil would disrupt the project he was working on and cause even greater losses.

"What the operator did was to send our industrial remote assistance solution to the offshore rig and put the team in contact with the expert in Panama," says Antonio Gentile, Jujotech's Chief Executive Officer. "Our solution, called Fusion Remote, was installed on a smart wearable device that was sent to the rig. Within 24 hours, they were able to solve the problem without anyone traveling."

Based in Boulder, Colorado, Jujotech provides industrial remote assistance software for various environments, such as manufacturing plants, construction sites, and buildings. Its software products are compatible with mobile devices like select smart wearables, tablets, and smartphones. These devices allow connected workers such as technicians and inspectors to collaborate with remote experts for support in solving problems.

"The remote expert can see exactly what the connected worker can see while operating on a piece of equipment or doing a maintenance task," says Gentile.



Industry: Technology

Challenge: Jujotech needed enhanced two-way audio and video functionality to enable competitive differentiation and the delivery of advanced industrial remote assistance capabilities.

Solution: The software maker integrated the BlueJeans Android Client Software Development Kit (SDK) with its Fusion Remote industrial remote assistance software.

Results: Connected workers and remote experts can address issues quickly and minimize downtime by collaborating and solving problems in real time.

Maintenance, repairs, operations, and training activities are optimized.

Travel is reduced as virtual experts can be deployed immediately.

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Enabling Collaborative Communication

To enable two-way communication between a connected worker and a remote expert, Jujotech integrated the BlueJeans Android Client SDK with its industrial remote assistance software products. This software kit comprises the BlueJeans Meetings API and sample apps that work seamlessly on select mobile devices. It supports features as diverse as audio and video permission handling, screen sharing, and public and private meeting chats.

By integrating BlueJeans Meetings, Jujotech ensures that its supported mobile devices are fully voice-controlled and that it delivers great user experiences. Workers and remote experts can zoom the device camera, operate its flashlight, show annotations on screen, and control other device features. And because all this can be done using voice commands and telemetry, workers can better focus on their job while maintaining their safety.

“We’ve been able to provide features that are not available in a standard video communication system,” says Gentile, noting that Jujotech’s software is also interoperable with other major virtual meeting platforms. “If you look across the board, none of BlueJeans’ competitors have zooming

capability in real time, unless they’re using a room-type approach, which has a pan and tilt option but is controlled in a completely different way when used in the field.”

Integrating BlueJeans Meetings has been painless for both Jujotech and its customers. According to Gentile, users have never had any issues with the platform, even when using it for the first time.

“We are fortunate to have the technology that BlueJeans has made available at the SDK level. It has enabled us to provide software with unique features, which is a key reason customers select us over competitors. With its best-in-class technical response times, BlueJeans has been an exceptional partner to us.”

Delivering Productivity Gains and Driving Efficiencies

Jujotech software delivers instant productivity gains and rapid return on investment by connecting and enabling mobile workforces to optimize maintenance, repairs, operations, inspections, and training activities. Businesses can rapidly respond to issues in the field and enable remote experts to provide advice and support in real time through enhanced video conferencing collaboration. As a result, they can address problems quickly and minimize downtime.

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Citing research published in the Harvard Business Review, Gentile says that utilizing industrial augmented reality-based software like Jujotech’s can increase productivity by 34%.

“A good case in point is a customer that sends a specialty technician to multiple states to fix car problems. The throughput of this type of activity can be as low as two cars per week. With the advanced capabilities we provide, they just send a smart wearable device installed with our software to each location. The same technician can now troubleshoot and fix multiple cars per day.”

Reducing Costs

Jujotech customers in the energy, real estate services, manufacturing, and automotive industries have also enjoyed cost savings from reduced travel expenses, according to Fran Harvey III, Jujotech Head of Sales.

“One of the original use cases Jujotech was chosen to support included travel avoidance,” he says. “As an alternative to multiple technicians traveling internationally for training in a manufacturing plant, the customer can conduct virtual training by utilizing Jujotech’s Fusion Remote software installed on a smart wearable device.”

The technicians in the virtual training are the remote experts located in one or multiple conference rooms in the United States, and the trainer is a connected worker in the manufacturing plant. Using Jujotech’s software, the trainer takes full advantage of hands-free operational capabilities while providing a point-of-view video stream for advanced training. And the technicians can control the trainer’s smart wearable device as needed.

“Considering the estimated travel costs for five technicians, including airfare, lodging, and food, one avoided international trip can pay for both the hardware and software with an additional \$15,000 saved,” says Harvey. He adds that the hardware cost is a one-time expense while the software cost is an annual subscription.

“Customers who successfully deploy our solution can typically achieve payback within three months.”

Supporting Assisted Reality Solution

In addition to Fusion Remote, Jujotech has created augmented reality-based software for connected workers to conduct inspections and view real-time equipment status through Industrial Internet of Things data visualization and asset recognition technologies. The products are called Fusion Inspect and Fusion AR.

The connected worker can use the equipment information to complete inspections, make adjustments on the fly, or decide to contact a remote expert for immediate support.

“We do that with PLC [Programmable Logic Controllers] in energy and in building management systems like air conditioning,” says Gentile. “It enables control and operation of a complex piece of equipment without distracting the operator from the task at hand because they control the device through voice, and the screen display doesn’t obstruct their line of sight.”

According to Gentile, BlueJeans has been instrumental to this development. “With BlueJeans, we have been able to build two very important components. One is the capabilities we have developed using the Android Client SDK, as I have discussed. The other has to do with ‘Expert View,’ thanks to the BlueJeans Web SDK.”

Jujotech’s Expert View is a command center dashboard designed for remote experts who support connected workers in the field. The dashboard simplifies the remote assistance process by providing a straightforward user interface and quick access to a mobile device’s telemetry, annotation tools, and other advanced features.

Gentile adds, “One of the great things about BlueJeans’ technology is that by being so open at the SDK level, you can add layers on top of it. It allows us to do something very simple and basic like having annotation while also letting us explore new things to grow our capabilities.”

ABOUT JUJOTECH

Jujotech creates augmented reality-based software to uniquely connect and enable industrial mobile workforces. The company produces rapid return on investment with products for industrial remote assistance, actionable inspection workflows, and Industrial Internet of Things data visualization. By deploying Jujotech’s industrial software with mobile devices, such as select smart wearables, tablets, and smartphones, businesses achieve both productivity gains and increased operational efficiencies, including reduced travel expenses. The company mainly serves businesses in the energy, real estate services, manufacturing, and automotive industries. It is based in Boulder Colorado and offers its products worldwide.