Shipping

Test proves that information-sharing prevents damage

RICK MAUL

The millions of dollars spent in the mill to produce high-quality paper don't count for much if rolls are damaged during shipment. To help address the problem, the TAPPI Shipping, Receiving and Warehousing Committee (SRW) is constantly seeking ways to reduce damage to paper rolls.

In April 2008, the committee gave approval to begin a proof-of-concept project using a system designed and proposed by VoIPcare Technology, Cedar Rapids, IA. The goal of the test was to prove that an inexpensive, easy-to-use method can be deployed to help mills, carriers, printers and publishers share information and reduce transit damage to paper rolls.

Figure 1: Each car loaded has its own picture with colors indicating received in good condition (green) or damaged (red). The visualization of the car also indicates that it was received in good working order and clean.

VoIPcare and the SRW committee worked together to understand the overall process used to record and archive information related to rail-based paper shipments. A set of system design documents was prepared and submitted to the committee for review and approval. The design was based on VoIPcare's patent-pending methods for gathering and delivering inspection-related information. The system uses a blend of Interactive Voice Response (IVR) technology, centralized data management and enhanced visual delivery methods to provide immediate event feedback to all concerned parties. The proof-of-concept system was designed around four inspection types:

- **Equipment Inspection:** The condition of the rail car before loading
- **Shipping Inspection:** The condition of the load before closing the doors, and the type of protective measures used to secure the load
- **Receiving Inspection:** The condition of the load when the door is opened, and the condition of the protective measures used
- **Damage Inspection:** The type of damage (if any) sustained by the paper rolls

One mill, one printer and two railroads participated in the test. The paper shipped represented the demands for multiple printing projects for J.C. Penney Co. Test participants included:

- UPM-Kymmene, Inc.—Jacksonville
- Quebecor—Memphis
- NS & CN railroads
- J.C. Penney

"We have been working with the SRW committee for the last couple of years to provide a cost-effective way for the various participants in the supply chain to share meaningful and timely information about paper shipments," said Bob Eckles, principal at VoIPcare Technology. "By applying our inspection process methodology, we were able to provide the industry with the first real opportunity to share relevant data in a simple and easy-to-use manner."

The test was conducted over a 90-day period using an adaptation of VoIPcare's inspection process, which provided immediate feedback to the participants. Inspections were conducted at the shipping and receiving locations. During the 90-day test, more than 100 railcars of paper were shipped from the UPM North America Port Facility in Jacksonville, FL, to the Quebecor World (USA) printing facility in Memphis, TN. The paper was carried by a combination of the rail lines and was designated to be used in printing projects for J.C. Penney.

During the test, every railcar delivered to the shipping location was inspected for damage. The inspection process consisted of a set of questions answered by the shipping team. The questions were answered through a telephone

call to VoIPcare's operations center in Melbourne, FL. After the paper was loaded, another inspection described the type of protective measures used to secure the load. Upon arrival at the receiving dock, a third inspection was conducted that described the condition of the paper and the protective measures. If damage was found with the paper rolls, a damage inspection was conducted immediately. The results of each inspection immediately updated a visual image of the car (see Figure 1) that was available to all the parties in the transaction via a standard browser.

At the end of the trial period, all stakeholders reviewed the information gathered to determine how useful the process would be to the industry. After review, the following conclusions were reached:

- The collection and delivery of information related to paper shipments can be standardized
- It is possible to implement the system quickly and easily
- Users can become proficient in the use of the system with minimal training
- Inspection results are immediately available in a clear and understandable format
- The improved information availability has the potential to provide value to all members of the supply chain

The proof-of-concept testing validated that the use of a centralized inspection and reporting system has the potential to make a positive impact on the amount of loss and damage experienced in the industry today and reduce certain operational expenses associated with the loss and damage process. The availability of immediate information will improve the overall process used to communicate between trading partners. The potential exists to automate a significant amount of the damage claims process and reduce the time spent on paperwork, follow-up calls and claims resolution. In addition to the immediate benefits, in a very short time the system will compile a great deal of information about the underlying causes of damage to paper rolls. The data gathered from a wide variety of sources can be analyzed to establish root causes and provide keys to corrective actions that will lead to reduced damage.

Since completion of the test, VoIPcare Technology has worked with the SRW committee to identify the necessary additions to the system to support a production release of the application. In addition to basic enhancements of the IVR and visualization elements of the system, a production system would include the ability to upload photographs associated with the inspections, provide notification of issues to the proper parties, and automatically generate claims for transit damage. The centralized information storage would give everyone in the supply chain immediate access to the same data from which to resolve issues.

Additional tests are being conducted by UPM, Quad Graphics, NS, BNSF and J.C. Penney. The results of the tests continue to confirm the initial feedback and conclusions reached during earlier testing.

GET INVOLVED

During the proof-of-concept project, VoIPcare implemented the infrastructure necessary to support a production version of the system. In order to move ahead with the project, TAPPI's SRW Committee is looking for innovative companies that would like to be early adopters of the technology. This would include a combination of publishers, printers, railroads and mills. It will be necessary for a minimum of 25 individual locations to commit to the project in order to justify the additional development. Each location involved in the test will be required to pay a one-time setup fee and a small processing fee for each railcar.

The proof-of-concept work just completed has shown that it is possible to standardize reporting methods, increase accountability, improve processes, reduce damage and save operational costs by implementing a centralized system. This is an exciting opportunity for the industry to take a significant step forward. The SRW Committee members encourage forward-thinking companies in our industry to consider becoming involved with the project. To learn more about becoming involved, contact VoIPcare Technology's Robin Mangold or Bob Eckles at +1 319 393-3230.

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SRW Committee meets in April

TAPPI's Shipping, Receiving, and Warehousing (SRW) Committee Spring 2009 meeting is April 28-29 in Nashville, TN.

During the meeting, the committee plans to present the expanded, production-ready VoIPcare system.

This meeting will also feature a presentation from Kim Nagele of J.C. Penney Procurement. Nagele is senior sourcing manager responsible for buying paper for J.C. Penney's print media, and he'll address "Print Innovation and Collaboration." Specifically, he'll share expert insight into the need for collaboration within the shipping arena, and highlight areas for logistics savings.

Visit www.tappi.org to learn more about the meeting and to register online. You need not be a TAPPI member to attend.