

Intel® Puts CarriersEdge in Driver's Seat For Transport Safety

Case Study

Dual-Core Intel® Xeon® processor technology

CarriersEdge

With online software powered by Intel®, drivers are getting ongoing education to improve safety records and lower the cost of doing business.



CarriersEdge, based in Markham, Ontario, is a leading provider of online driver quality improvement solutions.

Challenge	Provide the trucking industry with ongoing driver training accessible wherever drivers are located.
Solution	Dual-Core Intel® Xeon® processor technology

Summary

With changing regulations and major safety concerns, the trucking industry needs ongoing training to keep the roads safe for all travelers, but since drivers are constantly in transit, getting them together in one place to undergo training is a challenge. With online software powered by Intel®, drivers get ongoing education to improve safety records and lower the cost of doing business.

Challenge

High employee turnover, changing regulations and significant safety concerns are major issues for the trucking and transportation industry. Drivers need ongoing training to ensure they are up to date on new rules, but companies have trouble getting enough people together in one location for training, without losing money by pulling drivers off the road.

Mark Murrell, President of CarriersEdge, and his team saw this as an opportunity. With a background in online education from a large Canadian consulting firm, they discovered few companies offered high quality online training for small businesses.



“This is an industry coping with employee turnover of over 70 per cent, small margins and an environment of constant regulation change where insurance carriers require that every driver be trained,” says Murrell. “Companies can’t keep up. It was a perfect storm.”

To meet the industry needs, companies had three options: pull drivers off the road for classroom training; force drivers to take training in their time off; or play Russian roulette by foregoing training and hoping nothing happens. Additionally, Murrell says, experienced drivers were hesitant to let their peers know they didn’t understand something so even with classroom training, instructors couldn’t be certain the material was fully understood.

Transborder Logistics International (TLI) Limited* was experiencing this training challenge first hand. The company offers emergency ‘less than truckload’ (LTL) delivery services for customers in Canada and the US within four days for a rate less than air freight. The company was expanding to offer dangerous goods transportation in Canada and needed to offer training so their drivers could carry these goods in Canada.

John Stokes, Director of Safety & Compliance for TLI, started looking for a way to offer more training to drivers, including training in the handling and transportation of dangerous goods.

“Our drivers literally are spread out across North America and driving constantly in circles,” says Stokes. “Downtime is very important for drivers to get proper rest and family time, so it’s hard to pigeon hole one driver in a location to take training. I started looking for an alternative training option so the company could meet industry rules and regulations to carry dangerous goods.”

Stokes thought the CarriersEdge solution would be an effective way to offer training to drivers wherever they were.

“These problems scream out for an online solution,” explains Murrell, who launched CarriersEdge to meet that demand. Now the company needed to make sure clients like TLI could access that software 24/7.



Solution

To be effective, CarriersEdge needed to ensure its software as a service model ran seamlessly for all drivers and employees who were accessing the training. This meant building software that didn’t require a lot of horsepower on the side of the users, Murrell explains, noting that the trucking industry does not always use the latest and greatest technology available.

“One of our requirements was having an efficient system that delivered content fast to our clients,” says Murrell, who depends on Intel® for all aspects of his business.

Building on base code developed when the company founders were consultants, CarriersEdge created a Java*-based software-as-a-service model that runs on company servers to ensure it is constantly up to date with new trucking regulations and is available to anyone at any time.

Recognizing the need for uptime 24/7, the company chose a collocation facility in the United States to host their software. As the business grew, CarriersEdge realized they didn’t have the control or power they needed in their servers. When they relocated to a new facility in Ontario, their software started running on two Dell PowerEdge 1950* servers with Dual-Core Intel® Xeon® processor technology. Murrell says the speed was instantly increased, and they now have the capacity to add more clients and users without taxing the servers.

“We were looking for more control over our environment,” says Murrell, adding that redundancy and high availability were also of paramount importance. “We now have good through-put in an enterprise class hosting environment. With Intel we’ve seen a huge speed improvement but also the ability to grow without slowing content delivery.”

And they have been growing; Murrell estimates they have grown by more than 100 per cent every year since they launched three years ago.

For TLI, the CarriersEdge solution fit the bill. “We never have enough bodies in one place for training. A lot of drivers have laptops and can access the system from either home or the office,” says Stokes. “They can access the training from anywhere on the road, get exposure to the material, take a break and come back and pick up where they left off. There’s real flexibility to deliver a range of training when and where the driver can take it.”

An Ontario driver training school, KRTS Transportation Specialists Inc.* with campuses in Caledonia and Simcoe, has mandated CarriersEdge courses as part of their Professional Truck Drivers’ Institute* program, in conjunction with classroom and road training. In addition to offering a range of commercial and personal driver training, KRTS also provides consulting services to more than 250 clients in Canada and the US.

“The trucking industry is changing and we are competing with many different businesses for the same employees. We need to make the trucking business appealing or other industries will attract the mature, educated people looking at this business. Access to leading technology helps.”

- Kim Richardson, KRTS president.

Key Advantages

For customers, CarriersEdge addresses the challenges of training a mobile workforce by making content available online anytime, from any Internet browser.

“The biggest advantage is that they are able to train without having to bring everyone into one place at one time,” says Murrell, adding that the students seem to understand the material better. “We’ve heard from people that ‘I finally understand it’. There were a lot of people on the road who didn’t understand the rules as well as they thought they did. That is a huge risk management issue that the company won’t know about until there is a collision or incident. By that point it is too late. You need to find out before it happens and we are closing the gap on some of those issues.”

Training Improves Safety, Saves Money

TLI has seen tangible results from the increased training. While the company started by offering dangerous goods training, they now offer the full suite of training services including defensive driving, cargo securement and hours of work under current regulations. Stokes likes that he can assign different training modules to different employees. For example, someone in the warehouse would be assigned training on cargo securement, while drivers would take courses in defensive driving and cargo securement.

“If one driver is experiencing challenges with hours of service or logbook rules I can tailor a set of courses to address it and upgrade his performance through education,” says Stokes, who notes that drivers are the company’s mobile ambassadors so professional conduct is key.

With all motor carriers measured on their safety record, Stokes can see how the increased training is helping their bottom line. Stokes notes that both the Canadian and US departments of transportation maintain a database of all the safety statistics of a company including infractions and citations. At any time, they can track the performance of their company, specific drivers and compare themselves to the competition.

Since they started training, their score with the US Department of Transportation* has improved from a yellow (meaning optional inspection) to a green light, which tells the enforcement officer that TLI has a very good safety record and can receive a pass for inspections.

“The green light rating is acknowledgement by motor carrier enforcement officials that the safety management controls by a trucking company are effective,” says Stokes, noting TLI has found that adopting and implementing regulatory compliance strategies, measurably improved the performance of its driver fleet.

“We’re not perfect yet, but we have seen a noticeable drop in accidents, driver citations and violations,” says Stokes. “As that trend continues and as we implement more and more sound practices such as online training, we are also observing that our drivers and staff are developing into a higher caliber of employee.”

Insurance companies have also rewarded TLI’s improved record. When the company recently renewed its insurance for general cargo and liability, the rates had dropped. Stokes says that the combination of allying themselves with a forward-thinking private insurance provider and reduced claims has translated into savings of more than eight per cent in 2008. Since the company is based in British Columbia, TLI must carry Insurance Corporation of British Columbia’s government coverage, in addition to private insurance. TLI projects it will be eligible for rebates on mandatory government insurance by as much as 25 per cent (or \$100,000) because of the firm’s reduction of accident claims as a result of increased awareness, education and training.

“The cost of online training through CarriersEdge is negligible compared to what we gain across the board. Though it is difficult to zero in on exactly the benefit derived by training in terms of real dollars, our safety and compliance program, weighed as whole, translates into tangible insurance premium savings,” says Stokes.

Stokes adds that the improved rating is good for business. Since clients can access the company safety records, and based on the nature of TLI’s business as an emergency LTL carrier, customers are more likely to choose a carrier with a better safety record, and one with a low “out of service” rating.

Consistent Content Delivery

When training drivers, instructors can sometimes deliver the same content in slightly different ways. At KRTS, consistency is critical and by including CarriersEdge training as part of their curriculum, Richardson says they are certain every student gets the exact same message before they hit the road for the practical part of the training.

“They also have more exposure to the material before they ever get behind the wheel,” he says. “With CarriersEdge, we have flexibility, transparency and consistency.”

Additionally, it gives some people their first exposure to computers which are becoming increasingly important in this industry. "Because the system is so easy to use, it makes them comfortable touching a computer," says Richardson.

"By 2010, 90 per cent of trucks will be equipped with onboard computers so this experience with computer technology will make our students more employable."

Richardson says some of his clients are starting to give their drivers notebook PCs with wireless connectivity to help them stay in touch with their families while on the road. He says that with the price of notebooks coming down, it is very affordable for companies, and that the availability of wi-fi hot spots makes connecting easier than ever before.

"We've embraced technology. You're talking to someone who is not a techie but we know to be successful you will have to embrace technology," says Richardson. "All the good companies will be using technology and when you talk about the mobility of our people it makes sense."

Stokes agrees. TLI is focused on bringing the best technology to the company and its drivers. It recently implemented a new enterprise software system from TruckMate*, which will allow them to manage all aspects of their business from accounting and dispatch to the efficiency of each truck on the road.

Mobile Workforce Connected

With a very mobile workforce, Stokes says the company is looking to give its drivers notebook PCs in the coming years once they have completed their CarriersEdge training when they are hired. "I will be able to offer more and more training and professional development opportunities for drivers who want it," he says, noting that CarriersEdge has partnered with a college in Ontario to offer a professional driver certification. Stokes sees an opportunity to offer advanced business training to his drivers because the good employees are always eager to upgrade their skills. "Our drivers are company

ambassadors and if they can become better business people in their own right, we all win. As professionalism grows, the level of driver we recruit and retain improves."

As a business that's constantly on the road, mobility is critical for both customers and staff of CarriersEdge.

While CarriersEdge's staff of six people work both from the office and remotely, being able to access their network and their software for updates and creation of new modules is critical. Murrell chose recently to upgrade to a new MacBook Pro* with Intel® Core™ 2 Duo processor technology.

"I like that I can run both Windows and Apple operating systems," says Murrell, who finds it very easy to connect to any Windows network. When on the road making presentations, he finds the Mac's Keynote* software sets him apart. "We've received a very positive response to our presentations. The MacBook Pro is fast enough for me to do the development work I need to, and the Intel chips are a big part of that. It is a beautiful machine and I love it."

Future Uses

CarriersEdge is continuing to add more modules and refresh the course content as new regulations come into play. Murrell says there is still a large untapped market in the transportation and logistics space that they will continue to service.

For Stokes, being able to add more users and tailor programming to their specific roles in TLI is critical. He'd like to start offering refresher courses to drivers in the field, and would like to see the company start offering wireless notebooks to drivers who have completed all parts of the CarriersEdge program. Coupled with that, he sees an opportunity to add corporate email for drivers to stay in touch with family and the office, while being able to access additional development or professional programming from any hotspot.

"As our company grows and prospers, we see the advantages to giving our employees access to more and more technology. These are all the things we can implement."

For more information on Dual-Core Intel® Xeon® processors, visit <http://www.intel.com/go/xeon>

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