Human Factor Risk Management Delivers Stronger Bottom Line

By Kevin Cunningham

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My previous article focused on developing Safety Culture Solutions to slow down and eventually reverse the current disruption in the market for commercial auto insurance [*Crane Hot Line*, Feb. 2019, pg. 12].

This follow-up piece highlights that driver and equipment-operator performance are essential in building your company a stronger bottom line.

To grow profitably, crane and heavy haul businesses must minimize the high costs of jobsite accidents and fleet crashes. The people who have the biggest role in doing that are a company's crane operators, heavy haul drivers, and riggers.

Their decisions and actions can minimize human risks in order to protect all employees, maximize revenue, enhance customer service, and win new business.

Telematics or Human Factor Controls?

Lately, the industry has put a lot of attention on using telematics as the primary way to reduce the rising tide of costly accidents that is causing the problems commercial auto insurance now struggles with.

For example, introducing electronic logging devices (ELDs) was supposed to reduce driver fatigue and make roads safer. However, a recent report suggests that any benefits of the telematics mandate have been offset by an increase in unsafe driving behaviors.

A Northeastern University team that evaluated inspection and crash data from the *Federal Motor Carriers Safety Administration* (FMCSA) found that accidents have *increased* since the trucking industry has widely adopted ELDs. The report is at https://www.researchgate.net/publication/330425892_Did_the_Electronic_Logging_Device_Mandate_Reduce_Accidents.

Looking at large and small fleets, the report compared accident rates before and after the ELD mandate. It found that smaller trucking fleets saw a significant increase in accidents from 2017-2018, and that larger fleets saw no measurable decrease. The report also found that violations for unsafe driving grew by as much as 33.3%, and speeding violations went up as much as 31%.

These statistics validate the premise that telematics alone do not improve safety. The key to reducing incidents is managing or modifying human-factor risk.

Certainly, some telematics initiatives can support a progressive approach to re-engineering a company's safety culture. But modifying the culture is the vital part. It is a matter of priority attention.

There are no quick fixes.

Making a concerted effort to improve a company's safety culture takes continual commitment and should involve all parties in developing safety program elements to be effective (including the possible use of some telematics).

Worker Empowerment

When a company focuses on managing human-factor risk and empowers workers to help develop and operate the on-going safety improvement plan, employees are much more strongly motivated to reduce accidents.

Workers who feel empowered by their employers are more productive, have higher morale, and work more safely. Empowerment is effective for improving employee attitudes and safe behaviors.

A study by the University of Iowa shows that properly implemented empowerment initiatives can lead to higher job satisfaction, lower turnover, and reduced stress among workers. The study also says that empowered employees are more innovative and perform better.

Effective Empowerment Should Include:

- **High Performance Practices:** Managers share information, decentralize authority, involve workers in decisions (including the use of some telematics tools), and are actively involved in worker training.
- **Socio-Political Support:** Managers make workers feel valued and encourage employees to recognize each other's importance.
- **Leadership:** A manager who inspires, gives strong feedback, and is a good role model enhances workers' feelings of competence and helps them find meaning in their work.
- **Work Design:** Managers encourage training and provide an open environment for suggestions (that may include various telematics tools to support the safety improvement objectives).

Managers who took part in the University of Iowa study reported that empowered workers were more innovative and more willing to take the initiative to solve (safety) problems on their own.

Workers were measurably more engaged in their work when they were empowered and felt they had an impact on the business and safety issues.

The improvements boosted both individual and team performance, and tended to be strongest in the service sector.

Engagement Improves Culture

Many companies are looking for ways to change their reactive safety culture into a proactive one that improves safety and interactive learning through positive reinforcement and rewards.

This improvement model focuses on increasing the engagement levels of the entire workforce in order to improve the company culture measurably so that it positively affects safety performance.

A proven method of engaging workers is establishing an interactive safety committee that recognizes worker engagement. Include five basic steps in the process:

1. Re-evaluate current hazard identification processes at worksites while capturing basic descriptions for discussions in safety committee meetings.
2. Review details and causes of current and past accidents openly with the committee for lessons-learned training.
3. Evaluate new technology for telematics assistance tools that can help protect workers and the public from accidents caused by poor safety performance. Driver and operator feedback is vital to maximizing acceptance of any telematics tools, and today's technological advancements can help measure ways to improve.
4. Establish, or re-evaluate, safety incentive and recognition programs in an open forum in order to obtain viable feedback that enhances participation on the committee, and, more importantly, in the field.
5. Continually let workers know that top management is committed to reducing human-factor risk because doing so improves the company's safety culture for everyone, and that the system recognizes and rewards stellar safety performance.

Conclusion

Numerous studies and company examples show measurable improvement in accident reduction, including incident rates and citations issued during fleet inspections, as a result of workforce engagement in improving a company safety culture.

The keys are to remain focused on human-factor risk management and to strive for a ***performance*** culture instead of a ***compliance*** culture.

Numerous crane and heavy haul companies recognize the continual improvement process in working towards a world-class safety culture.

These high-safety-performance companies use leading indicators that allow top management to intervene with underperforming and disengaged crews.

In fact, current research points to engagement levels as the primary risk indicator for worker errors and incidents.

Therefore, top management commitment coupled with worker safety engagement in an environment that has an open communication platform with actionable statistics is a worthwhile investment that can improve bottom line results through human-factor risk management. ■