PART II

A DEEPER LOOK INSIDE THE FUTURE OF TRUCKING
MAKING THE RIGHT CONNECTIONS: From personal smart phones with trucking-related apps to remote diagnostics and big data analytics, the Internet of Things is having a tremendous impact on trucking. Is the technology growing faster than your capacity to adopt it?

PLANNING FOR PC-11: Understanding how the new motor oil classification will not affect the best practices determining your company’s success is just as important as understanding how it will. Figure that out and PC-11 implementation may prove easier than you thought.

FOLLOW THE LEADER: Impressive European demonstrations of truck platooning to reduce fuel consumption and greenhouse gas emissions hint of transformational technology to come. What can we expect in North America?

RIDING IN A TRUCK PLATOON: Editor James Menzies relates his experience of being part of a truck platoon on the A52 autobahn near Dusseldorf, Germany.

GET OFF ON THE RIGHT FOOT: The amount of data being generated by all the technology on a modern truck can feel like a terabyte tidal wave. What’s the most effective way to leverage the data to support you rather than overwhelm you?

A MORE DIVERSE WORKPLACE: More women, more ethnicities, younger people – that’s what you can expect to see in the workplaces of the future. Why you should embrace diversity now to ensure your company’s continued viability in the future.

WHAT MILLENNIALS WANT: The future of trucking depends on the industry attracting younger people to step into the cab, the dispatcher’s seat and the mechanic’s shop. Can we get millennials to view trucking as an attractive career rather than a last resort option?

EXPECT CHANGE: The last decade has seen increasingly stringent safety and environmental regulations for trucking and it’s a certainty this pattern will continue. Here is what you need to understand to stay in compliance.

Welcome to the second installment of Fast Forward. When we launched Fast Forward last year in partnership with Mobil Delvac I wrote that our industry is on the cusp of great change. Looking ahead I saw an industry whose current technologies, regulations and human resource practices would be significantly different within a decade.

The Fast Forward supplement was so well received that we decided to probe even further into the future and the changes that will transform the way we work.

In this issue we look at how the Internet of Things and the interconnected world it creates will affect how trucks are spec’ed, operated and maintained. The data we are able to collect from all the technological devices at our disposal is already considerable. Soon it may prove overwhelming. How do we ensure all this data works to make our jobs easier rather than adding more confusion? We discuss that issue in our Get Off on the Right Foot feature. Future technology – and its impact on safety – is also the focus of our Follow the Leader feature, which delves into the potential for truck platooning to reduce fuel consumption and greenhouse gas emissions while also removing human error.

Much of how and when these new technologies will be implemented will be determined by legislation and our Expect Change feature examines what makes for effective legislation.

As important as technology and legislation will be in shaping the future of our industry, nothing will be more important than how we deal with our considerable human resource issues. Our Unlocking the Value of a More Diverse Workplace feature examines how the workplace of tomorrow will look considerably different than today’s while our What do Millennials Want feature examines how to attract what will become the most significant segment of the North American work force.

I hope you enjoy reading Fast Forward Part II. I also encourage you to turn to the special Knowledge Centre entitled An Inside Look at the Future of Trucking we created for you on www.trucknews.com for more news stories, features and videos on the subject.

Lou Smyrlis, Group Publisher, Newcom Trucking Group

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A deeper look inside our future
with semi-autonomous and platooned trucks on the horizon, modern truck electronics is going through a growth spurt. This is an interconnected world that includes everything from a driver’s personal smart phone with an abundance of trucking-related apps, to the OEM’s telematic implants, remote diagnosis and big data analytics. The “Internet of Trucking” is having a profound effect on how trucks are spec’ed, operated and maintained, both now and into the future.

“Access to information is incredible now,” says Chris Iveson, fleet maintenance manager for Challenger Motor Freight in Cambridge. “We collect data on so many things, fuel economy, oil samples – we store the data from any of the ECM trouble codes.”

Iveson, whose Blackberry rings when one of his trucks is in distress, has supplied a list of about 40 critical engine faults to the truck manufacturers. If one of those sensors lights up, the OEM immediately notifies him and Challenger’s garage about the problem. “Low coolant, for instance, is one I want to know about. We don’t want a truck breaking down in Wawa.”

Data can either be stored in-house or in “the cloud” – outside servers with massive storage banks provided by the OEMs who, in turn, allow carriers and customers to access that data. Independent garages and owner/operators are now also included in the loop. Last September’s “Right to Repair” MOU, wherein in heavy-duty truck and engine manufacturers agreed to share proprietary information with truck owners and third-party repair shops, means there is more critical data available than ever before.

Bill Dawson, vice president of maintenance operations and engineering for Ryder Systems, thinks that the complexity of engine technology and sophisticated analytics could transform maintenance practices. “The more efficient we can make our sharing centres, the more we can provide data points to help the owner function more efficiently,” he says.

“Our customer web portal allows customers to go in and self-service as far as scheduling their activities. We can provide data points to help our customers function better; it also allows them to have insight into other fleet activities. These tools are extremely important and extremely significant as data becomes more accessible to make key decisions.”

On the fleet maintenance side of things, Dawson thinks that the inter-connectedness between engine diagnostic data and the maintenance provider is going to become increasingly more significant. “To get to a predictive and efficient maintenance model,” he says, “as efficient as it can be from one maintenance service to another...requires the OEMs to share their predictive diagnostic data with the end user. So ideally you would have all the data coming from the vehicles’ telematic devices under one umbrella. Detroit, Cummins, Volvo, everybody’s trying to find their place in this data exchange.”

But too much extraneous data is not always a good thing,.
According to Michael Riemer of Decisiv, "Most fleets aren't getting good value out of the information they're collecting. "They are not consistently capturing quality data from service events—so while they have lots of data they don't have big data that can be reliably used for improved decision making both in real-time and from a trending perspective."

Decisiv's "Service Relationship Management" program provides a platform for fleets to integrate with providers along the service supply chain. Riemer suggests that a collaborative platform is necessary to ensure the most rapid and appropriate service and repair process. What he calls a "frictionless flow of key information."

Ric Bedard of Cetaris Fleet Management Software Solutions thinks that an all-encompassing fleet maintenance assessment program is critical to profitability. "We download their assets into the system automatically with the warranty info, PM schedules a whole litany of items including operation codes, engine, tires, axle configurations etc. For each unit we can support up to 700 attributes. We can connect a vehicle to the warranty agreement and to all the operating codes and specifications.

"Some fleets are dealing with a multiplicity of OEMs and our programs make it easier to integrate the various suppliers, manufacturers and other fleet operations software. Instead of dealing with a number of phone calls and faxes, the technician just has to walk across the room to get the repair information he or she needs. Basically what we're doing is dramatically reducing the time spent filling out paperwork and making it easier to track the net cost of the asset. It also makes it easier to track a part failure. You can see what was the cause of the problem and what it took to correct it."

Kirk Altrichter, vice president of maintenance at Crete Carriers, thinks that predictive analytics will get more robust in the next 10-15 years. "The same as with airplanes and ships, more and more parts will have a pre-determined life cycle which will lead to less downtime."

Bill Dawson agrees. "If we have data on when parts fail, we can replace those parts before that time so there are no surprises, no business disruptions. But to do that your management of the parts supply has to be data-driven. Know your vehicles' spec's and you won't have to carry too much inventory."

Telematics (the ability of devices to communicate with another computer over great distances) is at the heart of remote analytics. According to Conal Deedy, director of connected vehicle services, at Volvo Trucks, Volvo has over 150,000 telematically connected trucks across North America.

"A recent safety issue was uncovered affecting some 2016 and 2017 model year trucks, and we were able to send a message into the driver information display of many affected trucks to let them know which trucks were qualified for this recall. To my knowledge, this is the first time something like this has ever been done," he says "and it has been recognized by the NHTSA and FMSCA. It is a great demonstration of how this technology can be used to promote safety."

Volvo Remote Diagnostics can also help customers from experiencing a "de-rate" if an engine code signifies that there is a problem with the emissions control system. "The EPA mandates that all OEMs are required to shut down the truck if it's not complying with the standards," says Deedy.

"When we see certain codes we can reach out to the fleet contact and let them know exactly what the vehicle has detected and when the truck will de-rate to 5 mph. In some cases the driver might have up to three hours to get to a shop before it has to make an unplanned stop."

"A significant customer concern is that the technology is growing faster than the workforce is ready to adopt it," adds Deedy. "It's the diagnostic time that's the big unknown these days," he says. "Whether it's going to take 20 minutes or two or three days to find out what's wrong with the truck, remote diagnostics at least take some of the guesswork away from the technicians. When a trouble code occurs we can often create a plan, including repair instructions and blueprints if necessary. It's a powerful tool for some for our dealers and for our customers who have their own workshops."

Finding properly trained technicians to diagnose these trucks is becoming an issue that will continue to dog the industry. "If you think about the complexities of this work, and the training required, and the fact that this field is still growing, it's not surprising that they're having trouble bringing people in," says Dawson. "We're seeing more outsourcing and there's no reason that the trend won't continue."

Iveson of Challenger thinks there are two types of "techs" working in his shop nowadays. "I have guys that never get dirty," he says. "You'll always need the hammer swingers, but this new breed of technician spends all day reading engine codes, doing diagnostics, setting up work schedules. It's a new world."

When it comes to spec'ing new truck orders, Iveson has a lot of help. He works with a committee of 15 people and the 30 pages of spec's seem to be getting longer every year. For instance, 70% of Challenger's trucks are equipped with collision avoidance systems so that they are pretty much standard these days. He's also looking at adding front and rear dash cameras in the near future.

"We're still looking at fuel economy, idle shut downs, and where we can use low resistance tires. All the big stuff, trailer skirts, super single tires, the SmartWay stuff has been dealt with," adds Iveson. "Now we're looking at fine tuning."

Iveson predicts trucks will become more aerodynamic and cameras will eventually replace sideview mirrors to mitigate drag. And Challenger is looking at alternative fuels as well. "We were involved in a CNG trail a few years ago," says Iveson. "And we're looking at participating in an LNG test later this year. Fuel may be cheap now, but it won't always be."

Carriers and fleets are becoming more conscious of their carbon footprint both from an environmental and fuel-saving perspective. In some cases, customers are requiring that their product is transported in a "green-friendly" manner. Cetaris' green house gas module may be one solution.

"Most carriers are running Smartway assets and they're interested in tracking how those assets are doing," says Ric Bedard. "Our green house gas module allows you to track emissions and how each one of those assets is doing from a cost and an emissions perspective. We're seeing a lot of interest in this kind of measurement and expect to see more with the governments adding more regulatory requirements."
Throughout my 15-plus years at Imperial Oil, I have had the privilege of working with large national fleets, such as Groupe Robert, as well as smaller specialized carriers, such as Danfreight Systems Inc.

Often, I’ve noticed that successful fleets have something fundamental in common – they excel at planning ahead.

They have plans to not just recruit drivers – but to find and keep the best ones.

They develop easy to understand maintenance plans, and recruit mechanics who stick around for the long haul to help carry them out.

They embrace new technologies and approaches more easily than their competitors.

And, most importantly, they successfully plan to manage major industry changes.

Soon, we will see a new change impact our industry as the American Petroleum Institute’s PC-11 lubricant specifications are set to go into effect in December 2016.

At Imperial, we’ve been preparing for PC-11 for many years, working closely with major engine manufacturers.

We’ve accrued more than 37 million kilometers of testing research through our affiliation/work with ExxonMobil, and are adding nearly 2.4 million kilometers of new testing each month.

Numerous Imperial technical experts have played key roles in the advancement of specifications and testing parameters that are part of PC-11.

As you may know, PC-11 will not affect every business in the same way. For many owner-operators, the impact will likely be minimal. And, it’s possible that some fleets will also see a small impact from PC-11.

Understanding how the new specification will – or will not – impact your fleet is critical. In fact, many fleets we work with have already started planning for PC-11. And, they know that choosing the right oil is an important first step.

But they also know that PC-11 will NOT change many of the best practices that have helped determine their success. Many of these success factors will remain exactly the same after PC-11 implementation, including:

- Recruiting the right drivers;
- Embracing strict safety protocols for drivers on the road and within the maintenance shop;
- A proactive maintenance approach, whether in-house or outsourced; and
- Using a data-driven approach to optimizing drain intervals and vehicle performance.

So, if you understand these success factors and how they impact your business, managing the implementation of PC-11 should be a breeze.
More than a dozen trucks from six manufacturers recently platooned across Europe, covering five countries and converging at the Port of Rotterdam from various points of origin. It was the most impressive demonstration to date of the potential for truck platooning to reduce fuel consumption and greenhouse gas emissions, while also making better use of limited road space.

The European Truck Platooning Challenge was spearheaded by the Netherlands, during its term as head of the European Union. Six OEMs took part, including DAF Trucks, Daimler Trucks, Iveco, MAN Truck & Bus, Scania and Volvo Group. Scania’s platoon travelled the greatest distance - more than 2,000 kilometres and across three national borders.

Each of the OEMs demonstrated their own proprietary platooning technologies, allowing a column of two or more trucks to travel across Europe in tightly packed formations. The goal was to demonstrate the feasibility and readiness of truck platooning technology as well as the need for the harmonization of regulations between European states to allow its use.

“The main objective for this demonstration was to highlight the need for the harmonization of regulations to allow cross-border platoons within Europe,” said Hayder Wokil, mobility and automation director with Volvo Trucks.

He said the demonstration was so impressive that regulators in Europe are keen to further the discussion about advancing truck platooning.

Additional platooning demonstrations, though not likely on so grand a scale, will be held in North America as well, as early as this year. Volvo is slated to show its truck platooning this year along with the University of California, Berkeley. Wokil said the system that will be used here will be based on the European platform, but tailored for North American applications.

As in Europe, harmonization of regulations is required before the technology can be widely deployed here.

“In North America, you have different rules in different states, the same case you see in Europe,” Wokil said. “Some countries within Europe in their regulations, regulate distance between trucks in time, some in distance, some of them just simply say you should behave and then it’s up to the police to judge on the road. There is no harmonization between the regulations. If we want to give this a boost, we need to have this kind of harmonization between states and make it clear for our customers.”

Daimler Trucks, just days before the European Truck Platooning Challenge, demonstrated its Highway Pilot Connect semi-autonomous truck platooning technology to more than 300 journalists from 36 countries. It claims an aggregate fuel savings of 7% across the trucks in a platoon, ranging from 2% for the lead truck to 11% for the next and 9% for the trailing truck in a three-truck formation. This is achieved by improving airflow across the entire formation, reducing wind resistance.

Daimler also touts safety benefits. Because the trucks are connected via vehicle-to-vehicle communications, the following trucks can initiate braking in just 0.1 seconds. It takes a
RIDING IN A TRUCK PLATOON

During a global press event in late March, Daimler Trucks afforded visiting journalists from around the world to ride in a truck platoon on public roads. Demonstrations were held on the A52 autobahn near Dusseldorf, Germany.

I rode along in the second truck in a three-truck platoon. Daimler’s Highway Pilot Connect is remarkably simple to use. A tablet mounted to the dash displayed the proximity of other platoon-enabled trucks. The driver in the lead truck simply flips the Highway Pilot Connect button on the dash to send the signal that it is ready to establish the platoon.

Nearby drivers activate the same switch and then align themselves for docking. With Highway Pilot Connect active, each driver can relinquish control of the truck to the electronics, which handle steering, acceleration and braking. The driver must always remain at the controls, ready to take over should the need arise.

Daimler was operating its Highway Pilot Connect system under permit from the German government. One of the conditions was that it restore the space between trucks to 50 metres where interchanges were present, to allow cars merging on and off the highway to pass through unimpeded.

This was done automatically using GPS. When the on- or off-ramp was in the rearview mirror, the trucks once again closed to within 15 metres. All this happened seamlessly.

Officials explained that there are no firm rules as to which truck must assume the lead position in a platoon. The 15 metres of following distance provides sufficient braking space, even if the following trucks are heavier, thanks to the near-instant response time of the following vehicles’ braking systems, officials explained.

When the truck is not in platoon formation, drivers can still take advantage of Daimler’s Highway Pilot, which allows for semi-autonomous hands-free driving under certain conditions.

Daimler’s Highway Pilot Connect allows the trucks to close up to within 15 metres at highway speeds. If a car inserts itself into a platoon, the following trucks automatically back off and restore a safe following distance. When the car leaves the lane, the trucks once again close up into a platoon formation. In Daimler’s case, all this happens while the driver keeps his hands off the steering wheel and feet off the pedals. Not all the systems developed by the OEMs that participated in the Challenge, however, involve this level of automation.

Volvo, for example, automated braking and acceleration, but not steering.

“There are different levels,” Wokil explained. “The system we ran to Holland with was only longitudinal control. That means it’s braking and accelerating automatically through vehicle-to-vehicle communications.”

However, Wokil added Volvo can and has demonstrated truck platooning that also incorporates latitudinal control, through its 2012 SARTRE (Safe Road Trains for the Environment) project. This project involved two Volvo trucks and three Volvo cars, travelling within four metres of each other at speeds of up to 90 km/h. Providing lateral control requires the use of cameras to complement radar and GPS technologies.

Getting regulators on-board with the truck platooning concept should be achievable by promoting the environmental benefits, and that’s exactly what truck manufacturers are doing. Daimler says a truck platoon travelling on level roads can achieve fuel consumption as low as 25 litres per 100 kilometres while pulling a loaded semi-trailer combination with a gross weight of 40 tonnes. This equates to just 0.66 litres/100 kms, producing 13.3 grams of CO₂ per km per tonne, well below the emissions of any passenger car with an internal combustion engine.

The other societal benefit is the ability to improve the use of limited road space and mitigate congestion. A three-truck platoon can travel in a pack occupying just 80 metres, compared to the 150 metres the same three trucks would require when not connected in a platoon, Daimler claims.

“We do platooning for three reasons,” Dr. Wolfgang Bernhard, head of Daimler Trucks globally said during the media demonstration in Dusseldorf, Germany. “It makes better use of the infrastructure, it reduces fuel consumption and greenhouse gas emissions and it increases safety.”

While two- and three-truck platoons were featured in the European Challenge, Sven Ennerst, head of truck product engineering and global procurement with Daimler Trucks, said up to 10 trucks could participate in a platoon using Highway Pilot Connect.

One of the next big challenges, however, once all the regulatory hurdles are overcome, will be to make the proprietary platooning systems developed by each OEM compatible, so that trucks of various makes and models can connect and travel in multi-brand platoons. Volvo’s Wokil said this is something customers are already pushing for.

“In North America, as in Europe, our customers are not only driving one brand,” Wokil said. “They usually have multiple brands in their fleet and to achieve the maximum benefit of platooning, we need to have these systems work between brands and be compatible.”
The number of technological devices that is currently at the disposal of the trucking industry can be overwhelming. Even more so, the amount of data that comes from those various devices can feel like a terabyte tidal wave crashing down on your computer system.

ELDs, GPS, telematics, remote engine diagnostics—the list of what’s out there is endless.

Though technology is intended to make a person’s life and job easier, and more often than not does just that, it can also cause a lot of confusion and unnecessary headaches if not used properly.

Larry Jordan, vice-president of product management at Zonar Systems, says the key to getting off on the right foot is to do your research.

“It is not about who is the first certified ELD supplier,” Jordan says. “It’s about having the best and the ones with the resources and compliance experts to support you and your fleet’s needs.”

Daimler Trucks North America director of telematics Matthew Pfaffenbach agrees, and says companies looking to integrate more technology into their operations should investigate what their preferred truck OEM has to offer from a factory-installed, standard offering perspective.

“Most truck OEMs offer integrated, factory installed remote engine diagnosis capabilities as a standard feature with their proprietary engines,” Pfaffenbach says. “These OEMs also generally have partnerships with telematics service providers, whose fleet management services—vehicle location, miles travelled by state, fuel consumption, idle time and other critical information—are enabled by the same hardware as the OEM’s remote diagnostics service.”

Jordan added that when it comes to the electronic logging device (ELD) mandate, fleets must partner with their ELD supplier to ensure that the pre-installed device on their trucks will be compliant with the new regulations.

Jordan also said companies must not overlook the customer service and training component when it comes to implementing new technology, and that during the early days utilizing a new application, they must lean on their provider heavily to get over the inevitable hurdles ahead.

“A trusted partner with experts on staff can best prepare you and your drivers outside of the actual hardware and solution to understand how the additional ELD requirements pertain to driver harassment, device malfunctions and short-haul drivers,” Jordan says.

Kirk Altrichter, vice-president of maintenance for Crete Carrier Corporation, addressed the concern of information paralysis during Newcom Business Media’s Canadian Fleet Maintenance Summit (CFMS) in Toronto earlier this year.

“Everybody in this room could look at the same data and see something different,” Altrichter said, adding that maintenance professionals must pinpoint what needs attention, what’s important and what is actionable.
Altrichter said choosing the right software is an important starting point for any company looking to collect data, as there are various products on the market that do a myriad of different tasks.

For Pfaffenbach, one of the most vital technological components companies operating heavy-duty trucks should be employing is remote engine diagnostics.

"Remote engine diagnostics services, such as (Detroit Connect) Virtual Technician, help keep fleets informed about their vehicles’ health and help them make more informed decisions regarding when and where their vehicles are repaired," Pfaffenbach said. "For instance, Virtual Technician categorizes fault events so that, with less severe issues, they can keep the truck running and bring it into the shop at a more convenient time. This improves vehicle uptime by keeping it on the road and avoiding untimely trips to a shop."

Altrichter said that a proper preventative maintenance schedule is important to avoid the issue becoming chronic and needing to be brought into the shop for repairs.

"How do you even know if you have a chronic repair? How do you know that you even have a problem?" Altrichter questioned. "And how well do we do at identifying them before they become problems?"

Altrichter said the collection of data is something that one fleet to the next does very differently, adding that some companies need to establish a standard for data collection, where goals, future vision and growth are all taken into account.

"There are basic programs and very complex programs," he said, "and it’s up to you to decide which one you really need."

Altrichter said fleets must also be ‘ready and willing’ to use new technologies, like ‘flash over the air’ updates, which, like remote engine diagnostics, provides updates to software remotely so that the vehicle does not have to come into the shop.

"My objective in life is to touch the truck as little as possible and have it on the road,” Altrichter said.

Jordan said when choosing which technologies to utilize, companies must look at those that are designed to help them achieve smart fleet management, while keeping the business’ goals in mind.

Some of the key areas Jordan said companies should consider are the health of the fleet and happiness of the drivers, preventative maintenance scheduling, reduced fuel spending, simplifying hours of service, driver productivity, asset protection and keeping customers happy.

One thing Jordan said companies should avoid when it comes to considering the use of technology is looking at it as a cost versus investment scenario.

When you look at cost, you can end up with a bunch of disparate parts,” he said. "When you invest you can end up with a uniform solution including hardware, software and operating systems that are standardized across the board instead of multiple applications being used for the same functions."

Altrichter said people must be conscious of how many different types of software they are integrating into their lives, as he said each outside shop could use a different type of software, which leaves the fleet maintenance manager with the task of wading through the varying packages.

"How many of these separate packages are you willing to look at every day?" Altrichter said, adding that even with the four that he analyzes daily, it can be a lot of different data to monitor.

Pfaffenbach reiterates the importance of knowing what your preferred OEM offers factory installed.

"Some folks do not understand that in many cases, telematics-enabled hardware, along with remote diagnostics and access to other services, already comes with their truck,” he said, "and they go out and install third party communications hardware, when their factory-installed option might have addressed their needs in a more simplified way."

Jordan says another mistake some make when it comes to technology is understanding that managing change is a process.

"They will want to partner with a vendor that knows how much customer service matters," Jordan said. "Technology is great, but who do you talk to when you have questions? And who is invested in keeping your fleet running as efficiently as possible?"

Altrichter believes it all comes down to setting realistic goals, and fleets must take the time to consider what software option is right for the type of data they wish to obtain.

"We all need to work together to drive efficiencies into the system,” said Altrichter. "Without everyone voicing their concerns, we’re not going to get there very fast. It should have been done four to five years ago.”
The future of trucking sees younger people behind the wheel, women as fleet managers and a variety of ethnicities being included – a far cry from the predominately older, male, white industry we work in today.

Diversity is a hot button issue for the trucking industry as it struggles to recruit and retain a lot of its workers, especially amid the driver and technician shortage. So in order to find success, human resource and diversity experts are sending the industry a clear, concise message: embrace diversity or watch your company flounder in the rough economic waves.

In terms of the workplace, diversity isn’t just adding an assortment of genders, ages, and ethnic backgrounds into your company to check off all the diversity boxes and hope for success. Rather, the word diversity in the workplace has a much deeper definition according to experts.

“On the surface, diversity is measured by what we can see. That’s why I think gender gets a lot of attention…and visible ethnicities,” says Shannon MacDonald, chief inclusion officer with Deloitte. “But it’s what is under the surface... it’s the diversity of thought and the collaboration of ideas – that’s true diversity.”

MacDonald stressed that most HR teams should be focusing on someone’s diverse thinking to achieve the goal of diversity, rather than their gender or skin colour.

“We have to train ourselves to look at those who might be a little different and will want to do things differently,” she said. “When we drive a car, we’ve trained ourselves to look in our blind spot. And this is a huge blind spot. We have to ask ourselves, I have to hire someone for this team, have I thought of hiring someone different who wouldn’t normally fill this role?”

Simply hiring someone with a different ethnic background to add diversity to your payroll, doesn’t solve this problem says Jennifer Laidlaw, diversity inclusion with CIBC, in fact, it hinders your diversity efforts.

The key, said Laidlaw, is to unlock the value of that diversity within the workplace.

“We want to get at those moments of truth,” Laidlaw said. “We can tick off all those boxes and say yes we have diversity... but the question is, are we valuing that diversity or are we trying to take difference and turn it into sameness? Diversity on its own has limited value because you have to unlock that value.”

To unlock the power of diversity, Laidlaw said fleet executives need to start getting comfortable hiring people who might challenge them in the boardroom. Welcoming this push and pull within the boardroom will leverage a team’s different thought processes and will cause a positive change in an organization, Laidlaw added.

The power of unlocking diversity is seen when companies have both men and women in the boardroom. Men and women are so different that it provides a great opportunity for discussion and conflict management since both sexes think and react differently to certain situations, experts say.

“We need both men and women at the table and we need them to be well positioned and well equipped to work well together to value the fact that, you may come at this differently and I may come at this differently, but if we come at this differently we are going to get a better outcome,” said Laidlaw.

Kelley Platt, chief diversity officer, Daimler and president of Western Star Trucks said that adding women to management positions in a company has other benefits, too, that add value to a business.

“Women tend to think more about how you get results not necessarily about what those results are,” she said. “They also tend to provide more recognition. And they tend to notice the little things, such as whether somebody actually has a problem at home that needs to be addressed.”

This in turn, said Platt, shows your employees that your company actually cares about them.

To add diversity to your workplace, Angela Splinter, CEO of Trucking Human Resources Canada says that trucking companies in particular should start looking at those traditionally underrepresented groups (those with disabilities, Indigenous peoples) when hiring because unbeknownst to many companies, these groups are actually growing.

“These groups are growing and they are becoming an increasingly larger portion of the Canadian labour force as a whole,” she said. “What we’re working to do (at Trucking HR Canada) is ensure the trucking industry is aware of this so they can...
start being proactive in terms of how they go about recruiting and most importantly retaining these untapped labour pools into their workforce. I think the industry can overlook (those with disabilities), considering the nature of some of our work, particularly when we’re talking about drivers and technicians. But I think it’s important to continue to look at that group in particular and what workplace accommodations we can be making.”

To add more Indigenous people into your organization, Splinter suggests partnering with Aboriginal organizations that specialize in finding work for those in the community.

Splinter added that there are multiple benefits to having a truly diverse workplace.

“First, it’s going to ensure you have the workers that you need and will help solve the shortages we have in trucking,” she said. “Plus, your workplace will be reflective of the Canadian population. And then when you’re reaching out to these underrepresented groups, that word of mouth is important to help build up your reputation that you are a good, inclusive place to work. And you’ll want more people working for your business. That is just good branding.”

Splinter stressed that in order for your workplace to achieve true diversity it is paramount that the messages of inclusion and acceptance come from the top down. This will create something else your business will want to achieve once it is a diverse workplace — a culture of inclusion.

“To have a culture of inclusion that is meaningful, it does have to come from the top,” she said. “The senior management of the organization needs to believe in it and needs to champion it so everyone within the organization knows it’s important.”

She used the example of how Kriska Transportation, which has a large population of Indo-Canadian employees, supports and includes all of its employees.

“Kriska for example, has more of an Indo community and they celebrate those holidays within their workplace, in addition to Christmas and the other traditional holidays.”

Splinter said that HR staff and managers in trucking need to make diversity a point of focus to ensure a successful future.

“Fleets today need to make diversity a priority within their HR strategies,” she said. “Workplace inclusion is important. Employers need to look at the makeup of their workforce and look at their policies and approaches and culture can be reflective of that. Workplace inclusion is important today and will be important tomorrow.”

On the surface, diversity is measured by what we can see. That’s why I think gender gets a lot of attention… and visible ethnicities. But it’s what is under the surface… it’s the diversity of thought and the collaboration of ideas – that’s true diversity.
It's no secret that trucking isn't appealing to many young people. Gone are the days when those young men (and some young women) would leave school and pine for a job on the open road in a bumpy tractor-trailer. Today, the plan for many is graduate high school, graduate university and find a nice cubicle to work in until retirement.

And while the industry can play the blame game – saying schools don't promote the trades to students early enough – the future of trucking depends on the industry itself attracting younger generations to step into the cab, the dispatcher's seat, and the mechanic's shop. And if they don't, it means trucking as we know it will cease to exist. So, how can we get millennials to look at trucking as a viable career instead of a last-resort job option?

Well, that's the billion dollar question facing the industry today.

Who are millennials?
Millennials, also known as generation Y, are the demographic group that follows generation X. Though there are no specific dates for when the millennial generation starts and ends, it is generally accepted that they are the group born between 1980-2000.

Millennials make up the largest generation in US history comprising of about 80 million people and to date, they are the largest cohort in the Canadian workforce. According to Statistics Canada data from 2014, millennials make up 37% of the workforce, followed by gen xers at 34% and baby boomers at 31%.

They’re very much into people over profits. They want to feel like they’re moving the needle both locally and globally”

BY SONIA STRAFACE
According to Justin Bailie, co-founder of FR8nex, a transportation management software provider and expert in the subject matter of the millennial economy, by the year 2025, three-quarters of all workers will be millennials. This means that attracting millennials into your workplace will no longer be an option – it will be a necessity, Bailie stated.

Gen Yers are also the most diverse group of individuals in both ethnicity and values. Millennials are also more accepting of equality, and millennial-run companies are starting to value equal pay among men and women.

**Why do you need millennials in your company?**

While some old-school fleet executives see no value in hiring young people who seemingly have no interest in the trucking business, when looking at the characteristics of this generation up close, they possess qualities that many employers would love to have in an employee.

First, millennials are the most educated generation to exist. More and more millennials are getting degrees than their gen X and baby boomer counterparts according to recent data from the Pew Research Center.

As well, they are very in tune with technology, which is a large component of the trucking industry.

“They are digital natives, meaning they grew up with the Internet and they grew up with technology,” said Bailie, adding that millennials are entrepreneurial and want to do work that is innovative and meaningful. “So be transparent with what your problems are as a company and let them try and solve it. Let them drive innovation in your company.”

And finally, according to Angela Splinter, CEO of Trucking HR Canada, millennials are more willing to work with flexible hours that come with a career in trucking.

“What we see with this younger generation is certainly a focus on flexibility in the workforce,” she said. “They don’t necessarily work the 8-4 workday. They can work at all different hours.”

**What can you as an employer do to recruit millennials?**

In order to recruit members of the millennial generation it’s important to understand what is important to them, claims Bailie.

To millennials, having a job they feel can change the world and is making a difference is important to them.

“They’re cause-based,” Bailie said of millennials. “They’re very much into people over profits. They need to see something that matters and has an effect. There’s a sense that millennials feel that they can make a difference, that they can change the world and what they do should go towards a greater good. So pretending to be cause based…doesn’t work for them. Authenticity is a word that should be kept in mind. They want to feel like they’re moving the needle both locally and globally.”

Being cause-based means asking yourself, what does your company stand for?, he explained.

Millennials want to work for companies that align with their own values, so just having a company that works to turn a profit and nothing more, won’t look appealing to this generation, Bailie added.

Splinter suggested marketing your company’s green initiatives (something millennials care about is the environment), safety records and innovative technologies you’ve adopted. Many millennials outside of the industry are unaware of how safe and fuel-efficient trucking is today, so “promote any fuel efficiency initiatives that you have and promote the new technologies you employ and show them your safety records,” Splinter said.

Another way to attract millennials is to show them that they can grow professionally within your organization – something they value greatly in an employer.

“This is a generation that wants access to personal development responsibilities, so if that’s something that your workplace invests in, training employees, that’s something you should be marketing to get young people in,” she said. “Also you should highlight career pathing when marketing. Yes, you could start as a driver, but you can move into being a driver trainer or perhaps into dispatch or safety. So let them know there are opportunities to move within the organization… millennials are a generation that invests heavily in professional development, they’re not just about moving up.”

Splinter also suggested to change up the way you are recruiting people into your company if you want a younger crowd.

“Have an up-to-date and modern application process,” Splinter said. “It should be easily accessible online.”

You could even turn to social media like Twitter and Facebook for recruitment, too, she said.

In the meantime, Splinter said Trucking HR Canada is working hard to combat the issue of having no young people in the industry as the last of the baby boomers retire.

“We are establishing a National Advisory Committee for youth in the trucking industry,” she said. “We’re building on of the Women with Drive National Advisory Committee, so we can bring young people to the table to help us figure out what we can do for the industry to better attract that generation. We’ll be looking at practical ways that we can better promote the industry.”

For trucking’s sake, hopefully with Trucking HR Canada’s help, more companies can jump on board and start looking at ways to get more young people in, so trucking can have an advantage over the other trades that are also struggling to recruit millennials.

If not, Bailie said the industry should be preparing for the worst case scenario – hiring the worst the millennial generation has to offer by default.

“You can’t debate the fact that people are getting older and dying, and new people who are younger need to take on these (trucking) jobs,” Bailie said. “What (trucking companies) can do today, is plan to invite these young employees in. And those who do that and get ahead of the shortage, will have a competitive advantage in the industry while those in denial will be scraping the bottom of the millennial barrel.”
Whether you’re a fleet owner or a driver, the hand of government is never far away and it can almost seem as if it’s interested only in making your lives more difficult.

The last decade, for example, saw more stringent rules piled on, whether via engine regulations, pollution control mandates, hours of service or whatever. And with new taxes proposed or appearing in various jurisdictions, it appears there’s no end in sight.

According to Stephen Laskowski, senior vice president of the Canadian Trucking Alliance “Change is a permanent feature on the legislative landscape, in that (safety and environmental) rules and requirements are going to get more challenging for carriers to comply with. The status quo is not the future and it’s only going to get tighter.”

In other words, the future belongs to the flexible. Laskowski said there needs to be a coordinated approach when it comes to any new regulations, however. “The issue is that when (industry and government) manage change and...new technologies, that (the technologies) are ready when they come into the marketplace and the industry is supportive,” he said. “What the industry doesn’t want to see is technologies forced upon them that aren’t market ready because governments believe the industry should adopt (them). That’s where
the friction is created and the problems arise.”

An example of such technologies is the abundance of new safety features that are appearing, including lane departure and/or blind spot warnings, adaptive cruise control, and the like. “They’ve improved the performance of drivers on light-duty vehicles,” Laskowski noted, “and you’ll see a migration over to the heavy-duty side.” There’s a commercial element to the heavy-duty side, of course, and Laskowski thinks legislators could mandate the new technologies there, while leaving them optional on the consumer side.

Laskowski thinks such potential new rules could actually make the roads safer. “If it’s affordable and improves the performance of the fleet then it may just make logical sense,” he said, adding “at the end of the day, how much does a fatality cost the fleet and how much are you willing to pay to avoid that fatality?”

That might be a difficult question to answer. “You can’t measure the accidents you don’t have,” said Gene Orlick, who balances his duties as CTA chairman with operating his Calgary-based fleet. “Most at fault collisions are the result of driver error – the truck driver or the motorist,” he said, “so anything that can help (is good) but what’s the return on investment?” Orlick noted that not all carriers can afford the new technology, but he admitted it might not matter if governments get involved, as he suspects they will. “What they plan to do…is legislate these technologies to the manufacturers and (they’ll) have to have it on their equipment,” he said, though he also thinks there’ll be some grandfathering for old trucks.

Orlick also expects more “green” legislation such as the carbon taxes in Quebec and B.C. “I haven’t seen how it’s going to impact (Alberta) yet or how we’re going to collect it,” he said, “because it’s going to be a flow through tax that has to be paid by the consumer.” Regardless of how Alberta’s NDP ends up extracting the dough, however, Orlick hopes it won’t raise companies’ costs. “We don’t have any room to absorb any more costs or taxes,” he said.

One of the current pushes is for electronic logs, and Orlick said he’s all in for them. “You reduce the cost for auditing purposes,” he said, “and you improve some time for the driver, where they don’t have to…do all this paperwork. ELD’s do that for them. And they can’t cheat.”

Not every trucking company owner is bullish on ELD’s, though. Scott Treanor, president of Shiny Side Up Roadrunner Inc. of Kingsville, Ontario, thinks they’ll cause hassles that his drivers don’t need or deserve. “Electronic logs are going to turn our industry upside down,” he said. “I really think it’s going to make highways much more unsafe.” Treanor, whose company runs perishables to the U.S. East Coast and Midwest via Buffalo and Detroit, noted that crossing the border – espe-

“ You can’t write legislation in a silo…without factoring in all three parties. Government has their mandate, the OEMs have their mandate and the carriers have theirs and when you develop a proper process that factors in all three parties, you end up writing legislation that is functional and beneficial for all. When you exclude one of the parties’ concerns, that’s when you run into problems.”
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