

EXECUTIVE WHITE PAPER

Trucking, Black Swans and Safety

“Did you ever observe to whom the accidents happen? Chance favors only the prepared mind.”
—Louis Pasteur

*By Mark G. Gardner
Chief Executive Officer
800.728.2827*



Achieve more.

Opening up to new ideas

Abstract

Are trucking executives smarter than the leaders in other industries? Probably not. However, they tend to be a lot closer to their operation. And the progressive leaders seem to be more willing to examine with a critical eye, how they run the business. These forward-thinking leaders often embrace new and different procedures in the pursuit of operational excellence. Many have “grown up” in the business and intuitively understand the importance of a customer service culture, driven by positive employee engagement. They are the polar opposite of the make-a-fast-buck-and-get-out narcissistic leader.

Trucking businesses have a lot going for them. With virtually no government subsidies, they:

- turn a fair profit with over 8 million employees and \$230 billion (with a “b”) in sales;
- deliver products where customers want them and when customers want them every day of the year;
- satisfy diverse customers by hauling a spectrum of cargo from: liquid or dry, light or heavy, high value or high volume in refrigerated to take-what-you-can-get temperatures.
- operate at a high standard of safety.

Over 8 million employees; \$230 billion in sales!

There are so many positives about trucking that it raises the question of what **controllable** threats you face and how you can overcome them.

Is the industry the victim of random, unforeseeable events over which it has no control? Or can a planned approach remove layers of risk and promote growth and profit?

This paper explores some of the dangers and opportunities you face. It suggests that you are not subject to the whims of nature, or to random, unforeseen events, but rather control your own destiny. We conclude that those operators who are willing to continuously look for new and better ways to run their business will be the ultimate winners in this marketplace.

Some will continue to suffer from the dismissive “we already do that” mentality. Those holding to this doctrine won’t get very far into this paper. Nor will they be around ten years from now. We hope you benefit from what you read here and we wish you the very best in your efforts to efficiently and safely transport America’s goods.

The dismissive “we already do that” mentality must be replaced with “learn and improve”.

Black Swan Events

In April, 2007, *The Black Swan*, a cautionary non-fiction book written by Nassim Nicholas Taleb, quickly moved to the top of the New York Times best seller list. The following year, esteem for the author grew when the crash of banks, *the great recession* and government bailouts forced economists to reexamine their fundamental thinking on financial risk.

The Black Swan gets its name from the commonly held, but untrue, belief that all swans are white. In fact, some are black and live in Australia.

Taleb effectively builds his case that random, unpredicted, unexpected and sometimes catastrophic events happen much more frequently than we realize. Furthermore, they often have massive, long-term impacts. They shake our basic beliefs, just like the discovery of black swans. Besides being an author, philosopher and teacher, Taleb¹, a mathematician, ran his own hedge fund and made hundreds of millions of dollars for his clients in 2008 and 2009, by hedging against the unpredictable.

In 2004 a tsunami in the Indian Ocean killed 230,000 people. More recently, an unpronounceable Iceland volcano erupted and closed down the airspace over Europe for nearly a week stranding millions of passengers at a cost of more than \$200 million per day. Black Swan events? You bet.

On September 11, 2001, four commercial aircraft were hijacked and three were used as missiles to destroy American icons and human life. In 2008 the derivatives group within AIG, a department with fewer than 300 employees, working for one of the world's largest corporations, brought about a worldwide financial catastrophe from which we have yet to recover. Suddenly a new term became part of the daily lexicon, "too big to fail." Black Swan events? Maybe. Maybe not.

Random. Unpredicted. Unexpected. Sometimes catastrophic.

Recently, 29 miners were killed in a mine explosion in West Virginia. Was this a Black Swan event? Was this the impact of the highly improbable?

Massey Energy officials would say yes. They claim that the hundreds of citations the mine received for safety violations were neither excessive nor significant. Massey even claims on its website that its safety record is better

**Truly unexpected:
an unpronounceable
Icelandic volcano
erupted and closed
down European air
space**

**This year's mine
disaster: Black
Swan event or
preventable?**

¹ Some of Taleb's principles: People who were driving a tractor trailer blindfolded (and crashed it) should never be given a new truck.
Do not let someone making an "incentive" bonus manage a nuclear plant – or your financial risks.
Counter-balance complexity with simplicity.
Don't give children dynamite, even if it comes with a warning.

than the industry average for the past six years. Comically, they go on to say that they averaged “only” one violation per day from MSHA.

Your opinion may differ from Massey’s. You might say the mine accident was clearly foreseeable and thus not a Black Swan event. In fact, based on the initial news reports, this opinion seems to be closer to the truth: *The mine was written up more than 50 times the prior month for safety violations. Twelve of the citations involved problems with ventilating the mine and preventing a buildup of methane gas.*

In seven of the past eight years, miners lost more time on the job through work-site accidents than did other miners nationally, federal records show. Three miners have died there since 1998, and the federal Mine Safety and Health Administration cited Upper Big Branch for 1,342 safety violations since 2005.

That brings us to a key question. How do we know when we’ve done enough? How can one person’s definition of *adequate* or even *above average* be another’s definition of *criminal*? We’re not talking about shades of gray. We’re talking night and day in the conclusions described by the adjectives above.

Adequate or criminal?

Taleb’s presents a third tenet regarding Black Swan events. That is, after a Black Swan event, people will analyze it and concoct explanations for its occurrence, making it explainable and *predictable*. Call it retrospective predictability as in, “we should have had a tsunami warning system in place in the Indian Ocean like we have in the Pacific.”

Of course, we all suffer longer lines at airports now as a result of 9/11. And, the mining disaster will play out in the media over many months if not years. In keeping with our human foibles and the nature of elected government, it didn’t take long for politicians to weigh in on the tragedy. “We cannot bring back the men we lost,” said President Barak Obama. “What we can do, in their memory, is thoroughly investigate this tragedy and (*emphasis added*) **demand accountability.**” A few hours later, Congress called for hearings.

But what do Black Swan events have to do with you and your trucking operation? Are there lessons to be learned? Actions to be taken? Tragedies to avoid? Yes. Yes. And, yes.

Heinrich and Safety

H.W. Heinrich was one of the founding fathers of the American industrial safety movement. He was a behavioral scientist who did much of his ground-breaking work before World War II. He studied American factory workers to determine why people have accidents. Through his studies and subsequent analysis, he calculated a relationship between repeated unsafe behaviors and the likelihood of a major accident. His work demonstrated that people will

Repeated, unsafe behaviors always lead to major accidents.

often commit unsafe acts over and over again, until something gets them to stop. He calculated that most of the time, they will get away with an unsafe act. In other words, nothing bad happens to them. But, he claimed that 300 similar unsafe acts will produce 29 accidents, and ultimately one that will be quite serious.

You come to a stop sign and drift through it. Nothing happens. You do it again and again. Repeated enough times, you'll eventually have a minor accident or be forced to squeal your tires in a panic stop, or you'll have a near accident or get a ticket. Keep doing it and eventually you'll have a serious accident and maybe someone will be killed. **300:29:1**.

In March, 2010, a Pennsylvania school bus driver was captured by his on-board camera going thru ten consecutive stop signs before crashing head-on into a Honda Civic, fatally injuring its front seat passenger. The sequence of video clips can still be seen on YouTube.² But how many unsafe behaviors preceded that fateful day? After the collision, investigators found that this driver had been involved in a fatality collision ten years earlier. A Black Swan event? No way. This is an example of **300:29:1**. His unsafe behaviors were most likely repeated over and over for many years, unnoticed and uncorrected, but the tragedy was predictable.

When you get away with an unsafe behavior, you tend to do it again. And again. And again. Until it's too late. This goes for you and your company. If you allow unsafe behaviors to add up, it's only a matter of time before you'll be the feature story on the evening news and some uninformed anchor will be questioning your commitment to safety.

But that raises another important question: What is safety? Aren't you safe if you comply with the DOT? Are you safe if you can answer compliance questions like: "How long can a driver legally drive in a day?" **We think not.**

Complying with DOT regulations is a good practice and will help you avoid fines, but it doesn't guarantee that you'll have a safe operation. Safety means *freedom from risk*. And risk, almost without exception, comes from people behaving in unsafe ways. **300:29:1**.

**Safety means
freedom from risk.**

Is this a lesson for Massey? It should be, but only time will tell if they are willing to take heed. How about your business? Is this a lesson for you? Only if you're willing to concede that, when it comes to safety and operational efficiency, there's always room for improvement. And improvement neither begins nor ends with rules and regulations.

Your risks come largely from your drivers' behaviors. And, that's where your focus has to be.

² In today's age of ubiquitous cameras, this if not the only stop-sign-running-bus incident you will find by performing a Google search.

This is important: major accidents in trucking are not black swans. They are almost always predictable. They aren't random events that just happen to anyone who finds himself in the wrong place at the wrong time. They are predictable and they are (are you ready to accept this gruesome truth?) **caused.** They are caused by unsafe behaviors.

Of course, accepting that accidents are caused is a terrific first step in the pursuit of improved safety results. After all, if accidents were accidental and major accidents were really Black Swan events, we would be at the mercy of fate and the gods. But fortunately, accidents are caused by unsafe behaviors and that gives us a starting point for implementing effective risk-mitigation strategies.

Unfortunately, there is no simple, one-size-fits all solution. Human behavior is, after all, one of the most complex and unpredictable studies you will ever undertake. Even worse is the lofty goal of achieving safety, which by definition is unattainable. That's right, unattainable. The very definition of the word is *freedom from risk*.

You can never be truly safe.

You can never be fully free from risk if you put trucks out on the highway everyday. But you can play the percentage game. You can eliminate many, in fact, most of the risks that you face. That is what you and your entire team should focus on: reducing the risks. Reducing the unsafe behaviors.

Why do we have accidents?

Heinrich said that, repeated often enough, unsafe behaviors always lead to accidents. And that leads us to an important questions, what causes your drivers to engage in unsafe behaviors?

Drivers, and for that matter all of us, engage in unsafe behaviors patterns from time to time either because we receive rewards for such behaviors, or because we simply don't know any better.

Why do you sometimes tailgate the car in front of you, even when they're going 65 MPH in the left lane of the highway? You know you've done it. Maybe you're in a hurry. By tailgating them, they become uncomfortable and move over, allowing you to be on your merry way. That, in itself is a reward for an unsafe behavior.

Why do you do that?

Why do you bend over at the waist to pick up the soap you dropped in the shower, even though it puts you at risk for a cumulative trauma back injury? First, it's faster and seems easier: one joint, not three. And, you don't have to lift your entire body weight, just your upper torso and of course the soap. Second, you don't douse your head with the shower water. Again, little rewards.

Why does a 16-year-old driver text her friends while driving in heavy traffic? Perhaps the reward of staying connected, but perhaps she simply doesn't know that she's putting herself at risk. She hasn't learned that lesson yet. There's a reason why older adults have far fewer collisions than teenagers; they've learned, through experience, what leads to problems, whether those experiences were actual accidents, or near misses.

What Can You Do?

Get the right people

If you owned an NFL team, you wouldn't draft a 175 pound wide receiver from William & Mary and try to build him up to become your defensive tackle. When you need a good tackle you go find a recruit who has the necessary qualities for the job. You look for a 300 pounder from Michigan, who helped them win the Rose Bowl.

Recruiting, selecting and hiring truck drivers works the same way. Take a look at your own processes. Do you scientifically assess for conscientiousness, emotional stability, dependability, a desire to serve others and most importantly **risk aversion**? Do you hire based on objective criteria such as proven bio-data markers and validated psychometrics, or do you go with your gut? Chances are, you're hiring your own mistakes.

Don't hire your own mistakes.

Every living breathing human being has a natural level of risk acceptance and it can't be changed. Some people dedicate thousands of hours to mastering the skills needed to perform the half pipe in the Winter Olympics. They provide us with wonderful entertainment and cause us to gasp at their bravery. But would they make good truck drivers? Never in a million years. They're risk takers. Dangerous. Accidents waiting to happen. Can you assess for this risk tolerance? Absolutely. And, if you don't, you will suffer.

Recently, the retiring CEO from Pepsi-Cola was asked what his biggest career mistake had been. He replied without hesitation, "Trying to fix people who couldn't be fixed." Are you trying to fix drivers who can't be fixed? Be sure you only hire drivers who don't need fixed in the first place.

Make sure they know what they're doing

You have a safety program. Of course you do. And, you train your drivers. New drivers probably go through a hundred or more hours of training. It probably includes traditional classroom instruction, a closed course to master the skills needed to maneuver a large vehicle and Behind-The-Wheel skills training. You probably also require regular ride-along coaching sessions. But is that enough? Are you free from risk? Massey Energy thought so.

Are you doing enough?

What is enough?

The very best fleets have a comprehensive curriculum featuring robust learning materials. Behind the wheel skills are taught using explicit performance standards that instructors and drivers both understand. Instructors aren't just the best drivers, they're carefully selected, promoted, prepared (through rigorous training) and certified before they instruct.

All training, education and development activities are documented. This protects you, in the event of a collision, from claims that you didn't do enough to prepare the driver. It will be interesting to see what documentation Massey can produce to demonstrate that the 500+ MSHA violations weren't legitimate.

Finally, best-in-class fleets have the guts to terminate both new and existing drivers who either choose to behave in unsafe ways, or who simply can't master the necessary skills. A warm body, even in a tight labor market, is far worse than a missed load.

Give them more support than a cross-your heart bra

Best-in-class trucking operators have safety programs that begin with the CEO. They build a culture of safety, over time. They establish and maintain safety norms. Norms are known as the accepted way of behaving in a certain situation, like being quiet in a church or museum or raucous in a football stadium. The very best safety results come from organizations where safe behavior is a cultural norm...the only accepted way of behaving.

Support comes from cultural norms.

Support comes in many different flavors, it includes adequate pay, decent benefits, competent leadership (especially on the front lines of supervision and dispatch), regular performance reviews, posters on the wall, motivational programs, safe driving awards, on-board computers such as DriveCam or SmartDrive, a driver's web portal, mentors, and a host of other strategies far too long to list. Support is another way of saying continuous influence and inspiration.

Summary

The last thing you want is a negative surprise: "Wow! I didn't know that could happen." What you prepare for can never hurt you as badly as the unpredictable and negative surprise...the Black Swan event. But tragic accidents, involving trucks are never Black Swan events, are they? They're as predictable as sunrise. By focusing on what really matters, your driver's behaviors, you can lower your risk and enjoy better operational results.

Few events are Black Swans. There is cause and effect between accidents and human behavior.

At Avatar Fleet, we believe there are really very few Black Swan events. We know there is a cause and effect relationship between accidents and human

behavior. We have proven that safety results are predictable, if only people would look at the right things.

Why are we doomed to view accidents and calamities as twists of fate or chance? Taleb has an answer in *The Black Swan*: “humans are hardwired to learn specifics when they should be focused on generalities. We concentrate on things we already know and time and time again fail to take into consideration what we don’t know.”

What don’t you know? Why not start there? Opening up to new ideas and better ways of operating your fleet is a great start to breaking away from this pattern. The enlightened industry leaders consider risk early in their business decisions. Such thinking appeals only to those who are in it for the long haul. Perhaps that’s you.

Avatar conducts organizational analyses, provides expertise and develops custom selection, orientation, education, training and support systems. Avatar helps companies modify their employees’ behaviors so that people take responsibility for their performance. Avatar’s custom branded strategies and out-come based management tools encourage and reinforce the desired behaviors that lead to operational excellence and world-class results.

For more information on this white paper, contact the author, Mark G. Gardner, at

mgardner@avatarms.com.

Avatar Management Services

8157 Bavaria Dr. E

Macedonia, OH 44056

330.963.3900 x222